



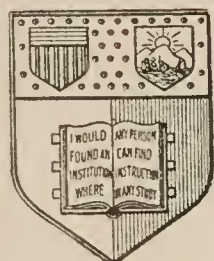
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AMERICAN AGRICULTURIST

\$1.00 Per Year

January 5, 1929

Published Weekly

All Agriculture Is Honored Governor-Elect Roosevelt Confers Title On Master Farmers

THE first Master Farmer banquet in New York is over and, if we take the consensus of opinion of the two hundred and seventy leading farmers, business men and professional men from country and city who attended, it was just about the finest agricultural and business gathering ever held in eastern United States. One of the many remarkable things about the banquet was the fact that every one of the twenty Master Farmers and their wives from New York and the two and their wives from New Jersey were present. Many of these were elderly people and travelled hundreds of miles to attend.

The banquet began promptly at seven o'clock and Henry Morgenthau, Jr., publisher of AMERICAN AGRICULTURIST and the toastmaster of the evening, asked everyone to in-

troduce himself to his neighbors at his table. The guests had been so arranged as to put a Master Farmer and his wife and other farmers at each table with business and professional men from the city.

Instead of an orchestra, John A. McDermott, famous old-time fiddler, accompanied by Mr. Winne, the pianist, livened everybody up with his old-time tunes. Kenneth D. Scott, manager of the Chenango County Farm Bureau, and well known throughout the State as a song leader, soon had everybody singing community songs, so it was not long before all had forgotten whether they were farmers or business men and were just a lot of good fellows together. Not the least result of the Master Farmer work was this bringing together of country and city folks and the resulting good feeling that comes from under-

standing one another's viewpoints and problems. Of course, the outstanding event of the evening was the speech by Governor-elect Franklin D. Roosevelt and the presentation of the medals to the Master Farmers and their wives, and in particular the brief responses of these farmers when they received the award. In a short introductory speech, Governor Roosevelt pointed out that New York is one of the leading states in the development of its agriculture and said that New York had many grave agricultural problems, including especially the questions of forestry, farm taxes, good roads and marketing.

"I am certain of one thing," said Mr. Roosevelt, "and that is that a spirit of cooperation will exist between the administrative and legislative branches of the State
(Continued on Page 20)



New York and New Jersey Master Farmers at the banquet given by American Agriculturist at Town Hall, New York City on December 19. Top row from left to right: Ed Heinaman, Bath; Harry E. Wellman, Kendall; Isaiah D. Karr, Almond; Fred N. Smith, Trumansburg; James O. Fyffe, Walton; J. J. Young, Randolph; Julius Gordon, Lawyersville; M. C. Burritt, Hilton; F. S. Wright, Worcester; John Fallon, Constable; Thomas McKeary, Marilla; Henry S. Nichols, Curriers and James R. Stevenson, Cayuga. Second row, left to right: Daniel V. Farley, Goshen; Mrs. Heinaman; Mrs. Wellman; Mrs. Karr; Mrs. Smith; Mrs. Fallon; Mrs. Fyffe; Mrs. Young; Mrs. Gordon; Mrs. Burritt; Mrs. Wright; Mrs. McKeary; Mrs. Stevenson; Mrs. Clark, Earl B. Clark, North Norwich; Gilbert A. Prole, Batavia. Seated in the third row, left to right: Mrs. Farley; Mrs. Talmage; Mrs. Franklin D. Roosevelt; Governor-elect Franklin D. Roosevelt; Mrs. Henry Morgenthau, Jr., Mr. Henry Morgenthau, Jr., publisher of American Agriculturist; E. R. Eastman, editor of American Agriculturist, Mrs. Prole; Mrs. Nichols. Front row, left to right: Fred DuBois, New Paltz; D. H. Clements, Liberty; Henry R. Talmage, Riverhead; Mrs. Clements; Mrs. DuBois; Miss Boisseau; Mrs. Kille, Willard Kille, Swedesboro, New Jersey; Mrs. Titsworth; Wallace Titsworth, Sussex, New Jersey; E. E. Boisseau, Southold.

It Is Time To Take the Annual Inventory — See Page 3

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Government Crop Reports

Do They Cause Low Prices to the Consumer?

“I am an average Long Island potato farmer and at this writing I am facing a loss of at least \$80 per acre on this year's crop. What is the reason that a bushel of potatoes, which will last an average family two weeks, is selling for less than a pound of very ordinary beef? I would like to give you my idea of what the trouble is.

“In all the farm papers that I pick up, and even in the daily papers, I read of the immense crop of potatoes that is being harvested on Long Island and elsewhere, at the present time.

“To my mind there are too many people being paid by the government to get out crop reports, and estimates of production. About two months ago I took an auto trip of about 2,000 miles, going completely around New York State and down through Vermont and Massachusetts. On the whole trip I never saw as many potatoes as I can see in half an hour riding around home. And three-fourths of what I did see were very small and did not look healthy. In spite of this, when I got home, I found a government report estimating the yield of potatoes in the northern states, at millions of bushels more than last year. Potatoes were selling for 60 cents a bushel when the report came out. The next day they went down to 50 cents. I tell you if the government would quit getting out crop reports, it would put money in the farmers' pockets.

ASSUMING that the indictment against Government crop reports was presented in court and we were acting as an attorney for the defendant, we would present the following arguments to the court in defense of the present Government crop reporting system:

1.—Each year early in the spring the Government puts out an “intentions to plant” report giving the acreage of crops which a representative group of farmers are planning to put in. This report is an estimate in that it is assumed that all farmers growing each particular crop mentioned are planning to do about the same as those who make reports.

Heavy Acreage Predicted

Last spring this “intention to plant” report indicated that potato growers would put in an acreage considerably higher than a year ago. Along with the report, the Government published a warning stating that if these intentions were carried out and if the season should be an average one or better, a potato crop would result which would be too large to market at prices profitable to the growers.

American Agriculturist published a similar warning in the April 24th issue. Developments since that time indicate that these warnings were not heeded and that the government forecast and warning were approximately correct.

2.—The crop reporting agencies of the Government have no reasons to

misrepresent facts. The estimates published by them are secured by thousands of farmers scattered through the country who serve without pay. Each month they fill out a blank giving the condition of the crop in their vicinity to the best of their judgment and forward it to the Government. Here it is tabulated and compared with the estimates of other years. It therefore follows that if there is an error in these crop reports that it is an error in the judgment of those producers who make reports to the Government.

Are Reports Accurate?

3.—No attempt is made in these reports to predict what may happen in the future. The Government crop reports give conditions as they are at the time the report is given out together with an indication of what the crop will be if the season until harvest time is an average season. Thus the estimates are changed from month to month as returns are received from local crop reporters.

4.—The assumption that prices would be higher were there no crop reports must be based on one of two arguments, either that the reports are incorrect or that ignorance of the facts on the part of the buyers would boost prices.

As to the first argument we believe that past history has shown that the estimates put out by the Government are very close to the final crop harvested. As to the second, we believe that without the Government figures the producers would be in the dark while the buyer would get information from private sources. In the years when the crop was heavy the figures would be published while in the years of short crops the figures would be withheld until the crops had been sold. The grower, as a result, would be at the mercy of the buyer.

Will It Pay to Store This Winter?

No crop report, either Government or private, can add or subtract from the total of any crop. If the estimates are slightly too high the prices will react later when true conditions become known. If the grower has the facts and if he is convinced that the estimates are too high on any particular crop he has only to store all or a part of it and wait for the rise in price. Many are doing this this year with potatoes, but in our opinion it is doubtful whether they will profit heavily by it. Recent reports indicate that the yield is not as high as previously predicted, yet it seems probable that the crop is not enough smaller to affect prices to any great extent.

The policy of the editorial staff of
(Continued on Page 15)

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Arthur Sigo, a 4-H potato club member fertilized every other row of his potatoes. The row on his left, which he has dug and sacked has exactly one bushel more than the sacks on his right, which represent the yield from an unfertilized row. The fertilizer not only increased the yields but there were more uniform tubers in the fertilized row.

Keeping Up With the Times

Farming Without An Inventory Is Like Driving Without Lights

THE person who said that "farming without an inventory is like driving without lights because you can't see the ditch until you are in it," hit the nail exactly on the head. A farmer or any other business man who does not take an annual inventory does not know where he stands financially, and he may be a whole lot nearer the ditch than he thinks. Lights on a car and an annual inventory on a farm help one to keep on the safe part of the road and to be prepared to put on the brakes or step on the gas as occasion demands.

A quarter of a century ago the farmer who took an annual inventory was a most unusual person. So was the farmer who had ever ridden in one of those "horseless carriages" which were

By V. B. HART,
Extension Professor of Farm Management, New York State College of Agriculture

driven by a duster-clad and goggled-eyed pilot who burned up the dirt roads at the terrific speed of twenty five miles per hour. The young farmer of 1904 with his red running gear buggy who threatened to lick the driver of the noisy old one linger for scaring his road horse, now gets equally peeved when he has to slow up for a stray horse and buggy on the concrete highway. Because of its ability to save labor, the American farmer has adopted the automobile as a standard part of his equipment the same as the farmer of a generation ago looked at one of Cyrus McCormick's grain binders on the fair grounds one year, said it was too complicated, and then cut his grain with one the next year. Few business-like farmers now feel that they can afford to be without a car.

In the "Golden Age of Homespun," when we had a self-sufficient type of agriculture, there was little need for a farmer to take an annual inventory and file a credit statement at a bank. Farming consisted principally in producing crops and stock products and converting them into food and clothing for the family. Success in that type of agriculture did not require the business judgment and dealings with the outside world which the present day farmer is up against. In the Golden Age of Homespun, the question of whether or not a

farm family was well clothed and fed, depended principally on how much they could produce on the home farm. In the good old days they didn't need to carry a checking account at a bank or use



Your bank sells credit. Use your inventory to show your banker that you are entitled to credit.

bank credit because they didn't do much buying and selling. Such products as they raised were mostly consumed at home, and if they had things to eat and wear they had to produce them.

Because present farming depends so much on transactions with the outside world, the successful farmer has to use more improved business methods than his father or grandfather and to just naturally be a better business man. The buckskin wallet and store credit were sufficient for the man who swung a grain cradle and drove an ox team, but the businesslike farmer of 1929 who pays by check and drives a car, feels the need for taking an annual inventory and filing a

(Continued on Page 12)



A fire under any circumstances is a calamity, but at least an inventory helps wonderfully in settling with the insurance company.

Growing Truck Crops on the Montezuma Marsh

Once a Sea of Flag and Cat-tails---Now Fast Becoming a Garden Spot

WITH the completion of the Barge Canal across the State of New York and its attendant raising and lowering the water levels of the various lakes and river through which it passed, many changes in the character of the land were found along its route. The most striking of these changes is probably in the great Marshes along the Seneca River near Montezuma, at the junction of the county lines of Cayuga, Wayne and Seneca. Before the completion of the Barge Canal, the Seneca River was shallow and sluggish, more like a lake, overflowing its banks in high water seasons to a width of three and four miles, and a narrowing to a stream no more than a hundred feet wide in dry periods. This area of overflow became in summer a veritable sea of cat-tails, flag as it is commonly called, standing eight to ten feet in height. The land is nearly level, sloping upward back to the hard land with a rise of about one foot for a hundred yards.

Under these conditions flag grew to near perfection and was cut in the fall, for use of the coopers trade in calking barrels. There are many other uses for flag such as making rush bottom chairs, packing nursery stock and the like. Of course, such a riotous growth of flag, standing in water six to eight inches deep, made excellent breeding grounds for muskrats, and the trapping of them was a fairly remunerative business. Both of these occupations are followed today where the water table has not been disturbed. It would require

more space than I can give here to adequately picture for you the two industries and the fascinating interest they hold.

With the digging of the canal and the building of the May's Point and Mud Locks farther south in the Seneca River, a water level was established approximately eight feet below its previous height. This left an area of land above water estimated from 18,000 to 20,000 acres composed for the greater part of mucklands and a black alluvial river bottom most of which can be drained suitable for farming purposes. The soil spoken of as river bottom extends back from the river's deeper channel approximately one hundred yards. From there the character of the land changes to a true muck soil two feet deep,

growing gradually deeper as you move back towards hard land where the extreme depth of eight feet is found. This muck is underlaid by a layer of marl, which in turn is supported by a lower strata of quicksand and silt. The origin of this muck is largely flag and similar marsh plants though there are a few isolated spots showing timber formations.

Development of this land for farming purposes began as soon as the water was lowered enough to make drainage possible. Ditches were dug from the river towards upland at intervals of 1,500 feet. These mains are usually five feet deep, four feet across the top and two feet wide at the bottom. This work is done entirely by hand with the exception of a few unsuccessful attempts to use ditching machines. In the earlier stages of development the land between these main ditches was subdivided into working fields 165 feet wide, by digging laterals at right angles to the mains three feet deep, two feet wide at top and one foot at bottom. Allowing for waste in ditch banks, roads, loading platforms and the like, there are about five acres of tillable land in each plot. The three wet seasons just passed, have proven these fields entirely too wide for good drainage and the tendency now is to make the fields 65 to 75 feet wide.

The first plowing or breaking of this land is done by a large plow drawn by two tractors of the



Growing celery on muck land. The rows at the right are being blanched by the use of paper.

(Continued on Page 10)

Editorial Page of the American Agriculturist

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A Happy New Year!

It is the heartfelt wish of the Publisher and the entire Staff that the New Year will bring all the A. A. family Health, Prosperity and real Happiness.

The Way to Get More Milk

DAIRYMEN will be interested in the article on our dairy page this time telling of the conference of representatives of many different organizations to discuss the problem of a milk shortage in the New York milk shed and to find some ways and means of furnishing enough milk for their markets here without making it necessary to bring in western milk.

The Dairymen's League Cooperative Association is to be commended for the hard fight it has made to confine the milk shed to its present limits. But it is very evident that if eastern farmers are going to continue to have this market exclusively, everybody must accept responsibility for supplying that market with more milk during the periods of short production, particularly in the late fall. A program or plan must be found and put into execution that will have everybody's support. It is easy enough to state what that program should be—not so easy, however, to carry it out.

The remedy is to pay more for milk when the milk is most needed and to assure dairymen a long time ahead that they can depend upon better prices for late fall and early winter milk. When this is done, dairymen will change the breeding dates of their cows to have them freshen when the milk is most needed.

A committee was appointed by the conference to formulate a program, but we hope that the committee will go much farther than this and suggest a way of putting that program into execution, by outlining a plan that will encourage dairymen by better prices to produce more milk during November and December when the worst shortage occurs.

"How Much for Cash?"

THE article by Dr. V. B. Hart, "Keeping up with the Times," telling about the increased use of the inventory and credit statement by farmers, certainly indicates that present day farming is indeed a business proposition. Our ancestors of the "Golden Age of Homespun" would certainly be surprised if they could come

back and see the thousands of business farmers who will walk into banks during this month and file their annual credit statements. They would be more surprised if they followed these men around and heard them saying, "How much for cash?" and saw them carrying check books and fountain pens instead of the old buckskin wallet and stub of a pencil.

Master Farmers Representative Americans

THE first Master Farmer banquet in New York was a success. It accomplished its purpose, which was to honor some splendid farmers and their wives, and through them to emphasize the merits of agriculture as the most important occupation of mankind. We tried to make the twenty-two Master Farmers and their wives feel at home at both the banquet and at the McAlpin Hotel for lodging and breakfast, and we hope the occasion was one which they will long remember. But as our Publisher, Henry Morgenthau, Jr., said, instead of honoring them, the situation was reversed and they brought honor to the occasion, as they would to any gathering at any time.

All who saw these splendid men and women went away impressed not only with their ability as farmers but with their great sincerity and high qualifications of real manhood and womanhood. They are representative of the great majority of men and women who till the soil and rear thereon the kind of homes that have done much to make America great.

A Constructive School Meeting

ON December 13 and 14 at Syracuse several hundred representatives of fifty-five central rural school districts of New York State met to compare notes and study together how better to administer the schools in their localities for the best interests of country boys and girls. The meeting was one of the most harmonious and instructive educational gatherings that we have ever attended. The spirit of real service to education manifested by practically everyone present was inspiring.

Our readers will remember that one of the new Cole Laws passed by the New York State Legislature three years ago gave any group of school districts in the State the *privilege* or *option* of uniting under certain conditions in an administrative unit to be known as a central rural school district. In order to organize such a district, it is first necessary for the local voters to petition the State Department of Education, and before the Commissioner will have anything to do with the proposition the local people must show plainly that a majority, including a majority of the country people involved, are in favor of the central school proposition. Many meetings are held and the matter thoroughly discussed. If the Commissioner is convinced that a majority really desire such a district, he lays it out.

The law distinctly provides that none of the one-room school districts can close the school unless the voters of that particular district so vote. But the plan provides for transportation of the older children in the seventh and eighth grades, and it especially makes provision to give all of the children in the central district the advantages of a free high school education, something that has never been done before for rural children in the history of the State. You will see that the plan does not consolidate schools, for the local schools may still be kept open. It does consolidate the administrative units and equalize the taxation within the whole unit.

At the meeting at Syracuse, representatives from the central districts brought out time and again many of the advantages that this central school plan has. It was emphasized that better facilities for the older children were provided.

More financial aid from the State enabled the local districts to provide these additional educational facilities, in many cases with an even lower tax rate than they had paid before. Several speakers from the different central districts said that those who had opposed the centralization at first now favored it and would not on any account go back to the old system.

It was very evident that the opposition to this progressive move for better school facilities had been based on misunderstanding by farm folks resulting from propaganda put out by those who are serving their own selfish interests rather than those of the boys and girls. However, even this opposition is serving its purpose for the districts that really want to centralize are petitioning the department as rapidly as the department can proceed with the work.

Ownership of Good Land in Small Holdings Makes a People

WE have been reading recently a very interesting book on the land tenures in America and in Europe. Few of us realize how the fortunes of every man, no matter what his business or calling, depend on the soil. Someone has said, "Let me write the songs of a nation and I care not who makes the laws." We can well change this to read: "Tell us the kind of soil on which a people live and we will tell you the kind of people they are."

In America the number of acres in farms has been more than doubled since 1860, by the opening of the great West, and it has been the bringing of this mighty new agricultural empire with its rich soil into cultivation through the development of modern farm machinery that has more than any other factor made America the largest industrial and the richest nation in the world.

But more important still has been the effect of this land upon the people themselves. In Europe it has always been the custom for the aristocracy to hold the land in great grants or tracts so that the men who actually worked the soil seldom if ever owned it. The result of such a system was peasantry. But in America almost from the beginning land was cheap and men owned it themselves. There were some exceptions to this in the South where the holdings were large and were worked by slaves, but the Civil War broke up this system so that in general throughout America the farms have been small and owned for the most part by the men who worked them. As a result of this system of land tenure, we think it may be said without undue boasting that the common people of America have been of the highest average intelligence of any people in the world. Without such a system of land tenure and ownership in small parcels, a Republic such as ours never would have been possible.

Therefore, when we begin to talk of the combination of small farms into large ones and of great farms owned and operated by corporations, let us remember the teachings of history and the fact that by such consolidations we may be heading again towards peasantry and sacrificing the principles that have made America great.

Eastman's Chestnut

ALITTLE girl was put in an upper berth for the first time. She kept crying till her mother told her not to be afraid because God would watch over her.

"Mother, you there?" she cried.

"Yes."

"Father, you there?"

"Yeah—"

A fellow-passenger lost all patience at this point and bellowed forth; "We're all here! Your father and mother and brothers and sisters and aunts and uncles and cousins. All here; now go to sleep."

There was a pause then, very softly; "Mama!"

"Well?"

"Was that God?"

When Was The Best Time to Live

The Winner of Our Latest Contest Says "Now"--Others Disagree

EDITOR'S NOTE—On this page we are printing letters from winners in A.A.'s contest on "When was the best time to live?" The "good old days" had many points of excellence but, after experiencing the comfort of modern conveniences, who of us would be contented to do without them.

First Prize Letter

I AM nearly seventy years old and, though I have pleasant memories of my childhood and the years succeeding it, and am fairly well acquainted with our country's history, I say unhesitatingly that the present age is preferable to any period of its past history.

For example, how much more convenient is the electric light by which I am now writing than the tallow candle of my childhood or the kerosene lamp of later years, not to mention the other uses of electricity, so common in many of our homes, which are adding to our comfort and convenience and which belong to this age alone.

How easy now to send or receive goods by mail, a privilege unknown to our ancestors as was also the free delivery, now considered a necessity—not a luxury. The telephone gives, not only to the wealthy, but to people in moderate circumstances, an easy means of communication.

And who, even forty years ago would have dreamed that the radio would bring to the rural districts from places thousands of miles distant, the news, the music and speeches that it now does?

The educational advantages of the youth of today far exceed those of the past. As to methods of travel, surely no one would care to discard the automobile, and, however urgent the case, be obliged to depend upon a horse, or to go back to the good (?) old days when the oxteam was in general use.

As to foods, compare the variety of fruits and vegetables now so easily obtained with the limited bill of fare of our grandmother's time, and the improved methods of preserving fruit, vegetables and meat. In my childhood, fruit was either dried or preserved, meat was dried or salted in brine. I well remember the first glass fruit jar which my mother owned. It was a novelty sixty years ago, while canning meat and vegetables at home was unheard of then.

Even more important is the improved labor saving machinery now common in our homes, on the farms, in mills and factories. Did space permit, I might mention the many books, magazines, libraries and other intellectual privileges in which the present age abounds and which we enjoy so fully.

But, some may say, there is more lawlessness now than in the past, that there is more crime now and less respect for authority and that people are more selfish than when the country was new. Possibly this may be so but I doubt if there is more crime only as the population has increased. We know more about it because of the various ways in which the news of what is going on is daily brought to our doors. Nor, when we consider the

varied benevolences supported by our countrymen, the gifts of vast sums of money and food sent to sufferers in other countries, the efforts to eradicate diseases, the money given to support missions in our home land and on foreign fields, can we say there is more selfishness? Our interest in others may be manifested more in organized work and lack the personal element found in former times, but it certainly is apparent.

But even granted these accusations are partly true, we still have all these advantages and I,



If it were necessary now to thresh with a flail all the grain produced it would take more time to do the job than it does to produce the entire crop with modern machinery.

for one, am very thankful that I live in this age.
—Mrs. J. E., New York.

* * *

A Vote for "Old Times"

Second Prize Letter

AS I am a man and my pleasures were gotten out of fishing, hunting and trapping along with my farm work, I will say that after the Civil War was the best time to get joy out of life.

We had a farm of 169 good acres and kept a dairy of from 20 to 25 good cows and a collection of horses that could step along at a good clip. We did not have to have a license to fish, hunt or trap. We kept a good bird dog—a pointer.

Believe me or not we got some joy out of hunting woodchuck, partridges and quail. There was always plenty of game and we would quit only when we were ready to come home. This is what I call real enjoyment. Today there is but little game and you have to go to parts unknown to find it; besides you have to be loaded with all kinds of legal papers to hunt at all. Fishing was the same way. There were plenty of fish and we had to quit only when we got ready. There was joy on the farm. We had no difficulty in getting a crop of whatever we raised or planted. We did not have to give our milk and butter

checks to the feed man for feed for our stock. We did not have the TB to contend with. A herd of Gray Durhams was the best all-round lot of cows we ever had for good milkers and good quality milk. It was a pleasure compared to what we have to do to get results from a dairy now.

We had the kind of horses that could step at a three-minute clip—and a buggy—believe me, the bolts and screws had to be kept tight to keep the rig from falling apart. It was joy to drive a pair of horses of this kind. An auto has never given me such pleasure as a pair of good nice horses hitched to a good buggy. We did not have to drive 100 miles from home to get enjoyment out of a drive. The good old husking bees and apple cuts were more enjoyment than anything of the kind or nature of these days of 1928. Believe me or not, the young people of today do not know, neither can they imagine what joy we had in our social gatherings. We did not go at a mile a minute to see and

do things as today. We are going at too fast a rate now to get real enjoyment. If I wanted to make money and leave enjoyment to come in when it so happened, I would say now is the time for a young and energetic person. One without energy and push need not apply for success at this age of the world as a failure will follow and joy go with it. Give me the good old days for joy and thanksgiving when the hens would lay a good supply of eggs with the grain that came from the farm and one had always on hand a full supply of smoked hams and salt pork and all the good healthy beef we wanted of the home grown type. Blessed be the good old days and God help the rising generations to prosper.—

H. E., New York.

* * *

The Best Time to Live

Third Prize Letter

These days that we're a livin' in
Are mighty hard to beat,
It costs like everything to live
But ain't the livin' sweet?

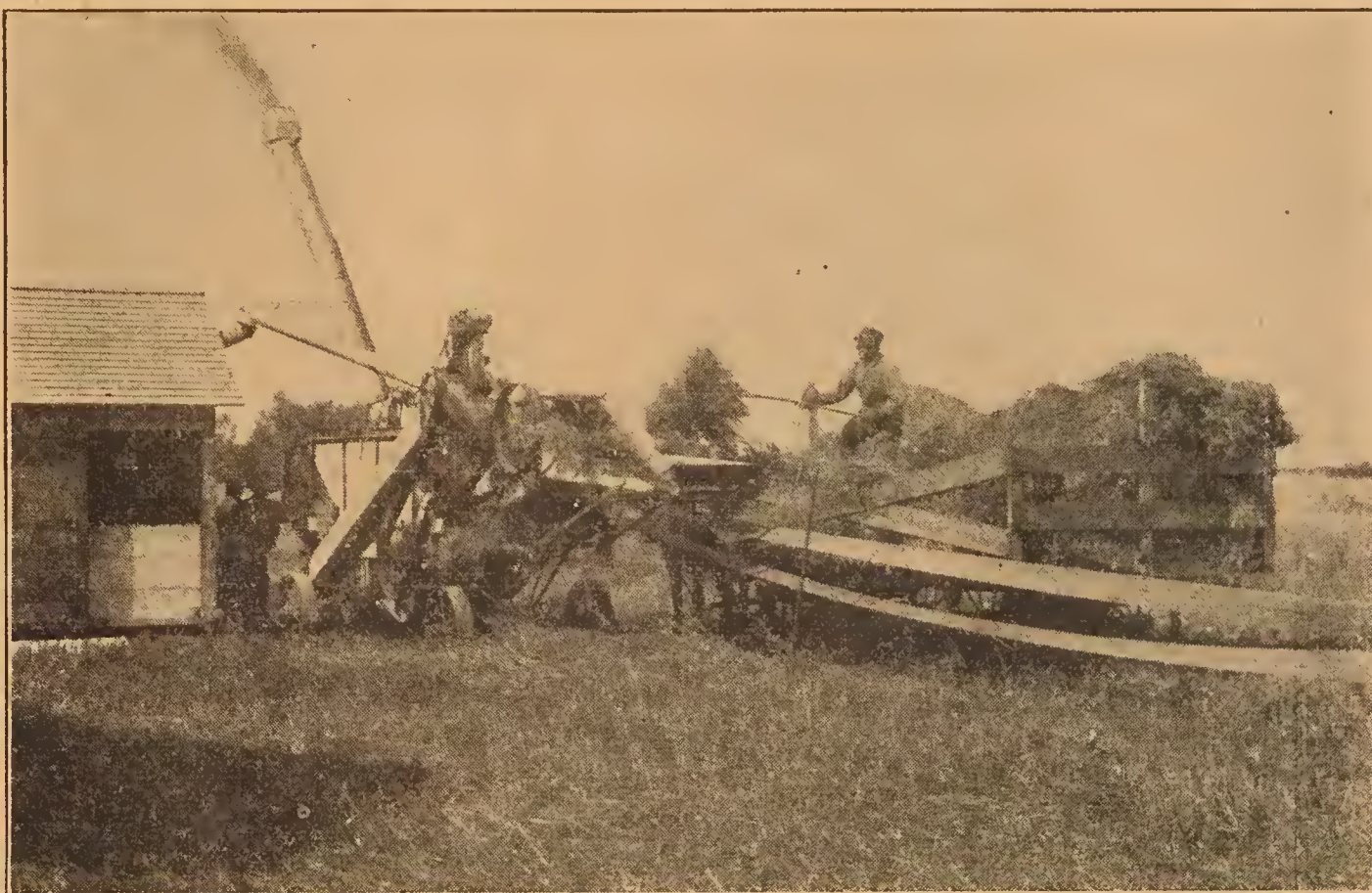
The "Good old days" are skinned
a mile,
But I'll say this: "I vow
I'd kinda like to live again
A hundred years from now."

—Mrs. G. R. C., New York

* * *

Prefers Colonial Days

I WOULD like to have lived in the time of George Washington, when ladies were courted so gallantly by young men wearing beautiful satin coats, knee pants and periwigs and when the young ladies were so dainty and graceful with their
(Continued on Page 20)



The modern threshing machine separates the grain from a load of bundles before a man with a flail would be fairly started.



This 20-year-old apple tree in Mr. Blakslee's orchard, Medina, Ohio, has borne a 50-bushel crop.

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Mr. Blakslee is a consistent user of Arcadian Sulphate of Ammonia and his apple trees, like any other growing plant, respond to liberal applications of available nitrogen plant food.

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A.A.'s Western New York Farm and Home Talk

Apple Varieties for Western New York

WHAT apple varieties should be

By M. C. BURRITT

perience in other sections of the region

kept in present orchards or planted in new ones? This question is one of lively interest to every wide awake fruit grower. Upon its wise answer

much depends—perhaps even success or failure. We all know growers who have made tidy sums of money because they planted wisely, and other growers whose plantings have been a loss because they chose poor varieties.

The question is not an easy one to answer correctly either, because consumer and

therefore market demands are changing. New varieties are being developed, new outlets opened up and public taste is becoming informed and educated. Therefore past experience is not a sure guide, at least for all varieties. It therefore becomes in large part a matter of well informed opinion as to what varieties are best or will be best ten or fifteen years from now.

What to Keep—What to Plant

The case of what to keep in a bearing orchard is also different from the problem of what to plant in a new orchard. For example I doubt if I would plant either King or Twenty Ounce in a new orchard in western New York now. But I certainly do not expect to cut down these varieties in my bearing orchard. On the other hand I have cut down Alexander and I expect to graft over Hubbardson next spring. So also how the apple is to be marketed, whether in local markets by truck, shipped to large domestic markets or exported has much to do with what one plants. Outlets such as canning factories, established demand in certain markets and private trade, soils, yields and prices are all vitally important factors.

Seven Important Varieties

Past experience is, of course, of much value. It at least classifies varieties into valuable ones, poor or worthless and a doubtful group. Perhaps the best experience guide is the careful record taken by Professor G. P. Scoville as to what the farmers in Newfane township, Niagara County have been doing in the last 20 years. He says:

"Of the trees standing in 1924 one half were less than 20 years old and two-fifths more than forty. Less than ten per cent of the trees were set during the 20 years from 1885 to 1904."

"Seven varieties made up 94 per cent of the trees set in the last 10 years. In the order of importance they were: McIntosh, Wealthy, R. I. Greening, Duchess, Baldwin, Jonathan and Delicious. Delicious, McIntosh and Jonathan were the only varieties to show increased plantings from 1915-1924 compared with the preceeding 10 years. Duchess plantings during the same period declined 70 per cent, Baldwins 57 per cent, Wealthies 31 per cent and Rhode Island Greenings 21 per cent. Some of the varieties showing little or no planting in the last 10 years were Twenty Ounce, Tompkins King, Russet, Northern Spy, Ben Davis, Spitzenburg and Rome Beauty."

In the light of this and other ex-

I think that few if any growers would now plant Duchess, Maiden Blush, Russet, or Spitzenburg. Most men would hesitate to plant Jonathan or Rome Beauty because other sections can grow them better. Many growers would not plant Wealthy, King or Twenty Ounce. The list of the varieties most in favor in western New York at the present time settles down to R. I. Greening, McIntosh, Baldwin, Northern Spy and Delicious. Even with these varieties good judgment needs to be used in selecting soils, locations and markets. Especially should one be sure that his soil was adapted to McIntosh which many eastern sections can grow better than most of western New York.

The Best Yields

Scoville's survey also shows that "apple yield by varieties for trees over 20 years of age, Twenty Ounce, R. I. Greening, Baldwin and Tompkins King were among the best yielding varieties. In the young orchards (trees 10-20 years of age) the yield per tree for McIntosh was a little below the average for all varieties. For Delicious the yield per tree was very low."

"Apples that did not sell as well in recent years as formerly when compared with Baldwin, were Russet, Ben Davis, Duchess and Maiden Blush. Northern Spy and Rhode Island Greening when compared with Baldwin sold relatively higher in recent years than formerly. McIntosh sold for the highest price."

In my own case I shall plant R. I. Greenings this spring with McIntosh and possibly a few Delicious, most in the centers of the squares as pollinators. This is partly because I do not now have many Greenings and McIntosh in my present plantings and they will fit in well with my other varieties. I may plant a few more Baldwins.

A Good Time to Plant Apples

Again I take the opportunity to say that it seems to me that this is a good time to plant apples. Apple planting is almost at a standstill the whole country over, except possibly New England and parts of Virginia. Old trees are going out fast. Replacements will be needed by the time they come to full bearing.

Best Time to Cut Scions

"What is the best time for cutting scions for grafting apples and pears."—A. T. W., New York.

SCIONS can be cut either in late fall, winter or until the sap begins to flow in the spring.

The exact time of cutting them will depend to some extent on what form of grafting is to be followed. Where whip grafting is done in the winter time it is advisable to cut the scions in the fall but where cleft grafting is to be done in the spring, there is no particular advantage of cutting the scions very far ahead of the time they are to be used.

In case they are cut in the fall or winter they are to be stored in moist sand or sawdust and placed in a cool cellar or ice house until they are used.

High production is important but hand in hand with it goes careful marketing. Farmers with the highest yields don't always make the most money.

Striking it Rich!



Scattered throughout the West and Northwest are the ghosts of towns that lived a reckless, roaring life in their heyday. They were the mining towns—and when the diggings petered out, the towns died.

Many of these dead towns have arisen to a new life. Modern machinery and efficient methods have made it possible to work the old mines profitably—glean silver and gold that was not worth the labor in the earlier, cruder days.

MODERN methods of feeding and modern feeds are creating profits for poultrymen and dairymen that would have seemed incredible fifty or even twenty-five years ago.

Much of this increased effectiveness in production can be attributed to the attention now given to feeding. This subject has become a real science—the science of animal nutrition. Men are devoting their lives to it—scientists of high calibre.

New ideas in feeds are constantly coming to light. It is necessary to test every one of them . . . test . . . test . . . and test again. To adopt a new idea without adequate experiment might prove both foolish and harmful.

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The laboratories are also essential for maintaining Park and Pollard feeds to standard. Ingredients must constantly be tested for purity to protect the profits of the poultryman and dairyman.

The Service Department, too, is helping farmers to glean the last dollar in profit from their flocks and herds. There the individual problems of feeders are given detailed consideration that usually dispels the trouble.

By helping its customers to “strike it rich” through modern methods, the prosperity of the firm itself has been built.

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—the new, air-nitrogen, complete fertilizer—contains three to five times as much plant-food as fertilizers of the usual analysis. It has 60% actual, available plant-food—15% nitrogen (18.2% ammonia), 30% phosphoric acid and 15% potash. Because of this concentration, the plant-food in Nitrophoska costs less per pound. One bag goes as far as several bags of regular fertilizer. There is less weight to haul; fewer bags to lift; less bulk to apply.

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Nearly two-thirds of the world's annual supply of nitrogen now comes from the air. Converted into mixed fertilizer of average nitrogen content, it would require 1,500,000 freight cars of 15 tons each, making a train over 8,000 miles long, to transport the product.

ONE Bag instead of FOUR

You get 60 pounds of plant-food in every hundred pounds of Nitrophoska—not 12 to 20 pounds as in most fertilizers. You save 60 to 80 percent of the hauling, lifting and applying. Furthermore, the plant-food is in balanced ratio, suitable for corn, potatoes, vegetables and most other crops—readily available for quick starting, continuous feeding and vigorous growth. And it is safe. Ask your County Agent, Experiment Station, Agricultural College, or your favorite Farm Paper about Nitrophoska. Write to us today for free, illustrated booklet. Just use the coupon below. Mail it NOW—don't delay.

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Use MORE NITROGEN for MORE PROFIT

A.F.B.F. Meets in Chicago

A Brief Summary of the Resolutions Passed

AT the tenth annual meeting of the American Farm Bureau Federation, December 10 to 12 at Chicago, a number of important resolutions were passed. Although space will not permit giving them in their entirety we are summarizing those resolutions which we consider most important to our readers. In these resolutions the American Farm Bureau Federation states:

"We pledge ourselves to carry out the objects of the American Farm Bureau Federation which are to develop, strengthen and correlate the work of the state Farm Bureau Federation; to encourage and promote cooperation of representative agricultural organizations in every effort to improve facilities and conditions for economic and efficient production, conservation, marketing, transportation and distribution of farm products; to further the study and enactment of constructive agricultural legislation; to advise with representatives of the public agricultural institutions cooperating with the Farm Bureau in the determination of nationwide policies; and to inform Farm Bureau members regarding all movements that affect their interests."

made was first: that no new reclamation work be done at present, and that the Bureau of Reclamation be transferred to the U. S. Department of Agriculture; second, to make a study of the possibilities of cooperative production; third, that the transportation act be amended so that the shipping public will be equitably represented on any board considering the wage question; fourth that the Federal Reserve Board be given authority to attempt to stabilize the purchasing power of money; fifth, that broadcasting stations specializing in farm programs be given proper consideration by the radio commission.

Reaffirms Position on Many Projects

The following projects favored by the A.F.B.F. are among those on which the position of the Federation was reaffirmed: rural electrification, farm fire prevention, opposition to retail price fixing, forest preservation and reforestation of marginal lands, an American merchant marine operated without subsidy, Federal aid for highways with special attention to farm-to-market highways and the Great Lakes-St. Lawrence waterway.

Regarding the tariff the Federation states: "Rates of duty on foreign grown commodities * * * must be adequate to permit our farmers to enjoy that profit which guarantees the American standard of living." "It is necessary that flexibility be provided in tariff rates. There must be continuously in the Federal government a tariff commission under the administration of which this elasticity can be secured."

Surplus Control a Problem Too Great for Cooperatives

Regarding a national policy for agriculture the Federation stated that this is the dominant economic question facing us, that the question of surplus control is too great a task for present cooperative marketing associations, that tariffs on farm crops are not substitutes for surplus control legislation and that acreage regulation by government or voluntary agreement cannot guarantee surplus control. The resolution states: "We are seeking to solve these problems as a basis upon which our national agricultural policies may be founded. While we have seen nothing up to this time which would cause us to recede from our former position, we are willing to compare legislation which has received our support in the past with that proposed by any other organization."

Regarding Muscle Shoals the resolutions recommend leasing the plant to some one who is obligated to fix atmospheric nitrogen at a profit limitation of eight per cent.

Among the many recommendations

Good Color Helps Market Apples

Is there anything that can be done to increase the coloring apples of the red varieties so they will go on the market in more attractive shape?

THE first thing that can be done is to prune properly so that sunlight can get to all the fruit. Of course better color will develop in a sod orchard, but where the orchard is cultivated it will help to stop cultivation early in July. Late cultivation stimulates growth and retards coloring.

In general the best practice as regards fertilization, spraying, etc., will help put fruit on the market in attractive shape.

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This winter take your milk-income into your own hands. Go after the real profits that come from gearing up your cows to produce MORE MILK. It CAN be done—countless dairymen are doing it winter after winter.

Barn-feeding conditions throw a severe strain on your cows. To be content with providing good feed and housing is to invite losses. Cows get off feed or break down because they cannot convert their rich, dry feeds into a profitable milk flow month after month when so many of the odds are against them. Every pound of feed that fails to register in the milk pail is money lost.

Kow-Kare Steps Up Digestion and Assimilation

This time-tested product is not a food. It is scientifically designed to aid the cow in converting her regular diet into the fullest milk-yield—without food



Home-mix your own Complete Mineral

A mineral mixture of recognized conditioning value is made by mixing 30 lbs. salt, 30 lbs. fine-ground limestone, 30 lbs. steamed bone meal and four cans (large) Kow-Kare. For well under \$6 per hundred you will have an unbeatable mineral. Use 80 lbs. of this mixture to a ton of grain.

Use BAG BALM—for the Udder and Teats

—a wonderful healing ointment, soothing and penetrating. Clean and pleasant to use—cannot taint the milk. No equal for Caked Bag, scratches, cuts, chaps, etc. Big 10-ounce package, 60c. Be sure to insist on BAG BALM; beware of cheap imitations in similar-style packages.

waste. It absorbs the heavy strain of forced production—keeps your cows vigorous and healthy. A balanced blend of Iron, the great builder and blood purifier, combined with potent medicinal herbs and roots enables winter-fed cows to convert the heavy, dry foods—produce more milk—and do it safely.

Regular Kow-Kare conditioning costs but a few cents per month per cow—and this slight cost is returned many times over. It is a fact you can test in your own herd with convincing results.

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—use Kow-Kare with feed a few weeks before and after the freshening period. Its vitalizing action on the reproductive organs has been acknowledged for over thirty years. No cow should freshen without this aid. It assists Nature in functioning properly and avoiding expensive troubles.

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With the A.A. Crop and Vegetable Grower




Seeing Vegetables Through

MANY growers have a tendency to consider that their interest in their products ends with the selling or shipment of the goods. In these times of low prices and shipper competition we are all interested in what becomes of the vegetables after they leave our hands. Careful harvesting, preparation and packing makes it possible to put our produce in the hands of dealers who will treat it as it deserves, giving it careful transportation and handling and protecting it from deterioration in the course of the marketing process.

When a grocer buys too much or allows the produce to wilt or deteriorate in his store he is blocking the channels of consumption, and so hurting all growers. Adequate display in stores and aggressive sales methods can help us almost beyond measure, and we need to study not only distribution costs but methods as well. On a recent visit to Minneapolis I was impressed with the fine quality and attractive displays of vegetables in many green gro-

By PAUL WORK



Paul Work


cery windows. Refrigeration, both in storage rooms and in display cases should be much more commonly used.

Our own growers who market low-grade products are also doing their share in clogging our outlets. It is hard to tell what we can do about it save along the lines of education and the creating of sentiment for better marketing methods.

* * *

Buckwheat as a Cover Crop

Seldom does one see a huskier growth of buckwheat than is shown on the Greffrath place at Irondequoit. An early crop was removed from this land and the latter part of the summer was



Buckwheat as a Cover Crop

used for this crop to be plowed under. Buckwheat is well adapted where it can make its growth before frost. It gives a heavy yield of green material and is regarded as particularly effective in lightening and improving the soil. The vegetable crops which follow the buckwheat will be well protected against drouth by the irrigation lines which appear in the illustration.

* * *

A Veteran Hired Man

The vegetable business has been able to make use of hired help more than the general farmer. Many of the men in this field are veterans and are highly skilled workers. W. H. Hardwick has been for forty years a hired man at Irondequoit and many a younger man, from the looks of him, would hesitate to challenge him for a wrestling match today or ten years from now. He worked for thirty years for the J. M. Cooper Company which catered to high class hotel and retail trade in Rochester until they retired from the game several years ago. More recently Mr. Hardwick has been with Greffrath Brothers who are operating the Del. Titus greenhouse establishment which embraces some three acres under glass.

* * *

Irondequoit

A few years ago it looked very much as if the gardeners of the famous old producing section of Irondequoit, just north of Rochester, would be forced out of the game through real estate development. This situation has now quieted down somewhat and the greenhouse men in particular are looking to a longer future than they previously expected. This year has seen the erection of about an acre of new greenhouses in four or five different establishments. Some are a little dubious about greenhouse investment for crop production on account of the increasing competition of western and southern shipments. Tomatoes and cucumbers, however, have continued to prove mildly profitable. Also radishes are being planted to some extent as a mid-winter crop.

COMPARE the RESULTS

- Yield
- Quality
- Profits



MAPES MANURES

MAPES results are so remarkable, so outstanding, so evident, that you have only to see them to be convinced that the Mapes slogan, "cost little more—worth much more," is a modest statement of the true worth of Mapes Manures.

Mapes Manures have always produced outstanding results because they have always been formulated on the basis of crop yield and quality. Two fertilizers of the same analysis may give widely different results because of the difference in the materials from which they are compounded.

We go to the crop; we ask it what materials it likes best; we put these materials into Mapes Manures. Mapes Manures are made to grow good crops—not to sell at a price. They are first made right, then priced as low as possible.

Try Mapes this year. Compare the results—the yield, the quality, the profits—with the results from any other fertilizer you can buy. Write today for list of crop brands and prices—also ask for Special Trial Offer.

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FORREST'S GOLD STANDARD No. 12 withstood the severe open winter of 1927, in Central New York. Grown especially for use in rigorous northern climates. Assures a fine quality of hay, greatly relished by the cattle. A heavy milk producer. Its expansive root system excels as a soil builder and enables it to survive the severest of winters.

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Raising Truck Crops on the Montezuma Marsh

(Continued from Page 3)

ten-twenty type. The plow turns a furrow fourteen inches deep and twenty four inches wide. To cut the very tough fibrous sod a rolling coulter is used, 30 inches in diameter and sharpened to a knife edge. Such a furrow will turn the mat of marsh grass and cat-tails under a sufficient depth of well decomposed muck that it can be worked without disturbing this trash underneath. For a period of three years this is the only plowing the land receives. After that period plowing once a year to the depth of eight and ten inches is the common practice.

The main crops grown are celery and onions, both having about equal acreage each year. Then follows lettuce, carrots, beets, turnips, potatoes, spinach and a number of other vegetables of lesser importance, all varying in acreage with the season and trend of the markets. For such heavy feeding crops as celery and carrots the standard practice now is to fertilize with one ton per acre of a good reliable 4-8-12 mixture. More than this is not unusual. Onions receive around 1500 pounds and lettuce 800 to 1000 pounds per acre. Muck has very little mineral plant food in it, and nearly all must be supplied. There is about 2% of nitrogen in muck which becomes available very slowly as the muck decomposes much the same as leaf mold and straw only much slower. Just what constitutes the best fertilizing practice on muck is one of the most complicated plant food problems now faced by scientists.

Production on Carlot Basis

Practically all produce is sold in carload lots and is shipped to the larger consuming centers of the cities in the East. There are numerous cold storage plants within easy trucking distance of the muck and a considerable portion of each years crops is stored until later fall or early winter when better prices are realized. The returns per acre are so dependant on the size of the crop and the trend of market prices that no indicative figures can be given. Some conception of the possibilities of the land can be had from the following figures. Celery has been known to return as high as \$3000 per acre under very favorable conditions. The more common return is about \$600 with an expense of producing the crop ranging around \$350 to \$400. The average yield of onions is given as 270 bushels per acre but on the farms of the men who show profits year after year the yield is nearer 600 bushels, and 1200 have frequently been obtained. Lettuce may return from \$2000 down to a complete loss of the crop, though \$300 returns and \$250 growing costs per acre are common.

To date there is under cultivation only about 10% of the total area available. In spite of the failures always present in new developments, the majority of the farmers are expanding each year on a sound financial basis. More practical machinery and methods are used. The grading of the fields so that the centers are a foot higher than the ditch banks is new practice. This is done to obtain a quicker run-off of heavy rains such as were experienced this past season. The use of lime has been found to have beneficial effect, even though there is an unlimited supply of lime in the marl under the muck.

Certainly this land has been an unending source of interest to those who work it and to those who have visited the section. It seems to be the common opinion that this one-time sea of waving cat-tails and flag, bids fair to become one of the greatest garden spots of this country.

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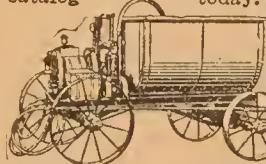
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2555

Keeping Up with the Times

(Continued from Page 3)

credit statement at his bank. It is possible for a New York State farmer to lose just as much by using store credit instead of bank credit as perhaps his grandfather lost when he gave a note to a lightning rod man or bought a sales right for a patent churn.

The best argument that can be presented for taking an annual inventory and filing a credit statement at a bank is that in the opinion of thousands of practical farmers, it pays to do it. Farmers did not stop cussing automobiles and start buying them because they wanted to ride in more style but because they wanted to save time. The twenty thousand requests for farm inventory books that came to the State College of Agriculture last winter during December and January was not because farmers thought it stylish to take an inventory and make out a credit statement but because they think this business practice saves them money.

Your Annual Inventory—What Is It Worth?

So much has been said and written in the last few years about the value of a farm inventory and how to take one, that the writer almost hesitates to discuss these points again. However it might be well to run over some of the more important reasons why a person should take an inventory.

In the first place, an inventory shows a person just where he stands financially and an inventory this year and another next shows whether a person is going ahead or behind and how fast. An inventory does not, of course, show a person where the money came from or where it went or how much the different farm enterprises paid but it does show a person his net worth and how fast he is getting ahead. As one person expressed it, an annual inventory helps in deciding whether to auction off or carry on.

One reason why a store keeper takes an inventory is on account of fire risk. Insurance adjusters depend upon inventories for settling claims. Within the last month, a farmer in Orange County, New York, said that his inventory saved him \$500 when it came to settling up a fire loss. If a man can say to an insurance company, "There's what my inventory shows," he is likely to get a much better settlement than if he has to depend on his memory.

Few farmers used to carry life insurance and there is little inducement for a farmer to put money into endowment insurance as an investment. However, many farmers are and more should be carrying straight life insurance for the protection of those dependent upon them. Along with a life insurance policy in a safe deposit box should be an inventory of what a person owns and what he owes to help those who may have to settle up his estate.

Bank Credit Instead of Store Credit

Probably the most important reason for taking an inventory is that it enables a person to file a credit statement at a bank. This is indeed the age of specialization and a feed store specializes in feed and a bank in credit, and each is able to sell its own line at less cost than the other. When a person can get a cash discount of 2 per cent on a bill of feed but has it charged and lets the bill run a month until his milk check comes, he is paying the feed dealer 2 per cent a month or 24 per cent per year for use of money. A man who can get a ten per cent cash discount on a mowing machine and buys it on six months time

is paying twenty per cent per year for use of money.

A credit study made by the College of Agriculture of New York State showed that the average cost of extending a hundred dollars worth of merchant credit to a farmer for one year was \$13.80, or nearly 14 per cent. This study and census data show that approximately three fourths of New York State's feed and fertilizer is bought on time and that the average bill runs about 4 months.

According to the last census, New York State farmers bought 62 million dollars worth of feed and 12 million dollars worth of fertilizer and lime in one year. Assuming that three quarters of this was bought on time and that the average bill ran for 4 months, the cost of this credit at the rate of 13.8% per year would be \$2,553,000. This same amount of credit obtained from a bank would have cost \$1,110,000, or a saving of \$1,443,000 on the purchase of feed and fertilizer alone, to say nothing of the savings that might be effected on purchases of machinery and other farm supplies. This \$1,443,000 loss on feed and fertilizer credit alone is enough to have paid two times the entire cost of operating the 55 local farm bureaus in the State during 1927 and to have given every farmer in the State a three year's subscription to the AMERICAN AGRICULTURIST.

Banks Entitled to Know the Facts

Banks cannot advertise to furnish unlimited credit. However, there are many farmers using store credit who are in good enough financial condition so that banks would be glad to loan them money if they asked for the credit in a business-like way. The best way for a farmer to find out if he is entitled to bank credit is by presenting a summary of his inventory, which is called a credit statement, to his banker. The banker is responsible to his depositors for the money which he loans and is entitled to the information about a borrower's business which a credit statement gives. The farmer is entitled to the better credit standing which a credit statement usually gives him. "A banker is liable to know what you owe but he may not know what you own."

Many times a farmer says that it would do no good to get in position to pay cash because no merchant in his community gives cash discounts. The answer to this is to demand cash discounts. There is no excuse for charging the same price for cash and credit sales. The man who pays cash should not be obliged to pay for a part of the other fellow's credit. Nothing tempts a person more to give a cash discount than the sight of the good old coin of the realm or a check book. Furthermore, the dealer who gives the cash discounts usually gets the cash business and the other man the credit.

How to Get Your Inventory Blank

For the fourth time, the extension service of the New York State College of Agriculture and the Agricultural Committee of the New York State Bankers' Association are cooperating on a farm inventory and credit statement campaign. If there is any reader of this paper who does not know about "Farm Inventory Week, Jan. 7-12, 1929," it must be because he has not been near a grange hall, feed store, farm bureau office, bank, or milk plant during the last month. All of these agencies have been using posters, letters, and personal contacts to encourage farmers to take an inventory

(Continued on Page 15)

Quality PIGS For Sale AT A LOW PRICE

Why not have quality when starting to raise a hog? These are all good blocky pigs; the kind that will prove good hogs. Yorkshire and Chester cross, or Chester and Berkshire cross pigs, 6 to 8 weeks old, \$3.50 each; 8 to 10 weeks old, \$4.00 each. I guarantee them to be healthy and good size for their age. I will ship any number C.O.D. to you on approval and if dissatisfied in 10 days with the pigs, return them and I will return your money. No charge for crating. WALTER LUX, 388 Salem St., Woburn, Mass. Telephone 0086.

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Where New York City's Milk Comes From

WHEN the dairy plants which supply New York City and the surrounding metropolitan territory are grouped by distance zones from New York City, certain interesting characteristics may be pointed out. That part of New York City Milk Shed located in New York State is widespread, with approximately 7 per cent of the milk which properly comes within it, located within 100 miles of New York City, eighteen per cent between 100 and 200 miles, 35 per cent between 200 and 300 miles, 29 per cent between 300 and 400 miles and 11 per cent over 400 miles. In other words, approximately 75 per cent of the milk in the State from which the supply for New York City may be drawn is produced more than 200 miles distant from the city. In the case of milk actually shipped for fluid use, however, only 68 per cent comes more than 200 miles. There are considerable variations, in different months, however.

Although most of the cream delivered by farmers is at butter factories or at the plants of upstate dealers and does not at present enter into the New York City supply to any extent, it should be noted that less than 10 per cent of that delivered at plants is within 200 miles of New York City.

Much Cream From Nearby Points

About 42 per cent of the cream shipped for fluid use (skimmed from fresh milk) originates within 200 miles of New York City. A rather large proportion of this is due to the predominance in Delaware and Greene counties, of Jersey cattle, producing milk high in fat content, which results in considerably more cream per 100 pounds of milk than is the case in many other sections. Also, parts of these counties are very rough in topography and are served by railroads which, because of the difficulty of operation, charge more than the usual rate for hauling fluid milk. These and possibly other factors help to keep cream shipments at a high level, even though the more general tendency would normally be for cream shipments to give way to fluid milk.

Production Uniform Near the City

Near New York City, the production of milk is nearly uniform throughout the year, while as the distance increases, there is relatively much more summer and much less winter milk produced. Thus, in the first distance zone of 0-99 miles, 9.9 per cent of the annual supply of milk was delivered in January. This decreased gradually with distance until at 400-499 miles, only 4.3 per cent was delivered in January. Similarly July deliveries increased from 6.5 per cent of the annual total in the 0-99 mile zone, to 12.7 in the more distant one. During the six-month summer period from May to October, only 46 per cent of the annual total of milk received within the zone was delivered at plants in the first hundred miles from New York City. The proportion increased zone by zone until at 400-499 miles, 66 per cent was delivered in the six summer months.

On the other hand, in the case of milk shipped for fluid use, there was little difference in the proportion shipped in different months as between zones up to 400 miles. The zone 400-499 miles showed 11.9 per cent of the annual total shipped in October and only 5.4 per cent shipped in June. This represents the practice of reaching out to a relatively great distance at seasons when milk for city supplies is short.

Briefly, the milk supply which is potentially available for the New York City market is produced throughout

With the A. A.
Dairyman



the year in about the correct proportions needed for fluid consumption during the various months, in territory near the market, while in more distant territory, fall and early winter production is increasingly smaller and summer production increasingly greater as distance increases. This means that the constant expansion of the active "milk shed" into this territory, in order to obtain additional supplies of fluid milk during the late fall months, carries with it the problem of utilizing in manufactured products, increasingly greater quantities of summer milk. This, at the same time, makes available for the fluid market additional quantities of milk in the summer time, which could be either manufactured or sold in fluid form, and tends to hold summer prices to producers for all milk at levels close to the returns that could be received on national markets for standard non-perishable dairy products, though of course these returns are modified considerably by distance from market and other factors.

To meet the gradually increasing needs of late fall and early winter markets, for fluid milk, when production is at the low point, will require that seasonal production be gradually evened out. It seems probable that this can be most easily brought about by a price system which will encourage those dairymen who have already adjusted relationship, and at the same time, stimulate winter dairying moderately in other sections, in the zones nearest market first, so that winter supplies of milk will be available as needed, from year to year, without excessive winter surplus for manufactured products which can, in general, be produced more advantageously by using summer milk.

A Question About Fencing Untested Cattle

Does the New York State law require a double fence between tested and untested cows in adjoining pastures?—C. M.

THERE is no law or regulation which requires a double fence between pastures where tuberculin tested and untested cattle are pastured. In quite a number of such cases, the owner of a tested herd, as a precaution against re-infection, has built a second on his property some ten or twelve feet distant from the original line fence.

We are mailing you, under separate cover, Department bulletin entitled "Help Eradicate Tuberculosis," which contains a great deal of detailed information on the subject.

Off-Flavored Milk Due to Lack of Air and Sun

MILK has the absorbing qualities of a sponge, so that wherever foreign odors exist near milk, it will have an off-flavor highly distasteful to the consumer.

Such defects may be traced usually to one of three sources. First, faulty barn ventilation which may allow gasses and odors to accumulate. Then there is the matter of feeding. Good hay and grain ordinarily do not produce abnormal flavors in milk, but turnips, cabbages, potatoes, and certain weeds will make milk very repulsive to some consumers. The best plan is to feed after milking rather than before. Finally milk becomes contaminated from foreign odors when it is stored or handled in places where fruits, vegetables, oil, gasoline, or other materials emitting strong odors, are stored. Proper ventilation and exposure to sunlight will help, but it is better to remove the offending object. —N. J. State College.



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A Serious Problem

Conference Called to Check Western Milk

ON December 20, at the request of the Dairymen's League Cooperative Association a conference was held at their offices in New York to discuss the problem of supplying New York City with enough milk without making it necessary to enlarge the present New York milk shed. Among those present were representatives of the dairy industry, farm organizations, the State Department of Agriculture, the College of Agriculture, farm press, railroads, and several others.

President Sexauer of the League, Mr. Coulter, the secretary, and George Fitts very ably presented the situation. It was stated that this year more than ever before there developed a very insistent demand that the New York milk shed be extended at least to allow cream to be brought into this market during the short period. The city Health Department takes the position that if they inspect territory and qualify it for shipment into New York they have no way of barring that territory at such times as the milk or cream is not needed here. If it is allowed part of the time, we must contend with it all of the time. If inspections are made for one company, they will have to be made for all companies.

Western Cream Will Affect the Market

In 1927, 4,301 cans of cream were used per day. This is equivalent to 43,000 forty-quart cans of milk. The average price for New York cream is \$26.26 per can. The average price for western cream delivered here is \$22.09 per can. It is obvious, therefore, that large shipments of western cream will demoralize the New York market and greatly lower the prices to farmers of all milk products. It is figured that with this western supply available, even though not a quart of milk came in, the class 1 price would have to be at least one cent a quart lower on the average throughout the year. This would mean a total loss of more than \$18,000,000 to the farmers of this section.

The problem is acute now because the shortage has been the greatest this fall that it has ever been and the object of the conference at the League offices was to take steps immediately to see that our own farmers here in the East produce enough milk for the market during the short periods next year.

Other engagements prevented Dr. Wynne, the Health Commissioner, being present at the conference, but he was well represented by Mr. A. A. Reitweisner who very ably presented the views of Dr. Wynne and the poli-

cies of the Health Department. Mr. Reitweisner said that the Health Department was very much in sympathy with confining the New York milk shed to its present limits, that they did not want to inspect or bring in western cream or milk unless they were obliged to in order to have an adequate supply for the consumers of the metropolitan market. Mr. Reitweisner was very positive in this statement.

Mr. Sexauer, president of the League, said this constructive policy of the Health Department placed the responsibility squarely upon producers in the New York milk shed. Various speakers were then called upon to discuss the situation. Among these were Professors Warren and Ross and Dean Mann of Cornell, and Commissioner Pyrke of the Department of Agriculture and Markets.

It was brought out that there are two ways of increasing the milk supply. One of them is by artificial stimulation whereby dairymen are urged to raise more heifer calves, to feed more, and in general to give the extra care that will produce a little more milk. The other remedy is to change the breeding dates of more cows so as to have them freshen earlier in the fall at the time when their maximum production comes during the short periods.

Artificial Stimulation Dangerous

In the opinion of AMERICAN AGRICULTURIST and this was also stated several times at the conference, too much stimulation of the dairy industry is extremely dangerous. The time is not far distant when we are surely going to have more milk than the market can care for with resulting lower prices. In particular, the encouragement of farmers to increase the number of cows is especially dangerous and sure to be followed by trouble. What is needed is not *more* cows but *better* ones, better fed and better cared for, and in particular what we need as a remedy for this situation is not artificial stimulation but rather changing of breeding dates of the cows to give the milk when it is most needed.

That comes right down to the matter of price. Pay farmers what their stuff is worth, and you will get the stuff every time. That has been proven hundreds of times in agricultural history.

It has been said that too much is now being paid for milk during the surplus periods. We do not believe this, but we are sure that not enough is paid for milk during the short periods. If it pays better to produce milk in June,

(Continued on Opposite Page)

CLIP AND GROOM YOUR COWS DURING STABLE MONTHS.

It Means Cleaner and Better Milk Clipped and Groomed Cows are clean and comfortable and keep dirt out of the milk pail. Clipping and Grooming improve the health of your LIVE STOCK. GILLETTE PORTABLE ELECTRIC CLIPPING AND GROOMING MACHINES OPERATE ON THE LIGHT CIRCUIT furnished by any Electric Power Co. or on any make of Farm Lighting Plant.

Price List on Request.

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40 Years Making Clipping and Grooming Machines Only.

UNADILLA SILOS

Made Famous by
the Men Who
Own Them

Every dollar put into a Unadilla—both in roughage and construction—comes back to you many times during its long life. That's why successful dairymen praise the Unadilla and buy it again and again. If you aim to make more money in dairying, and to pay the least for the most convenience and service—buy a Unadilla—the safest, strongest, most efficient silo of them all.

Makers of tubs, tanks and vats

Unadilla Silo Company
Box B, Unadilla, N. Y.



COUGHS and COLDS

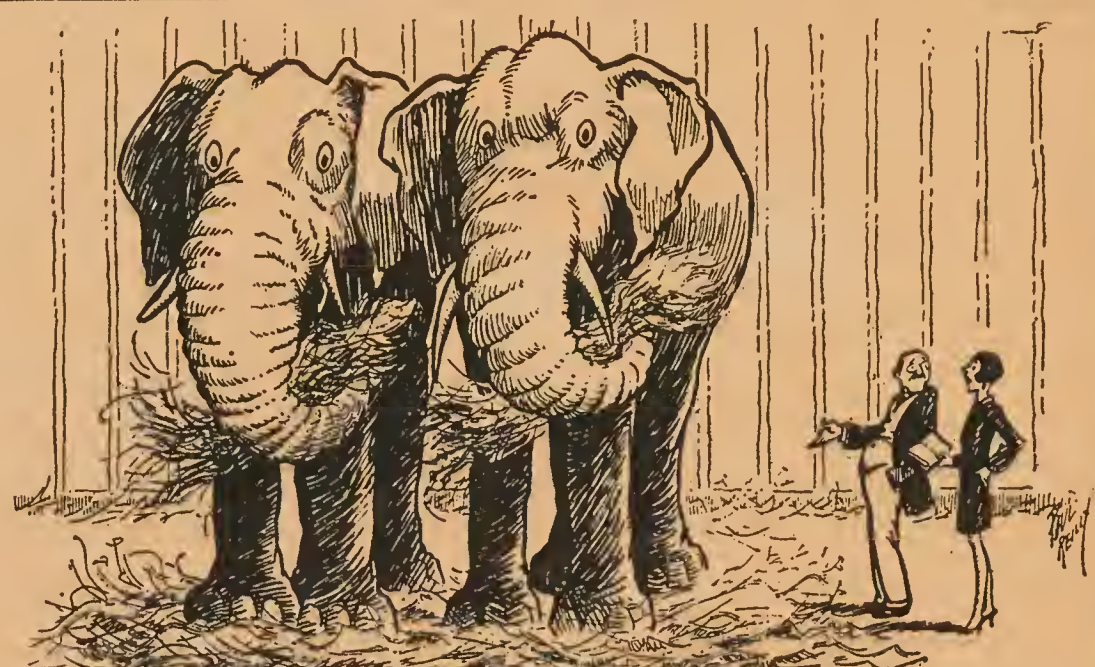
are often the forerunners of serious complications, trouble and expense. Don't allow your horses to be laid up when you need them most. Keep them working with

SPOHN'S

Horsemen swear by it—sold for 35 years. 60 cents and \$1.20 at drug stores or direct.

FREE SAMPLE! Write today for free trial bottle—convince yourself at our expense.

SPOHN MED. CO., Dept. 2 Goshen, Ind.



ZOO-KEEPER'S DAUGHTER—Dad, who was it who said "Two live as cheaply as one"?
"I don't know—but he never bought dinner for a couple of elephants!"
—JUDGE.

then is when the market is going to get the milk, whether it wants it or not; and vice versa, if it does not pay to produce it in November, no amount of stimulation is going to provide enough. Moreover, dairymen must in some way be sure of fair prices during the short periods time enough in advance so they can plan for more milk at those times. Milk cannot be turned off and on at will like water from a faucet.

We believe that the leaders in the dairy industry are becoming rapidly convinced of this. We are looking forward to a constructive policy leading to better prices for winter milk, particularly for late fall milk. Therefore, we think that farmers should certainly give attention to breeding their cows that are freshening now immediately so that they will come into production during the short periods. It is perfectly true that the dairymen of this section have a responsibility to do everything they can to produce enough milk at the right time or else they are surely going to lose the benefits of this splendid local market.

Government Crop Reports

(Continued from Page 2)

American Agriculturist is to give our readers all the available facts. Following out this policy we published a warning in the April 24th issue, already mentioned, warning of the danger of increased acreage. In the August 18th issue we published a story "What Is the Matter With the Potato Market" and in the September 8th issue we published the reports which have come to us indicating that potatoes on Long Island were not yielding as heavy as was anticipated earlier. Following this, on September 22nd, we published the latest reports of conditions in all of the important eastern potato growing sections.

It seems probable to us that if some way could be devised for holding up potato prices this fall to a profitable level that it would only result in a still larger increase in acreage next spring and a still larger slump in prices next fall, provided of course, that weather conditions were favorable for growth. We believe that the government crop reports act as a stabilizer in preventing violent fluctuations in the acreage and prices and that by doing so they do a good service to farmers.

It is pretty generally agreed that over a long period of time there is a definite relation between the cost of production and the selling prices of any product. On the other hand, there is little or no relation between cost of producing a perishable crop in any particular year and the selling price. Consumers may be perfectly willing to pay as much for potatoes as they did last year. As a matter of fact, we have heard little in the way of complaints of last year's prices, but this willingness has little effect on prices. It is a well known fact that a ten per cent surplus of a perishable product will reduce the price not ten per cent but fifty per cent or more. The man who can find some scheme for overcoming this tendency will certainly do much for agriculture.

However, after considering all the facts involved we can come to but one conclusion; namely, that discontinuing the Government crop reports would aggravate the situation rather than cure it.

Keeping Up With the Times

(Continued from Page 12)

during Farm Inventory Week and file a credit statement at a bank. The College, local farm bureaus, and banks are all prepared to furnish to any farmer for the asking, a copy of a farm inventory book containing the official credit statement of the New York State Bankers' Association. Ask for a copy of "How to Take a Farm Inventory and Make a Credit Statement."

Tonic cow was Handicapped but wins by \$45²⁷

A TEN months' competition on our Research Farm was staged between these two cows to determine the effect of Dr. Hess Improved Stock Tonic on milk production.

Contest began in fall of 1927. Cows were same age and condition. They were stabled together and had the same care and feed. The feed consisted of 6 parts ground corn, 6 parts ground oats, 2 parts wheat bran, 1 part oil meal and roughage (mixed hay and silage).

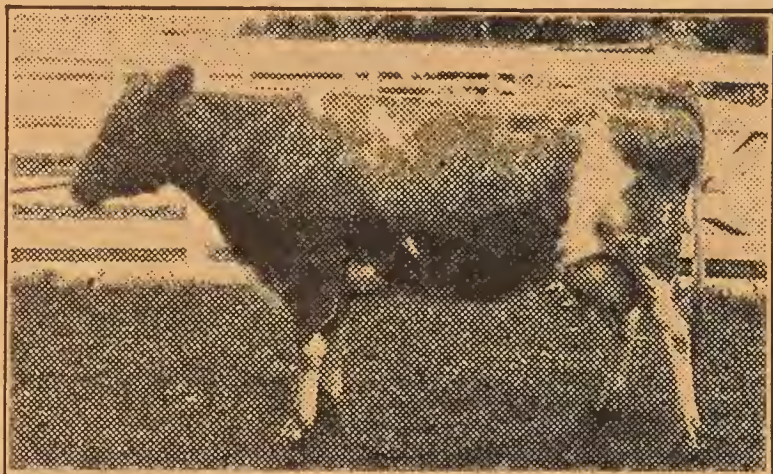
One cow freshened September 15th, the other August 11th. October was observation month. The cow freshening in September made a profit

in October, the usual peak of production month, of \$28. Butter fat rating 4%. This cow was selected to receive the Tonic in the ensuing contest.

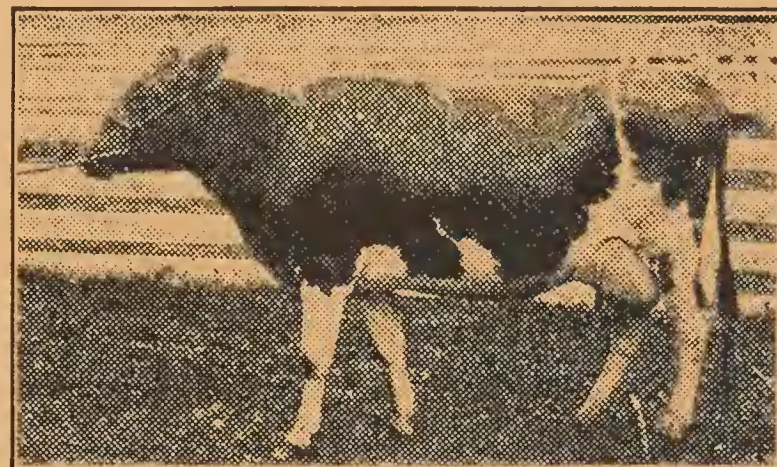
The other cow made a profit in October, her second month after freshening, of \$36.81. Butter fat rating 5%. She did not receive Tonic.

The Weaker Cow Selected to Receive Tonic

Notice that the low producer, according to the October observation, was chosen to receive the Tonic. She began with a clear handicap of \$8.81 against her.



This cow got Tonic



This cow did not get Tonic

The Tonic Cow's Record for Nine Months

	Pounds of Milk	B. F.	Profit
November	945.5	4.5	\$25.72
December	1029.9	5.0	30.88
January	1022.7	5.5	31.42
February	924.6	4.8	24.02
March	973.3	5.1	27.15
April	945.6	5.1	26.96
May	953.9	4.9	26.89
June	890.1	5.2	28.10
July	813.0	5.4	24.69
Total	8498.6		\$245.83

The figures show that the low producer in October gave 1543.3 pounds more milk than the other cow during the remaining nine months when she had Improved Stock Tonic added to her feed.

They also show that while her October profits ran \$8.81 behind the other cow, yet she overcame this handicap and produced \$45.27 more profit than the other cow in the nine months when she had the advantages of Tonic.

Non-Tonic Cow's Record for Nine Months

	Pounds of Milk	B. F.	Profit
November	862.2	5.2	\$25.41
December	756.3	5.4	21.39
January	761.9	5.6	21.75
February	735.6	5.8	21.79
March	746.2	5.5	20.75
April	752.9	5.3	20.45
May	775.6	5.0	20.67
June	799.2	4.9	24.97
July	765.4	4.9	23.38
Total	6955.3		\$200.56

The cost of the Tonic in this test was \$4.50. It returned in extra profits just about ten times its cost. This Tonic will do as much for your cows. No other investment will return in profits so many times its cost.

Dr. Hess Improved Stock Tonic is not a feed. It does not take the place of feed and no feed can take the place of Dr. Hess Improved Stock Tonic. No additional salt or other minerals are required, for they are present in Stock Tonic in all-sufficient quantities.

Dr. Hess Improved Stock Tonic

APPETIZER—REGULATOR—MINERAL BALANCE—all combined in one product

Adopt our plan of continuous feeding of this Tonic for at least 90 days and see what it will mean to you in increased production and profits. It costs but 50c per cow per month. See your local Dr. Hess dealer and get your 90 days' supply now. Figure 15 lbs. for each cow.

RESEARCH FARM — DR. HESS & CLARK, Incorporated — ASHLAND, OHIO



~and Now Metal Tubes Replace Rubber

This New Burrell Feature Is the Biggest Improvement Since the Automatic Controller

A single-tube system—now with metal tubes! Half as much rubber! Half as much wear! Short tubes—easy washing—clean milk! That is what this improved Burrell Milker means to you! And, all the exclusive Burrell features are retained—Automatic Controller, Air-Cushion Teat Cup; Positive Relief Pulsator; Sanitary Moisture Trap. The Burrell is the outstanding mechanical milker—by far! Send for illustrated catalog.

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PUTS IT TO WORK FOR YOU

Ready to milk when you get it. Send for sensational offer! Milk 18 to 40 cows an hour—easy. Costs nothing to install. Easy to clean. Milks the human way—easy on the cows. 30 Days Trial—10 Year Guarantee—satisfaction guaranteed or money refunded. Write today.

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If There is Anything That You Wish To Buy, Sell or Trade Advertise in the Classified Columns OF THE AMERICAN AGRICULTURIST

Another CHINESE Auction

This time we offer FISHKILL DEMEER HENGERVELD Born February 6, 1928

He is a son of a three year old (by the noted Dutchland Colantha Sir Inka) that has made two good long time records first and second calf on twice a day milking. This young bull's sire, and also his dam are son and daughter of Winana Segis May 2d, who made 876.76 lbs. of butter and close to 20,000 lbs. of milk in ten months as a four year old. Also his sire is a son of Hengerveld Homestead De Kol 4th who has a splendid list of large producing daughters, he being a son of Jenny Linn Colantha, with a record of over 30 lbs. butter in 7 days.

We will start him off at \$400.

This price will be reduced \$50 the first of each month until sold.

Dairymen's League Certificates will be accepted at face value in payment for this animal.

FISHKILL FARMS HENRY MORGENTHAU, Jr., Owner
461 Fourth Avenue New York

Reviewing the Latest Eastern Markets

Milk Prices

The following are the January prices for milk in the basic zone of 201-210 miles from New York City.

Dairymen's League prices are based on milk testing 3.5%. Sheffield on the basis of 3%.

Class	Dairymen's League	Sheffield Producers
1 Fluid Milk....	3.42	3.17
2 Fluid Cream		2.30
2A Fluid Cream	2.46	
2B Cond. Milk..		
Soft Cheese..	2.71	
3 Evap. Cond. Milk Powder		2.25
Hard Cheese	3.00	
4 Butter and American cheese. Based on New York City Market quotations on butter and American cheese.		

The Class 1 League price for January 1928 was \$3.37 for 3.5% milk and Sheffield's \$3.27 for 3%.

The above prices in each class are not the final prices the farmer receives. The final price received from the dealer is the result of the weighted average.

Butter Market Quiet and Easy During Holidays

CREAMERY	Dec. 26	Dec. 19	Dec. 28, 1927
SALTED			
Higher than extra...	49 1/4-49 3/4	51 -51 1/2	52 1/2-53
Extra (92sc).....	48 1/2-48 3/4	50 1/2-	52 -
84-91 score.....	44 -48	44 1/2-49 1/2	40 1/2-51
Lower Grades.....	43 -43 1/2	43 -44	39 1/2-40

The butter market went into its customary slump during the holidays. At this writing midway between Christmas and New Years there is very little activity. Most of the big buyers had stacked up ahead, but at the same time there have been enough smaller buyers and jobbers to keep stock moving fairly well. There has been, since our last report, a very decided nervousness in evidence beneath the surface. That nervousness has disappeared with values going to lower levels. The feeling is now that we are on a pretty safe

level. In fact, we are below Chicago and a lot of western butter is going there instead of east which keeps the New York market in a healthier state statistically.

Advices from producing sections indicate a gain in the make, and during the past two weeks arrivals here reflect the truth in those advices. We are getting fully enough fresh butter to supply the trade so that as long as Chicago keeps on its level New York trade looks for no burdensome surplus. It is the opinion of many on the street that we may see slightly lower figures perhaps before the turn of the year.

We have not been bothered with any large supply of foreign butter. The steamer Devon from New Zealand left a small cargo here early in the month, and another boat from the same point is expected before New Years. However, most of this butter is expected to go on to England for the market there is several cents above the New York price level.

Cheese Remains Steady

STATE FLATS	Dec. 26	Dec. 19	Dec. 28, 1927
Fresh Fancy	25 1/2-27	25 1/2-27	
Fresh Average.....			
Held Fancy	27 1/2-29	27 1/2-29	29 -29 1/2
Held Average			

The cheese market has not experienced any material change since our last report. Prices have held steady, although the sentiment seems to be better on held goods. Fresh goods have been rather light in supply, but the demand has not been sufficient to warrant any price increase. The demand of the trade has been for fine quality cured cheese, and it seems to be improving. On the other hand the demand for fresh makes has been of the very indifferent sort. Incidentally, the newest makes that have been arriving in New York are of late fall production, practically no strictly fresh cheese coming lately from New York factories. Most of the fall make has been turning at 25 1/2 to 26 cents for fancy goods, while pet marks have reached even higher levels.

The December 1 reports show that in the entire United States we have an excess of 20,000,000 pounds surplus over a year ago. However, from November 1 to December 1 the surplus has been cut down over 2,000,000 pounds.

Weather Works Against Egg Market

	Dec. 26	Dec. 19	Dec. 28, 1927
NEARBY WHITE			
Hen's Sel. Extras....	49 -50	50-51	53-54
Hen's Av'ge Extras....	47 -48	48-49	51-52
Extra Firsts.....	45 -46	39-47	47-50
Firsts	29 -44	31-45	45-46
Undergrades	28 -29	30-31	38-44
Pullets	35 -40	35-42	40-44
Pewees	30 -34	30-34	34-37
NEARBY BROWNS			
Hennery	51 -53	52-54	51-
Gathered	28 1/2-50	31-51	45-50

It looks as though the weather man has entered into a conspiracy with those who would like to break the egg market. The balmy days that have prevailed throughout the central west and most of the east have apparently aroused the ambitions of Biddy for she has been producing under full pressure. The egg market has been all aflutter

of late. In some quarters we hear nothing but optimism while others are sure the world is coming to an end within the next couple of months. The white egg market has been suffering more than the brown. The Pacific Coast has been sending full supplies eastward for one thing. Then again, we have a surplus of the smaller sizes of fresh whites. It is in that classification that we have the greatest weakness. In addition to that, the Chicago market broke on the morning of the 26th, and that added to a slight increase in arrivals wound up in a reduction of prices.

According to the Price Current the total eggs in storage in the United States on December 1 totalled 3,546,000 cases, compared with 2,956,000 cases at the same time a year ago. The surplus over last year on November 1 was 752,000 cases; on November 1 we had in storage over 6,000,000 cases of eggs, which shows during the month of November almost 3,000,000 cases of eggs were taken out of storage.

There are a lot of stories going around that we are going to see some very cheap eggs before many weeks. It being stated that the holders of storage eggs are getting panicky.

Fair Market for Holiday Poultry

	Dec. 26	Dec. 19	Dec. 28, 1927
FOWLS			
Colored	30-32	25-32	23-27
Leghorn	26-27	25-36	19-20
CHICKENS			
Colored	31-32	30-31	25-35
Leghorn	27-29	25-26	20-25
BROILERS			
Colored	34-45	34-40	40-45
Leghorn	32-49		35-38
CAPONS			
Colored	40-50	40-45	45-50
TURKEYS			
Colored	25-36	35-38	30-45
DUCKS, Nearby	30-32	30-32	28-32
GESE			
Colored	25-30	25-30	25-31

We had a fairly good market for holiday poultry, one or two items excepted. Turkeys for one were way off. Some turkeys sold as low as 35 cents before Christmas and at this writing it is possible to pick up some fairly good stock as low as two shillings. Freight arrivals were heavy, and these had a tendency to crowd the express stock which was not in any great surplus. It was well that only a few people shipped express turkeys, for the supply was not great, and most of them were of poor quality.

Broilers and capons sold best. Ducks and geese also sold well. At this writing mid-way between the holidays the market is in good shape with the exception of turkeys. Readers will recall that several weeks ago it was stated in these columns that it would be a safe bet to sell turkeys locally. We are very positive that those who followed the suggestion fared infinitely better than if they had shipped to New York.

Potatoes Hold Steady.

The potato market has been holding steady. Long Islands are still bringing from \$2.25 to \$2.50 for No. 1 stock in 150 lb. sacks, with some No. 2's as low as 90 cents. Long Island bulk goods have been bringing from \$2.75 to \$3.00 per 180 pounds. State and Pennsylvania goods only bring from \$1.85 to \$2.00 per 180 pounds, while Maines bring the same price for goods in 150 pound sacks. Maine potatoes in bulk range from \$2.25 to \$2.40. Some potatoes are coming from Bermuda, but they are moving very slowly at \$7.50 to \$8.00 a barrel for No. 1's, with poorer stock selling as low as \$3.00. How those people can pay the transportation, tariff and other charges and make any money at those prices we cannot see.

Meats and Live Stock

The live calf market has been holding steady. Choice veals have been bringing from \$16.50 to \$18.00. Medium stock from \$14.00 to \$15.00.

Steers are steady, good stuff selling at \$14.00, some real choice higher with medium and common stock ranging down as low as \$9.75.

Bulls are steady. A few good sold at \$9.50, but most of the arrivals bring

from \$8.50 to \$9.00 with common light weights down to \$7.00 to \$8.25.

The cow market is in line with steers and bulls, being steady to firm. A few fancy head are bringing \$8.50, with others ranging down to \$3.75 for low cutters. Reactors have been bringing from \$5.00 to \$8.00.

Demand has been fairly active for lambs, and trade has been moving along at a fine pace. The best of the arrivals have been bringing \$15.50, with medium to good stuff ranging from \$12.25 to \$14.50. Culls and commons from \$10.00 to \$12.00.

The market for country dressed veal is the same as always i.e. slow demand that failed to move the arrivals except

Market Reports Daily by Radio

Up-to-the minute market information and prices are broadcast daily for your benefit by American Agriculturist co-operating with the New York State and Federal Departments of Agriculture, through station WEAf. The reports are broadcast at 12:30 standard time.

on very choice goods. There are extremely few choice veals arriving and these have been working out at 20 to 21 cents. Anything else however had a hard job finding a buyer.

There has been a good market for rabbits, prices ranging from 32 to 35 cents a pound for nice stuff.

No Change in Beans

There has been no change of any consequence in the bean market. Jumbo marrows are still bringing from \$11.50 to \$12.50 while average goods are from \$9.75 to \$10.50. Peas are bringing from \$9.50 to \$10.00. Red Kidneys range from \$8.00 to \$8.75.

Hay Supplies Heavy

Medium grade hay has been in heavy supply and prices on such are not so good. No. 1 Timothy is scarce and meeting a fairly good demand at \$26.00 to \$27.00. When we get into the mixtures and lower grades, prices vary widely from \$16.00 to \$26.00 depending on quality. Some of the lower grades receiving absolutely no attention, and the shippers would be money ahead if they would keep it at home and feed it to some sheep.

Fruits and Vegetables

The apple market is moving along fairly well. McIntosh are bringing anywhere from \$1.50 for the poorest to \$3.75 for the best. Some Macs in barrels are bringing \$11.00. Greenings in barrels are bringing anywhere from \$3.00 to \$8.00, while Kings range from \$2.75 to \$5.50. In fact most other varieties are covering the same range with the exception of Baldwins the best of which have reached \$6.50.

The onion market is working along in nice shape. There have been no sales of nearby goods on which to base quotations. Some mid western yellows have been bringing \$4.10 to \$4.55 per hundred.

State cabbage is moving slowly at fairly steady prices. Bulk goods ranging from \$38.00 to \$45.00 a ton. Jobbing sales run all the way up to \$50.00 a ton. The market is very variable.

State carrots have been none too active, and \$2.90 is extreme on bags.

State celery has eased off a little bit. Freight goods bringing from \$2.50 to \$3.25.

The movement of Christmas mail has interfered with the receipts of reports from the N. Y. State Department of Agriculture and Markets dealing with the Feed and Grain market. Until schedules are reestablished we are compelled to omit quotations.

Cold storage facilities in the United States are equivalent to an ice box a mile long, half a mile wide, and nearly 48 feet high.

For Sprains and Bruises

ABSORBINE reduces thickened, swollen tissues, softens, fills tendons, soreness from bruises or strains. Does not blister, remove hair or lay up horse. \$2.50 at druggists, or postpaid. Horse book 1-B free. Write for it today.

Read this: "Horse had large swelling just below knee. Now gone; has not reappeared. Horse good as ever. Have used Absorbine for years with great success."

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CHICKS OF QUALITY

	In lots of 25	50	100	500	1000
Wh. Wyandottes	\$4.50	\$8.50	\$16.00	\$77.50	\$150
Rocks or Reds	4.00	7.50	14.00	67.50	130
Wh. Leghorns	3.50	6.50	12.00	57.50	110
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Light Mixed	3.00	5.50	10.00	47.50	90

From carefully selected free-range flocks. 100% arrival. Postpaid. Valuable illustrated 96-page booklet FREE.

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Box 75-A (The dependable plant) Richfield, Penna.

CHICKS

	Will ship C. O. D.	25	50	100
S. C. Reds		\$4.00	\$7.50	\$14.00
Barred Rocks		4.00	7.50	14.00
White Leghorns		3.50	6.50	12.00
Heavy Mixed		3.50	6.50	12.00
Light Mixed		2.75	5.00	9.00

500 lots 1/2c less, 1000 lots 1c less.

Free range. 100% Delivery. Circular.

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"Duck News" Free.
ROY PARDEE,
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Farm News from New York and Pennsylvania

State Institution Farm Workers Have Old Time Institute -- County Notes

THAT the New York State Bureau of State Institution farms is making unusual progress was apparent to any disinterested observer at their conference in Albany the middle of December. These farms usually are referred to in connection with the statement that the state is the largest farmer in the state. C. H. Baldwin is in charge of the bureau which is in the State Department of Agriculture and Markets. He was referred to by his chief, Commissioner Pyrke, as a "Baldwin locomotive of the twelve-wheel sort."

The Institute recalled to mind the old-time affairs in interest and value. The speakers were specialists such as Professor Wing, Dr. Hedrick, Professor Boew, Professor Robb, Professor Worthen and others of similar caliber.

Production Per Cow Has Increased

Professor Wing reviewed the dairy industry, calling attention to the change in production per cow since '850, when it was only slightly over three thousand pounds, while now it appears to be fully 5500 pounds as an average for the state. He also mentioned that the average for the institution farms, including all the cows kept, is about 8700 pounds. The professor quoted an authority who long ago said that dairying is inevitable because the dairy cow produces much more from each 100 pounds digestible food than any other animal. The pig comes next and the hen third, but the hen falls to less than one-third the product of the cow. There is a handicap for the cow however in the amount of labor involved.

Perhaps the use of commercial fertilizers as presented by Professor Worthen might interest farmers generally as much as any subject. Use a high analysis fertilizer and not so much of it 's general advice. A 10-20-10 might be good in many cases or where superphosphate, sometimes called acid phosphate, is used it may do to use a 10-10-10 unless for some special purpose. Manure with probably the addition of superphosphate should be given first consideration and perhaps that will be all that is needed, except for the need of lime generally.

When we listened to Professor Busell it soon became evident that we usually fail to appreciate the great amount of painstaking effort needed in the development of a better variety or

strain of farm crops. The hundreds or even thousands of details that have to be looked after are bewildering. Then there are so few satisfactory results that great patience is needed in the work. The general opinion of the instructors seems to be that on reasonably good soil it is doubtful if a complete fertilizer is advisable for field crops. Nitrogen can be furnished by legumes and there is already an abundance of potash. Some favored plowing under a clover crop sometimes instead of feeding it and applying manure but at present I believe more favor feeding and plowing down the sod for a good crop to follow.

The potato crop has been stressed by the bureau and splendid results have followed. For potatoes and other vegetables heavy applications of fer-

tilizer are recommended. There have been contests among the various farm managers as to yields and in previous years some remarkable results have been achieved on single acre plots, even well towards 600 bushels, I believe. This year the five-acre field was taken as the unit and 14 succeeded in reaching double the state average or more. Six of these exceeded three times the state average and received certificates of membership in the exclusive potato growers club. These ranged from 345.2 bushels per acre on a 5-acre field to 418.7. The latter was won by Harry J. Van Loon of Bath. A two-bushel basket of the potatoes was put in evidence on the table after the banquet and these were presented to Governor Smith. Commissioner Norgord advised that agriculture is so big and technical

that no one can be authority on many phases of it. He with others urged a special exhibit at the state fair next year by the state farms.

The use of the blood test for abortion as an aid in its control was advised, as was the continued inoculation of hogs against cholera. A correct map of the farm is desirable with copies for succeeding years. Of course the use of lime is urged generally. Improve the orchards is good advice for all the dairy sections.—H. L. LYON.

* * *

SEVENTY Ontario county 4H sheep club members, parents and leaders attended the third annual Canandaigua National Bank and Trust Company Sheep Club Banquet, on Thursday evening, December 13, 1928 at Canandaigua, N. Y.

New York County Notes

Hotel in Albany last week, 105 children took toxin-antitoxin at Philmont for diphtheria prevention. Mrs. Williams of Ghent entertained Red Cross officers at her home. Columbia County Historical Society celebrated its 10th anniversary with dinner at Worth House, Hudson. Pork buyers offer 15 cents for light pork and 11 cents per pound for heavy.—MRS. C.V.H.

Dutchess County —We are having nice warm weather with no rain or snow. More fall plowing done than ever. Milk is bringing a fair price but they soon will cut prices as usual. Dairy feed, 22

son; Secretary, Mrs. J. E. Selfridge; Treasurer, Charles Efnor; Gate-keeper, C. G. Herrick; Flora, Cynthia White; Pomona, Mrs. John Peters; Ceres, Mrs. Howard Saunders; Pianist, Mrs. E. H. Palmer.—MRS. L.W.P.

Washington County —John Sheridan has sold his farm on Mt. Colfax to a New York millionaire who will erect a large summer residence. Mr. Armistead Peter 3rd and family of "Content Farms" have gone to Washington, D. C. for the winter. L. F. Beadle markets several cases of eggs in Troy each week. Mr. Frank Pomerick is planning to open a milk route in Cambridge about January 1st. There is no market for potatoes.—H.C.C.

In the Hudson Valley

Rensselaer County —The weather continues warm, almost summerlike. Rain is needed as water is running low in cisterns and streams. Potatoes are bringing \$2.50 to 2.75 per barrel. They are below standard in both quality and quantity. There were no turkeys sent to market from this section. Pork brings \$13., pig pork \$16.50. Eggs are very scarce. A third TB test has just been made of the accredited herds. No reactors have been reported.—E.S.R.

Columbia County —A week of mild weather. A snow storm one night was very light and melted fast when the sun rose. The Borden Farm Products Company has completed improvements on its milk plant at Ancram Lead Mines. The Philmont Camp of Modern Woodmen at Philmont gave a rabbit supper to the Stottville Camp members. John Lusk of Kinderhook shipped 67 head of Jersey cattle to New York City. They were loaded on a train at Stuyvesant. William Quinn, Valatie State Farm, raised 350.19 bushel potatoes on a 5 acre plot of ground. He received a certificate of membership in the New York State Institutional Farmers' Potato Club at the annual banquet of Farmers Institute for State Institution Farmers at the DeWitt Clinton

Poultry Thief Rewards Discontinued

THE rewards which for the past two years have been paid by Mr. Morgenthau for information leading to the conviction of chicken thieves will be discontinued on January 1, 1929.

Rewards will be paid, subject to the usual conditions and rules on all cases, where the thief was actually under arrest prior to January 1 even though the trial and conviction do not come until later.

We believe that the sum totaling over \$2,000 which has been paid on rewards has had a decided effect on lessening chicken stealing. We will continue to co-operate in this good work by furnishing a chicken marker to subscribers at cost and by calling cases of thefts to the attention of the state troopers and local law enforcing authorities.

In the North Country

Essex County —More plowing has been done this fall than in several previous years. Some were still plowing the week of December 17. The grain crop was light in most towns. Potatoes were a fair crop, corn an average crop, hay a good crop. There is no snow on the ground and but little cold weather yet. The outstanding event in Essex County is the construction of the Champlain bridge from the town of Crown Point to Chimney Point, Vt. Work is now progressing on the bridge which will provide a great thoroughfare between the two states.—M.E.B.

Clinton County —The county granges are now having their installation of new officers. Clinton County is well organized, there being a grange in easy driving distance of practically all parts. During the past year the county made the greatest gain in membership of any county of the state. This speaks well for the north country which is popularly supposed to have nine months of winter and three months of late fall.—R.J.M.

Western New York

Cattaraugus County —James Dornham of Franklinville was elected to succeed the late A. P. Anst of Otto as director of the Farm Bureau at the annual meeting at Salamanca, December 15. Those re-elected are: J. J. Young of Randolph, F. B. Farwell of Hinsdale. The Home Bureau chose Mrs. George Ransom, Delevan; Mrs. C. C. Groff of West Valley and Mrs. F. B. Nix of Ischua. Officers will be elected by the directors on January 6. Charles J. Locke, old time violinist gave several musical selections and a play "Witches in the Cream" was put on by West Valley Grange. The city hall where the meeting was held was well filled. A tractor school is being held at East Leon cheese factory this week. Professor Steve is in charge.—MRS. M.M.S.

Genesee County —Our county fair seems to be a big problem with no solution in view. There seems to be a lot of dissatisfaction in present arrangements. An adjournment, called and seconded in the midst of a meeting nearly caused a riot. Too bad that an organization that has continued for 89 years should fail in the 90th. Different plans to make it pay will have to be devised if it continues. December 15 the Genesee County Farm and Home Bureau each met at the Y. W. C. A. Farm Bureau directors elected were Ernest Welker, Danien and Dennis Phelps, Indian Falls; Home Bureau directors: Mrs. Ward Hammer, Mrs. George Wells, Mrs. A. Childs of Batavia, Ray and Corfu.—MRS. R.E.G.

Pennsylvania Farm Notes

PENNSYLVANIA will hold the annual State Farm Products Show in Harrisburg, commencing Monday, January 21st and a number of additional large buildings and commodious halls were necessarily leased to accommodate the thousands of exhibits that will be entered for competition. The live stock display promises to exceed in number and quality any previous show held in the State. Secretary, C. G. Gordan, of the State Department of Agriculture, is the chairman in charge. In connection with the show many agricultural and kindred organizations will hold their annual meetings in Harrisburg during the week. Special importance is attached to these many reunions because of the fact that the State Legislature will be convened in biennial session during this all-important agricultural show week.

Surviving officers, members and farmers' institute lecturers who served under the active regime of the Pennsylvania State Board of Agriculture for many years, will also hold a reunion during the week. Oliver D. Schock, who held the position of Assistant Secretary of the Board and later as Chief Clerk of the Department of Agriculture, is the only surviving official the late Hon. Thomas J. Edge, the efficient and beloved Secretary of the Board having died a number of years ago.

Many Organizations Will Meet

The list of agricultural, horticultural, dairying, poultry, vegetable, tobacco, beekeepers and other related associations listed to meet in Harrisburg numbers an

even forty in number. The interesting achievements, fads, tastes, diversions, fancies, experiments, etc. of so many diversified branches will be more fully exploited than at any preceding farmers' meeting held in the Keystone State. In this connection it is but proper to state that Governor John K. Fisher is in strong sympathy and a willing supporter of all measures which tend to the advance of our agricultural development and wealth.—OLIVER D. SCHOCK.

* * *

Luzerne County —Not much corn worth husking and most of the fodder spoiled by the frost and rainy weather. Some fifteen of our farmers made their 400 bushels of potatoes which sell readily at fifty cents per bushel. Many other farmers had not enough to winter their families. Apples are about a half crop and cabbage is readily salable at almost any reasonable price but most plantings were a failure because of the wet weather. Many farms failed to produce enough to pay taxes.—W.B.S.

Crawford County —Fall work is well done this year owing to much nice weather for such. But present roads are nearly impassable for automobiles and weather is very warm. Fewer hunters through the country than usual. There are very few public sales. Hogs are 8½ to 9 cents, live young chickens 22 cents per pound, eggs 50 cents per dozen, buckwheat \$1.75 a cwt. potatoes 60 cents per bushel and up. The apple crop is not up to normal.—MRS. C.B.L.

per cent protein costs \$2.25. Bran is higher. Feed prices help to cut down the profit to the farmer. Pork \$12.00 per 100 dressed, fowls 35 cents dressed, butter 55 cents per pound, potatoes \$1.00 per bushel.—P.S.

Sullivan County —Alfred Davis was installed commander of the Roscoe Legion Post. Unpaid tax property was sold on Monday, December 16 at the Court House at Monticello. Several hundred parcels were sold. Sullivan County had 55 more deer taken this year than were taken last year, the total being 405. A large black bear was shot at Mongan Pond on December 7 by La Mournie Stewart. Corn is selling for \$2.30, middlings \$2.15 and mash \$2.75. Butter and eggs seem to remain the same. Cows are keeping up well on their product. Some farmers are plowing as the ground hasn't frozen up yet, others are busy cutting wood.—P.E.

Saratoga County —The weather is very warm for the season. There has been no snow and the roads are not in good condition. Gansevoort Grange 832 held their annual election with the following officers elected: Master, Herbert E. Gray; Overseer, Edward Selfridge, Jr.; Steward, Roland Crowell; Chaplain, Mrs. C. A. Efnor; Lecturer, Mrs. Ernest Pettis; Assistant Steward, Kenneth Robinson; Lady Assistant Steward, Mrs. Kenneth Robin-



Farmers' Week presents opportunities

EVERY month and every business has its conventions. The most outstanding and unusual of these is the one conducted by the State Agricultural Colleges in New York Central territory during January and February under the name of Farmers' Week.

Embodying all the features of the ordinary convention, it is also a seminar—it presents a post graduate course to those engaged in agriculture. Here is an opportunity for the men in the field to exchange ideas with the agricultural scientists. By personal contact, the theoretical meets the practical and the business of agriculture is benefited.

Better soil, better crops, better cattle, better farmers, and better citizens! Fascinating subjects worthy of discussion, as well as profitable.

Progressive farmers throughout the New York Central territory ascribe much of their success to the information and inspiration which they receive from their State Agricultural Colleges through these Farmers' Weeks.



New York Central Lines

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B A B Y



C H I C K S

**KERR'S
1929
CHICKS**

**Quality better than ever
Prices lower than ever**

KERR'S 1929 Quality Chicks will have one more cross of the blood that is consistently producing our prize winners in the egg laying contests. Among the best ten-hen pens of all breeders having five or more pens in the 1927-28 contests eligible to compete for the coveted Poultry Item trophy, the Kerr pens stood ninth with an average lay of 221.9 eggs per bird. The leading specialty breeders of the United States competed.

Our 1929 Special Matings White Leghorn chicks are sired by males from hens with official records up to 294 eggs per year; our Special Matings Rhode Island Reds by males from hens with official records up to 280 eggs; and our Special Matings Barred Rocks by males from hens with official records up to 250 eggs. These 1929 chicks are out of hens, 80% of whose dams in four generations have contest or R. O. P. records up to 250 eggs in White Leghorns and up to 240 eggs in Rhode Island Reds and Barred Rocks.

We can furnish both utility and special mating chicks from flocks that have passed the blood test for Bacillary White Diarrhea, thus insuring a high degree of livability. Write for booklet with 1929 prices. Liberal discounts on orders placed before February 1st.

KERR CHICKERIES, Inc.

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**FERRIS STRAIN
WHITE LEGHORN
CHICKS**

Send orders now for March and April.
\$12 per 100--\$57.50, 500--\$110, 1000
Juniata Poultry Farm, Richfield, Pa.

Hampton's Black Leghorn Day Old Chicks.
Circular free. A. E. HAMPTON, Box A, Pittstown, N.J.

SPECIAL FALL prices for breeding Turkeys.
Write your wants and for mailing list. PIONEER
STOCK FARM, TELFORD, PA.



With the A. A.
Poultry Farmer



Henhouse Floors and Floor Litter

WRITING in this paper some months ago I gave the comparative figures on the cost of straw and shavings as a floor litter. The conclusion that I reached was that shavings of the baled type were a cheaper floor litter than

straw, assuming that you were obliged to buy them. I am willing to go a little farther now and say that straw, especially of the baled type, rich in dust and dirt, is one of the most important and potential factors in the spread of the so-called nasal and ropy diseases that I know of. There may be a

time when all floor litters become dusty from use and wear, but there have been few times in my experience when I have littered my houses with baled straw that a very dusty condition has not prevailed from the start. On the other hand, on the few occasions when I have been able to get straw from a loft or stack, this straw has proven very satisfactory because it eliminated the dirty condition which so often prevails in the baled variety.

Dust Aggravates Colds

As it is a necessity for me to buy floor litter at all times I have made various checks, paying especial attention to the irritation of dust. Due to sudden illness, I changed my whole housing litter from shavings to straw. The plant had gone thru the winter without cold, nasal trouble, etc. From the day the straw went in, these troubles began to appear. Having made this discovery by accident, my next test was on expense. Under the same conditions of care, I set four pens, two each and in the same house one test. One had but to walk thru these pens at feeding time to make a comparison. The dust in the straw pens was as obvious as was its total absence in the shaving pen, and the constant sneeze and cough of one bunch of birds formed a strange contrast to the other two flocks which ate in peace and happiness.

It seems strange that we should pay so much attention to drafts, exposure, and what not and ignore a condition which is serious for either man or beast, and my plea is,—and I am not concerned what floor litter you use,—that you watch the dust element and eliminate it as a factor in contagion and disease. In the old days we used to feel that we had to litter the floors a half a foot or so. Now it is more a question of using only enough litter to help in keeping the floors clean and to protect the birds where floors may

be cold, unusually hard, damp, etc. Frankly, I would rather change litter more often and use less than I would to have it too deep.

Where floors are damp the most wear and tear will be found on any floor litter. No litter can successfully last very long, and the best suggestion I can give you is that you try to overcome the dampness. It will never do your birds any good. The use of commercial litter such as peat moss can be used with most success under such conditions, and in this connection, one word about peat. I have used this moss at various times, and have run into two distinct kinds: live peat moss and dead peat moss, and the former is the best. The distinction, as I understand it, is that live peat comes from beds that are living and growing; it is soft and resilient and breaks apart readily when a bale is undone, whereas the dead moss lacks this resilient character, it is hard and must be beaten apart, and does not make nearly as desirable floor litter as live peat.

Buckwheat for Poultry

I live in the buckwheat section of Pennsylvania and it is grown by all for chicken feed. I would like to know the food value of it for laying hens. Would it be more profitable to sell the buckwheat and buy corn and wheat. Also what portion buckwheat should be mixed with corn and wheat for feeding.—B.W.M.

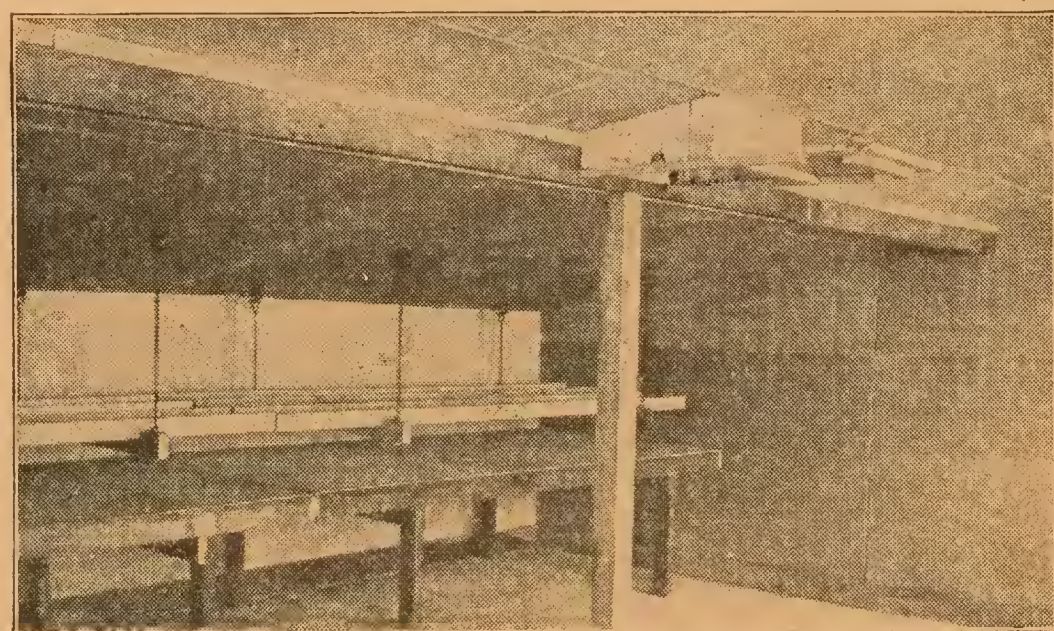
WE believe that buckwheat is a very good poultry feed as part of a grain ration although we do not feel that good results can be secured by feeding it alone.

It is considerably higher in fibre than barley or corn but about the same as oats. A grain ration of buckwheat alone or buckwheat and oats would be too high in fibre to get the best results but good results can be secured by using perhaps not over 100 pounds of buckwheat to 500 pounds of a grain mixture. We think you can get good results by feeding 200 pounds of corn and 200 pounds of wheat and 100 pounds of buckwheat. It might even be possible to use 200 pounds of corn, 200 pounds of buckwheat and 100 pounds of wheat. If the buckwheat is home grown and the wheat has to be purchased, we certainly would try this proportion.

A Case of Roup

I am coming to you for some information about poultry that are sick. They are very droopish and a pus seems to come out of their eyes so bad that they lose their sight.—D.V.L.

YOUR birds have a form of roup. The best thing to do is to remove all the affected birds and keep taking
(Continued on Opposite Page)



It is difficult to get both warmth and proper ventilation in the same house. In the above illustration insulating board has been used to line the sides and ceiling and keep in the body heat of the birds.

The Question Box



Will Storage Battery Freeze?

"Please tell me what temperature a fully charged storage battery will stand without freezing."—J. J., New York.

A FULLY charged storage battery in which all parts of the electrolyte show a gravity reading of 1.300 will freeze at 96 degrees Fahr., below zero; 1.250 gravity at 58 degrees below zero; 1.200 gravity at 16 below; and 1.150 at 5 above. Distilled water should not be put into a battery in bitterly cold weather without having the battery in a warm place and then charging the battery until the water has mixed with the electrolyte.—I. W. D.

Size Of Seed Potatoes

What size potatoes would you advise keeping for seed? Some say large and some say small.—Mrs. E. S., New York.

THE size of seed potatoes is not so important. It is important however, to have the seed potatoes come from high yielding plants. Seed potatoes are not seeds in the true sense of the word but are more similar to cuttings such as are made from house plants, grape vines, etc.

If you are saving your own seed the best way to do is to save them at digging time, selecting those which come from hills having a goodly number of uniform tubers. In case you are buying seed it is advisable to buy from some one who is noted for high yields or to buy from a certified seed potato grower.

The reason for the prejudice against small tubers for seed is that in the majority of cases the small tubers come from hills that are low yielders.

Trouble With Stringy Milk

Could you advise me what is the trouble with a cow when her milk is stringy after setting a short time? We hate to sell this cow but we are afraid to use her milk. It does not seem to be that way when milked, but after setting it becomes stringy.—N. O., New York.

THE trouble with stringy milk is no indication that anything is wrong with the cow and as stringy milk is not harmful you need have no hesitancy in

using it. On the other hand it is unpleasant to say the least and we believe that with proper care the trouble can be stopped.

This stringy condition is due to a type of bacteria which develop at a rather low temperature. When they once get a start it is very difficult to get rid of them. The only way to do this is to boil or very thoroughly scald every utensil which comes in contact with the milk. If you miss one utensil the trouble will be as bad as ever in a few days.

Gassing the Borers Next Spring

Where the P. D. B. treatment for peach borers was neglected in the fall is it safe to apply the treatment in the spring?

IT is better to treat in the fall but where it has been neglected it can be done in the spring. Probably not quite as high a percentage of the borers will be killed by the spring treatment.

Pollenizer for Stayman

What is the best pollenizer for Stayman Winesap?

IT has been found that Grimes, Delicious, Rome, Transparent, Jonathan, York, Wealthy, Bonum, Early Ripe, Nickajack, Williams and McIntosh will successfully pollinate Stayman Winesap.



On the Radio

Leaving Voltmeter in Circuit

Please let me know whether it does any harm to a voltmeter to leave it continually in circuit, so as to register the voltage? I mean for "B" voltage.

IF your meter is of the high resistance type, it will not damage it at all. If you are speaking of "B" battery voltage, the meter will consume some current, and if the low resistance type will run the batteries down quickly and may become over-heated itself. A meter suitable for eliminator work can be left in circuit continually.

* * *

Size of Aerial Has No Effect On Power

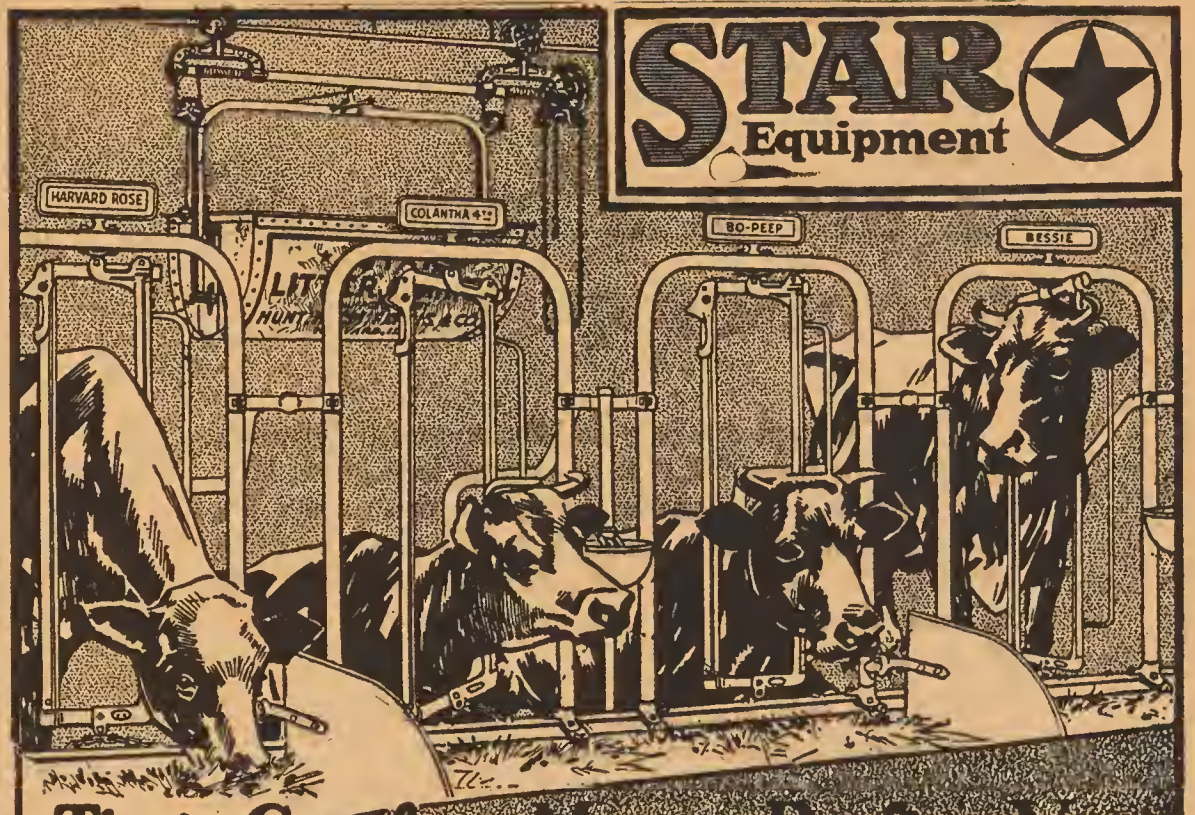
Is it not better to use a large aerial, so the volume of the set will not have to be turned on so far, rather than to use a small aerial and have to turn the set at full power all the time? I am advised to use a small aerial.

SOMETHING depends on the type of set you have, but most sets consume the same amount of power regardless of the setting of the volume control. You could easily verify this. Inasmuch as the use of a small aerial results in much finer selectivity, less interference, less static and electric noise, without sacrificing the volume of the stations you customarily listen to the smaller aerial is recommended.

A Case of Roup

(Continued from Opposite Page)
out the new cases as they appear. Some of these birds, if kept in dry clean quarters will probably come out of the disease.

The chief cause of this trouble is exposure. It generally begins with a cold and goes from bad to worse and is easily spread through the drinking water, floor litter, etc. Clean your house thoroughly, disinfecting it with kerosene oil. Now locate the cause of your trouble. You will find it along this line: your birds are in a drafty house, they are too cold at night after the hot days of the summer, the house is damp, the floor is dusty, etc. I simply suggest these as possible causes. In this or some similar cause the trouble started. The best remedy is to find and remove this condition.—L. H. Hiscock.



Their Comfort Means Profit to You

You insure the full profit from your careful breeding and feeding when your cows enjoy the supreme comfort and safety which can be given only by the use of STAR Stalls, Stanchions, Pens, Carriers, Water Bowls and Ventilation Fixtures.

The neat, smooth, one-piece arched stalls, without cracks, crevices, dark corners or dirt catchers, protect them from crowding or trampling. Light reaches every spot around them; they lie down, get up, and turn to look or lick behind as easily as in the pasture. The strongest of stanchions—wood-lined—adjusted to a comfortable fit, hold them safe. The stanchion alignment keeps them in line at the gutter; so they lie down in comfort and not in filth and misery.

With fresh air, fresh water whenever they want it—even at night—they're never nervous, tired or restless. They look well and feel well and they just can't help giving more milk.

STAR equipment not only eliminates those accidents and diseases that wipe out profits, but it pares production cost to the bone by saving feed, time, work and miles of useless steps.

FREE BARN PLANS

Tell us the size and kind of barn you want to build or send rough sketch of the one you want to fix up. We'll help you develop your own ideas and furnish a floor plan blue print without the slightest cost or obligation to you.

Get this big 192-page book. It tells all about the new rust shield which prevents partitions rusting off at the floor, and the vital, time-tested features of STAR equipment whose values show up in everyday use and convert your barn—new or old—into a real money-maker.



Hunt-Helm-Ferris & Co., Inc. Dept. A-1

Albany N. Y. HARVARD ILLINOIS San Francisco Calif.

Please send Star Line Book. I expect to

☐ Build ☐ Barn ☐ About when

☐ Remodel ☐ Hog House

☐ Equip ☐ Hen House

Name.....

Address.....

Send floor sketch for free blue-print

BABY



CHICKS

Hall's Chicks

Leghorns-Reds-Rocks-Wyandottes

"WELL BRED FROM WELL BREEDERS"

Extra quality chicks—the kind to show the greatest profits for Mr. Dollars-and-sense Poultryman. We have 100 acres here, and we know our birds. 4 breeds. Order early for wanted dates. Special prices for broiler chicks. All breeders B. W. D. tested. 100% delivery guaranteed. Circular free.

HALL BROS., Poplar Hill Farm Box 59 Wallingford, Conn.

HUBER'S RELIABLE CHICKS

10 FREE CHICKS —ON orders booked before March 15th, we give 10 Chicks free with each 100 ordered. When we say RELIABLE—we mean RELIABLE in every way. Breeding stock of highest quality of 19 years of careful development. Special attention paid to health of flocks and records kept.

CATALOG FREE—CHICKS SENT C. O. D. IF YOU WISH Write for details—get our illustrated catalog which tells all the story. Our prices reasonable. A book on Raising Chicks worth many dollars given free with each order of \$10.00 or more. Big discount for early orders.

HUBER'S RELIABLE HATCHERY, No. High St., Fostoria, Ohio

Schwegler's "THOR-O-BRED" BABY CHICKS

THEY LIVE because they are bred from healthy, free range breeders that have thrived and gained in vigor for generations. They LAY because they are from selected and tested high egg power stock. White, Brown and Buff Leghorns, Barred and White Rocks, R. I. Reds, Anconas, Black Minorcas, Buff Orpingtons, White Wyandottes. 22¢ and up. 100% live delivery guaranteed. Postpaid. Member International Chick Assn. Write today for FREE Chick Book.

SCHWEGLER'S HATCHERY, 204 Northampton, BUFFALO, N. Y.

Fairport Quality Chicks

are bred to make money for you. Strong, healthy, vigorous from the world's best and heaviest laying strains such as—Tancred, Ferris, Owen Farms, Daniels, Thompson, Martin, Shepard, Fishel and others. Free range flocks, scientifically culled and supervised. Smith Hatched. 100% live delivery guaranteed. 16 breeds 9¢ and up. Postpaid. Members International Baby Chick Association. Send now for free poultry book and prices. Buy Hatchery Chicks for Greater Profits.

FAIRPORT HATCHERIES Box 44 Fairport, N. Y.

To benefit by our guarantee of ads, say

"I saw your ad in American Agriculturist"

Baby Chicks

HIGH GRADE CHICKS

Blood Tested and Utility Stock

Leghorns, Rocks, Reds, Wyandottes, Anconas, Black Minorcas and Mixed. Pekin Ducklings.

Write for circular and prices.

TAYLOR'S HATCHERY, BOX 12 LIBERTY, N. Y.

Baby CHICKS

hatched by the best system of Incubators from high class bred-to-lay stock. S.C. White Leghorns \$14.00 per 100; Barred, White Rocks, Reds \$16.00 per 100; White Wyandottes \$17.00 per 100; Heavy Broilers \$12.00 per 100; Light Broilers \$10.00 per 100; Pekin Ducklings \$35.00 per 100. Add 25¢ on orders for less than 100. Safe delivery guaranteed by parcel post.

NUNDA POULTRY FARM, Desk H, Nunda, N. Y. Member of the International Baby Chick Association

Two Free Books

Breed squabs and make money. Sold by millions at higher prices than chickens. Write at once for two free books telling how to do it. One is 48 pages printed in colors, other 32 pages. Ask for Books 3 and 4. You will be surprised. Plymouth Rock Squab Company, 334 H Street, Melrose Highlands, Massachusetts. Established 23 years. Reference, any bank.

KERLIN BARGAINS in Wh Leghorn Chicks

"Kerlin-Quality" Money-Making Leghorns. Beautiful, Great Winter Layers, White Diarrhoea Free. Egg Contest Winners. Over 50,000 Delighted Customers. BIG DISCOUNT on Chicks ordered Now. Delivery When Wanted. Free Starting Feed! Big Catalog FREE! Kerlin's Grand View Poultry Farm, Box 35, Centre Hall, Pa.

HEAVY BROILER CHICKS—\$14.00 PER 100

Consisting of Rocks, Reds, Wyandottes, Orpingtons. Sent C.O.D. Pay after arrival. Postage prepaid. Live delivery. Immediate shipment. We hatch all year. Send for folder. SCHOENBORN HATCHERY, 355 Main St., Hackensack, N. J. Phone 1603 or 1604.

This is a message to one-crop Farmers

Many farmers are hog-tied by one-crop farming. You may be one of the best farmers in a given line, but if you have no market for any crops except the one big crop in your locality, you have to farm blind-folded year after year. Maybe conditions will be such that you will make a profit—and maybe they won't.

Contrast this condition with the varied agricultural opportunities in Florida. Here no farmer need be a one-crop farmer. But many farmers become specialists in a given line because they like that work best. They don't have to specialize—they just like to.

Here's a state with a farm income of more than \$135,000,000. In Florida, farmers in one section of the state raise tropical fruits, winter vegetables, oranges, strawberries in midwinter. In another section field crops, livestock and dairying are the chief activities. The point is, any farmer coming to Florida has a chance to choose the work he likes best—and in whatever field he chooses he may be sure of making a good living and more.

Does it pay a farmer to move? It does if he is a good farmer doing the wrong kind of work. If you would rather raise oranges, it is foolish to continue growing wheat. We'd like to talk this over with farmers who are looking for real opportunities today.

NATHAN MAYO, *Commissioner of Agriculture.*



Check the list below and mail to the Department of Agriculture, Tallahassee, Florida, for facts regarding farm opportunities in Florida.

(This advertisement is authorized by the State of Florida)

Which of these farm opportunities do you like best?

- ☐ Citrus Fruits
- ☐ Poultry
- ☐ Dairying
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DEPARTMENT of AGRICULTURE
Tallahassee

FLORIDA

The Sunshine State

All Agriculture Is Honored

(Continued from Page 1)

government to try and solve the farm problems of the State without regard to partisan politics." The Governor-elect spoke of the leadership of the newly created Master Farmers and characterized them as "pioneers in the march of farm progress."

In the presentation of the medals to the Master Farmers, Governor-elect Roosevelt was particularly happy and gracious. A brief review of the life and work of each Master Farmer and his wife was given by the Governor-elect and then each couple was called forward to make a short response and to receive the Master Farmer medal awarded by AMERICAN AGRICULTURIST. The responses by the Master Farmers were all fine and interesting. Many were visibly affected and all were deeply sincere. A city business man remarked after the meeting that no other class of people in America could present forty-four men and women of such uniformly high grade qualifications of manhood, womanhood and citizenship.

Much of this part of the program was broadcast over station WJZ through the courtesy of the National Broadcasting Company, so thousands of the folks back home were able to hear Governor-elect Roosevelt's speech and many of the responses made by the farmers. All of the Master Farmers caught the real spirit and idea of the occasion by emphasizing the merits and dignity of man's greatest calling. Time and again during the evening it was brought out that the purpose or ideal of the Master Farmer movement was not to set one farmer above another but instead to emphasize the great importance and dignity of agriculture.

At the speakers' table, in addition to Governor-elect Roosevelt and Henry Morgenthau, Jr., there were: Lieutenant-governor-elect Herbert H. Lehman, Henry Morgenthau, former ambassador to Turkey, Dean A. R. Mann of the New York State College of Agriculture, Dr. J. G. Lipman, director of the New Jersey Experiment Station, Michael H. Cahill, president of the New York State Bankers' Association, Commissioner Berne A. Pyrke of the New York State Department of Agriculture and Markets, D. P. Witter, chairman of the Agricultural Committee of the New York State Assembly, W. M. Duryee, secretary of the New Jersey Department of Agriculture, Dr. F. P. Graves, New York State Commissioner of Education, Fred J. Freestone, master of the New York State Grange, Dr. C. E. Ladd, extension director of the New York State College of Agriculture, C. L. White, editor of Pennsylvania Farmer, and E. R. Eastman, editor of AMERICAN AGRICULTURIST.

In addition to these, there were officials and representatives of practically every farm organization in New York State, many of the leading business men of the East, and the heads of departments of the State government from both New York and New Jersey.

Where and when has there ever been another such gathering of notables to emphasize the importance of agriculture? Certainly New York never has had another occasion when so many of the leading officials of the State and so many business men have come together to do honor to the State's agriculture, and to some of its good farmers.

In New Jersey, the Master Farmer work has been conducted in cooperation with the Pennsylvania Farmer. Four Master Farmers were finally named by the judges, two of whom were honored at our New York banquet, and two will go to Harrisburg in January to a banquet conducted by the Pennsylvania Farmer.

We wish there were room to publish all of the speeches that were made, but possibly no better description of the spirit of these speeches and the whole occasion can be given than was expressed in a personal letter to the Master Farmers of New York and New Jersey printed on the banquet program by W. M. Jardine, Secretary of the

United States Department of Agriculture. This letter follows:

"I am glad to take this opportunity to congratulate * * * the Master Farmers of New York and New Jersey. This designation of 'Master' has a fine tradition. It has meant to those of many years ago, recognition of ability to do some thing surpassingly well, fidelity to high standards, contribution to the material comfort and wealth of the community and the world, leadership in thinking and in execution. It is particularly fitting that the custom of awarding the title of 'master' has been revived to do honor to the farmer who has made himself a 'master of his craft', who has attained a 'position of command and authority', because the farmer is truly the central craftsman about whom the activities of the rest of the world revolve.

"This event makes us newly conscious of the importance to every farmer that he be a master of his profession. There was a time in this young country when people said 'a farmer is a man who lives on a farm'. Today he must be, if he is to attain any success in his life's work, a man whose business is running a farm. The successful farmer of today, the 'Master Farmer', gives his business the same concentration of mind and effort, the same keen analysis, the same amount of managerial skill that goes into the creation and maintenance of a successful business anywhere. It is eminently fitting that we give recognition to those men who are leaders in this development. I congratulate the Master Farmers on the recognition which they receive on this occasion and I congratulate the states of New York and New Jersey on having the benefit of their pioneering and leadership in this master business of farming."

When Was the Best Time to Live

(Continued from Page 5)

powdered hair and long flowing skirts and in their dancing of the minuet with their measured steps and courtly manners.

I have visited Mt. Vernon and know what the feeling must have been to have lived in those times, as I spent many days going over the ground and in the home looking at all it contained of books, furniture and antiques. It almost seemed as though I had lived there at some time and I think that was the best time to have lived—when young men were respectful and chivalrous to the old as well as the younger people and when the father and mother were respected above all and held in regard by their children—Mrs. A. B., New York.

The long winter nights are never too long for the man who wants to improve himself by study.



Deplorably Absent-Minded
"Oh, what a saphead—here I've gone and forgotten my parachute!"
—LE PETIT BLEU (PARIS)

How sore throat gets its start



"GREAT!"

men say. They're enthusiastic about Listerine Shaving Cream. You will be also when you try it. So cool! So soothing!

Check it with **LISTERINE** *full strength*

WORKING over a steaming tub one minute, out in raw weather the next, a woman is almost certain to get sore throat or a cold—or both.

The same goes for a man leaving a warm house to work around icy barns.

Such sudden changes in temperature, physicians say, are the cause of countless throat conditions and colds. Many of them become complicated and dangerous if neglected.

After such exposure, or after your feet have been wet, gargle repeatedly with Listerine full strength at the first opportunity. It often keeps sore throat from becoming serious.

When Listerine enters the mouth it attacks the disease germs that cause ordinary colds and sore throat. Your relief is almost immediate. When it is not, consult your physician.

Listerine, full strength, is so powerful that even the stubborn B. Typhosus (typhoid) germ is killed in 15 seconds! This is shown by scientific tests in bacteriological laboratories of national repute.

Keep Listerine handy and use it daily during bad weather. You may be spared a costly and possibly dangerous illness. Lambert Pharmacal Company, St. Louis, Mo., U. S. A.

To prevent colds

rinse the hands with Listerine

Countless colds start when germs are carried to the mouth on food. By using Listerine on the hands before every meal, you attack such germs and lessen the risk of cold. Remember this, mothers, when handling baby's food.



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NEW, luxurious carpets throughout.

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NEW, high speed, self-leveling elevators that safely whisk you to any of the 24 floors of the McAlpin.

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HAIR BALSAM**
Removes Dandruff—Stops Hair Falling
Restores Color and
Beauty to Gray and Faded Hair
60c. and \$1.00 at druggists.
Hiscox Chem. Works, Patchogue, N. Y.

Have a Mock Trial in Your Grange

Send for one or more of the following mock trial outlines. They will help you put on an entertaining, instructive program. Send 2 cents for each trial requested to cover mailing costs.

Robbing the Soil.

Mock Trial of a farmer for failing to buy Labor Saving Devices for his wife.

Mock Trial of John Brown for Cruelty to Animals.

AMERICAN AGRICULTURIST
461-4th Ave., New York City

Second Prize Letter in Kitchen Contest

Mrs. Stanley Adapts Her "Treadmill" to Needs of Modern Kitchen

WHEN we moved on to this place I was delighted with amount of room I was to have in my kitchen. It was a room about 21 feet square which was originally an old mill and had been moved up and joined to the house for



Mrs. Frank Stanley

a kitchen. A big leap from the bank of the babbling brook to the center of my dream of 42 years! Some of my good neighbors told me that the woman who lived here before called the room "her Tread Mill." This seemed like a peculiar remark to me but now after using the room for nine years I can agree that there has been a great deal of treading in the many unnecessary steps I have had to take in doing my work. The sink is located 13 feet from the work tables, the cupboard for cooking utensils is 17 feet away and the refrigerator 17 while the door to the pantry where I keep my china is but a trip of 27 feet from the working center.

My plans call for some quite radical changes with no great amount of expense involved, but after studying the problem for several years I am convinced that my new kitchen will be quite a factor in lengthening my life and shortening my steps.

The first change will be the elimination of that abominable workmaker, the old chimney which drips creosote from its shelf base in the room above. This being located directly over the range in the center of the room can be depended upon to make a very unsightly mess after every rain. A new chimney will be built outside the west wall and the range will be located against that wall. The east wall will be moved toward the center of the room about 16 inches and this space will be added to the new bath room which will be located where the pantry is now. What a pleasure it will be to see that outside toilet torn from the south west corner!

We built our septic tank two years ago and the sink now drains into it. An electric power line has just been built past the house so that I am assured of electric lights and a pressure water system which will be located near our wonderful springs just below the house. This will eliminate the two hand pumps at either end of the sink.

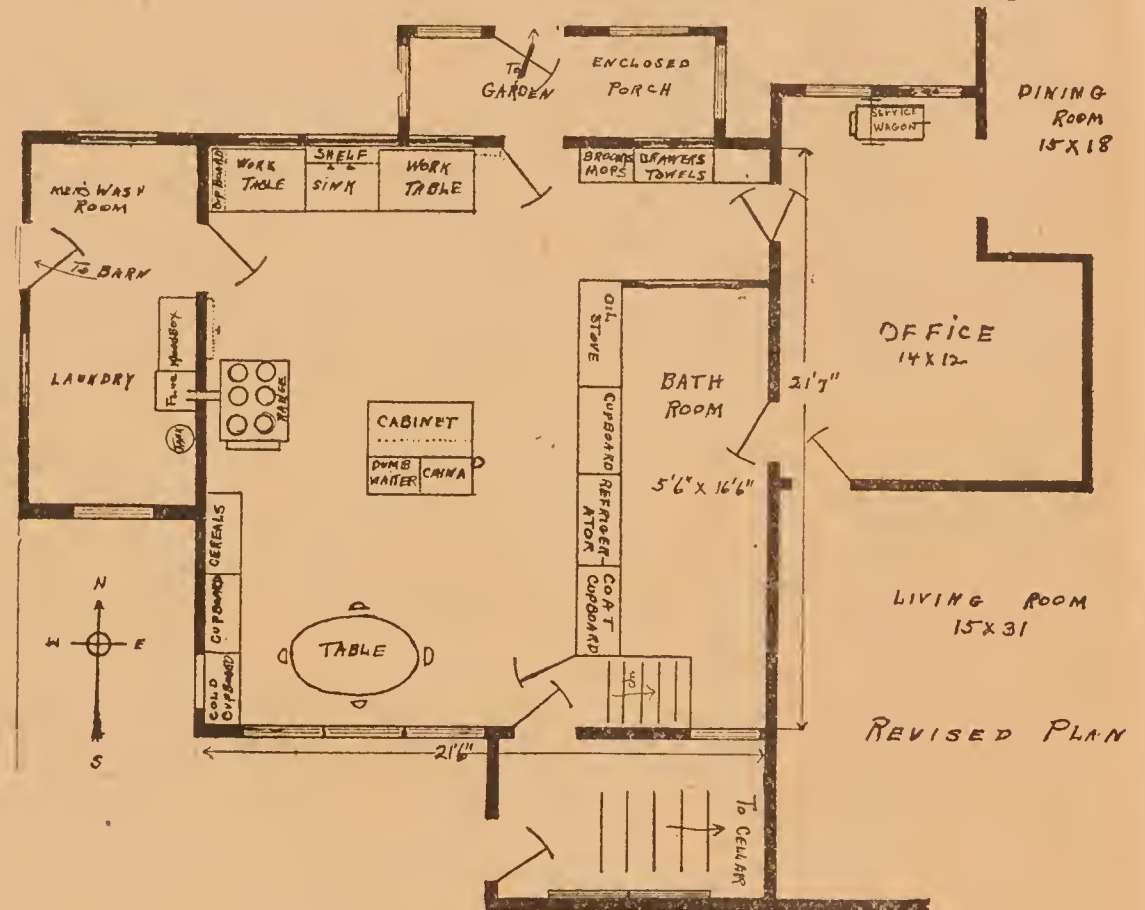
The sink will be replaced by a new porcelain fixture to be located between the two porcelain work tables which I now have, and will be on a level with the table which is 32 inches from the floor, a most convenient working height for me. Because I have these two fine tables and want my working tables by the north windows I can not have a permanent drain board on my sink and still get the group in the space provided by that wall. Necessity, being the mother of invention, has come to my assistance in the plan for a drain board of impregnated wood which is waterproof and can be hooked on to one side of the sink for use while washing dishes and folded back out of use when not needed.

The cabinet table with two flour bins under it will be moved to where the stove now stands, the top will be covered with zinc affording a convenient place only 3 feet distant from the range upon which hot dishes may be placed while working at the range. The

which is plenty large enough for serving even the extra help at threshing and other rush times.

I am banking big on the increase in light and air; I have planned for this by the addition of the casement window on the south wall, the window over the sink and the glass in the cellar door; I have increased the window space by 21 square feet. There is a door in each side of the room and a total of nine windows so that I will be assured of plenty of light and ventilation.

Some of the helps which take no little effort and yet mean so much to one doing the work will be; the broom and mop cupboard which will collect this much used equipment into one place; the clothes closet which will eliminate the draping of garments about the room; the service wagon; to be located in the north end of the office, will shorten the distance between my dining room and kitchen; the garbage can with its strainer to separate the



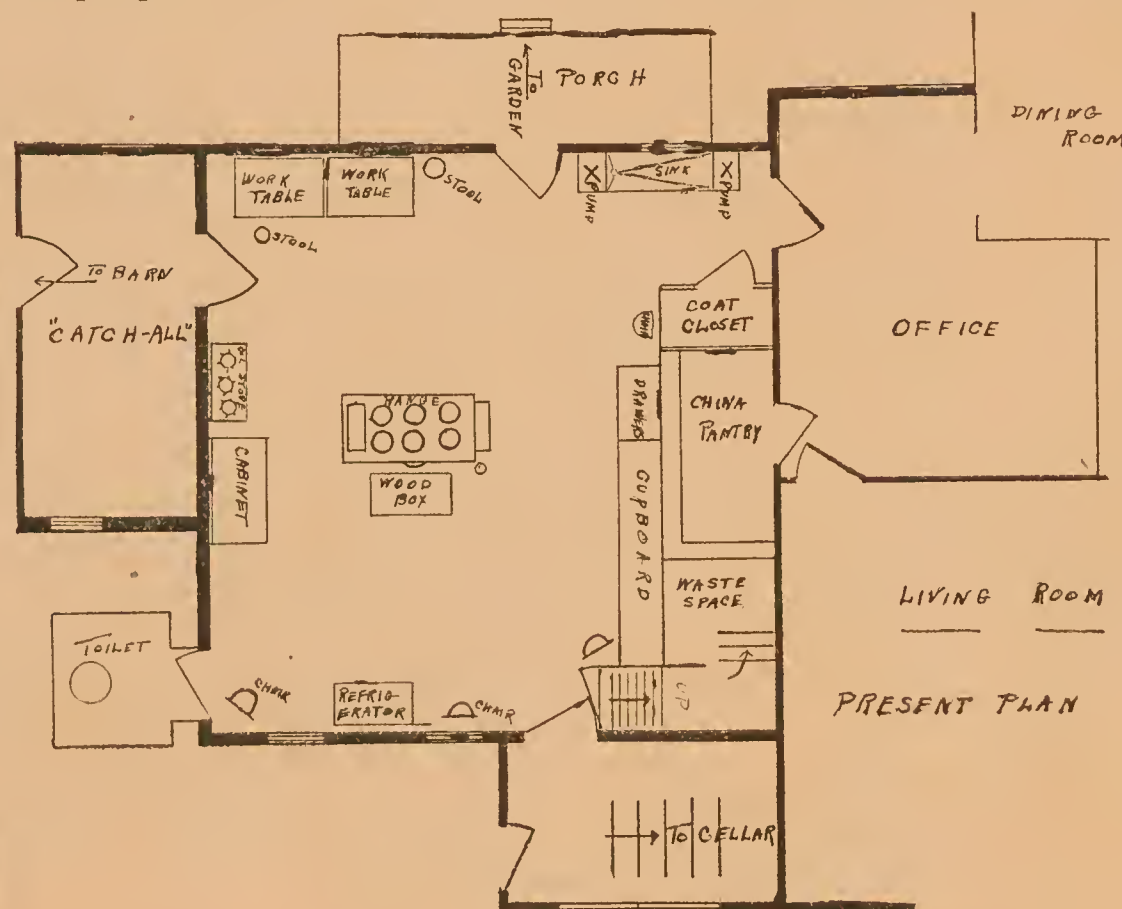
cabinet table will be built into and made a part of a cupboard for baking supplies, which will be built above it and backed up by the new dumb waiter and another cupboard for china.

The space between this group and the south wall will be used for a dining nook and will be set apart from the kitchen by the suggestion of an archway. This will add a touch of the artistic as the ceiling of the entire room is now a beamed effect. All of the family meals will be served in this nook

liquids will be installed under the sink; the wood box, filled from the outside but made so as to open into the kitchen will not only reduce the litter from the wood but it will entirely eliminate the usual tracking-in necessary to filling; the cereal cupboard to be located next to the range will provide a warm dry place which will mean crisp cereals. Under this cupboard will be a shelf for my pressure cooker. Because I use my cooker very often and it is so heavy to carry upstairs where I now keep it, a place close by the stove will be most welcome. The fireless cooker, on casters will roll under the left work table and a shelf just above the cooker will be provided for the dishpan. Under the other table will be a built-in cupboard for some of the larger cooking utensils while just over the sink and under the window will be a small cupboard for the supplies used at the sink. A white enameled stool will be located at each table.

The doorway through which we now enter the toilet will be used as a part of the cold cupboard, a piece of equipment I am proud of because I am constructing it from a splendid refrigerator discarded by a friend when she bought an electric cooler. The placing of my refrigerator between the two cupboards on the east wall will prevent my using the shelf I now have on its side. Here again necessity has come to the rescue for I have planned a shelf which will pull out from between the lower and upper cupboard

(Continued on Opposite Page)



Aunt Janet's Counsel Corner

A Thorough "Going-Over" Is in Order at this Time of Year

JUST as we turn the corner of the New Year we more or less cast up accounts to see where we stand. If we can stand up straight, breathe great lungfuls of pure fresh air, do a good day's work without undue fatigue, and keep all our organs working along without friction, then we are blest physically. If you doubt your blessings, just go to a hospital and look around at all its people who are deprived of one or more of these privileges.

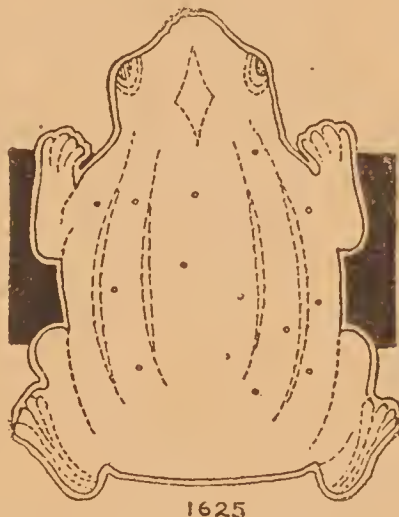
As for mental equipment, kind nature and our ancestors have already done all they can do; the rest is an individual matter with each of us. I have heard the remark, "Well, I can't help it if I haven't as good a mind as So-and-So. The truth is, many times the remarker was excusing himself from the labor necessary to develop the mind he already had. Nobody (except real mental derelicts) has so poor a mind but what exercise will make it better. Good reading, the habit of analyzing what is read, listening to good sermons, cultivating the acquaintance of people who know more than we do, taking advantage of opportunities offered by local organizations for study, selecting radio programs which are more than mere entertainment—really, the world is full of opportunities if one truly wishes to develop mentally.

Spiritually, we all need help. No human being ever achieves that high estate where perfection is absolute. True, I can point with a feeling amounting to reverence to certain

characters I have known whose fine qualities of unselfishness, loyalty, devotion to service for others, honesty, truthfulness, or high sense of honor marked them for distinction. Such qualities always meant that the owner carefully cherished that divine spark within himself which can be stifled so easily. Call it conscience if you like, that still, small voice within, which

A Quilted Pillow

This cunning little quilted pillow is quickly and easily made and would make an ideal gift for any friend. It is about 14 by 22 inches in size when finished and may be obtained in colors,



green, maize, blue, lavender and coral. Stamped on fast color Venetian, the pillow (top and back) is 35 cents each. If you desire the wadding lining, the pillow is 70 cents each. The same pattern in same colors on silk rayon with wadding is \$1.40 each. Order from Embroidery Department, American Agriculturist, 461-4th Avenue, New York City.

prompts every noble deed and thought—but which is so easily stilled. The rush of modern life gives this small voice little chance to be heard; therefore, we have to nurture it all the more carefully in order that it be not lost altogether.

Financially, we are never satisfied. We always could use more money than we have, no matter how little or how much we have. Increased wealth always means larger responsibilities—that is one aspect of the case not seen by the casual observer. If the owner of wealth fails to live up to the responsibilities it entails, it is a safe guess that the wealth will soon disappear. So when we long for more riches, we ought to consider whether we want the extra responsibility which goes with it. On the other hand, we human beings seem to require the stimulation which comes from taking part in an active, going business of some sort. One proof that it is a going business is adequate financial returns—that spurs us on to greater efforts. Add to the satisfaction which comes from adequate returns the joy of the job itself, coupled with good physical, mental and spiritual health, and life should be very full and satisfying.

It is very helpful to give ourselves a "going-over" occasionally and the New Year is a natural time for such reflections. Whatever you find in such a search, the Corner wishes you much joy and happiness in the year to come! —AUNT JANET.

Second Prize in Kitchen Contest

(Continued from Opposite Page)
at the left of the refrigerator.

Just east of the garden door will be located an interesting group. Next to the door is the broom and mop cup-

board and next to the door leading into the office is another full length cupboard for table leaves and other miscellaneous things, between these two and under the window is a series of five drawers for towels, aprons, first aid equipment and clean cloths. The top of this built-in chest will be 32 inches from the floor.

The walls are now of wide boards painted light blue and the casings and ceiling are of white. I am planning to cover the side walls and ceiling between the beams with the tiled upson board. Not least among my pleasures in fixing up will be the decorating. The well laid floor will be covered with heavy inlaid linoleum of a small pattern which will harmonize with the other colors used. I shall tint the ceiling a very light cream, the side walls a pale yellow and the wood work, built-in equipment and furniture old ivory. Yellow and white dimity curtains will help in making the sun shine even on dull days.

You may picture me, when my plans are completed, as looking over a dream come true and while it may not exactly blend with the color scheme I know I will be "Tickled Pink"! The best part of it all to me is that my husband is as enthusiastic about my plans as I am and after 42 years I know that that means success in my undertaking. —MRS. FRANK STANLEY, Skaneateles, N. Y.

List of movable equipment: Range, oil stove, two porcelain work tables, enameled stools, chairs, refrigerator, fireless cooker, pressure cooker, all cooking utensils, dining table.

Wooden handled kitchen utensils or the cogs of the Dover egg beater should never be allowed to soak in the dish water.

Youthful Neckline



PATTERN 2628 shows a deftly crossed scarf tie showing decidedly modern influence in its diagonal lines. The smartly dipped skirt yoke makes the frock all the more youthful. Sheer tweed, rayon velvet, canton crepe or other heavy silks are admirably suited to this design. The pattern cuts in sizes 16, 18 years, 36, 38, 40 and 42 inches bust. The 36-inch bust size requires 3 1/4 yards of 40-inch material with 3/4 yard of 40-inch contrasting. PRICE 13c.



Less Work

Washing Work Clothes

if you use Fels-Naptha. For Fels-Naptha brings you two cleaners instead of one. Good golden soap blended, by our exclusive process, with plenty of naptha. The naptha and soapy suds loosen even ground-in, greasy dirt and wash it away. Working together, they give the extra help that does the hard rubbing for you, whether the job is a couple of jumpers or a whole week's wash. So it's easy to understand why so many women say...

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FELS-NAPTHA

ORDER FROM YOUR GROCER TODAY

Stubborn Cough Quickly Ended by Famous Recipe

Here is the famous old recipe which millions of housewives have found to be the most dependable means of breaking up a stubborn, lingering cough. It takes but a moment to prepare and costs little, but it gives real relief even for those dreaded coughs that usually follow the "flu."

From any druggist, get 2 1/2 ounces of Pinex, pour it into a pint bottle and fill the bottle with plain granulated sugar syrup or strained honey. Thus you make a full pint of better remedy than you could buy ready-made for three times the cost. It never spoils and tastes so good that even children like it.

Not only does this simple mixture soothe and heal the inflamed throat membranes with surprising ease, but also it is absorbed into the blood, and acts directly upon the bronchial tubes, thus aiding the whole system in throwing off the cough. It loosens the germ-laden phlegm and eases chest soreness in a way that is really astonishing.

Pinex is a highly concentrated compound of genuine Norway Pine, containing the active agent of creosote, in a refined, palatable form. Nothing known in medicine is more helpful in cases of severe coughs, chest colds and bronchial troubles.

Do not accept a substitute for Pinex. It is guaranteed to give prompt relief or money refunded.

INVENTS AIR-BURNING FLAT IRON

Cuts Ironing Time in Half

O. O. Steese, 261 Steese Bldg., Akron, Ohio, is the inventor of an amazing new kind of flat iron that cuts ironing time in half and burns 96% air and 4% common kerosene (coal oil). It is self-heating, has no cords or wires, and is cheaper to operate than a gas or electric iron. He offers one free to the first user in each locality who will help introduce it. Write him for particulars. Agents wanted.

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Slender Coat Styling



The whole of PATTERN 2640 is designed to conceal lines of the over-full figure and to make her appear slender. The new silk tweed, lightweight woolsens, or faille silk crepe would lend themselves suitably to such a design. The pattern cuts in sizes 16, 18 years, 36, 38, 40, 42, 44, 46 and 48 inches bust. The 36-inch size requires 4 yards of 40-inch material with 1/4 yard of 9-inch contrasting and 3/4 yard of binding.—PRICE 13c.

TO ORDER: Write name, address, pattern numbers and sizes clearly and correctly and enclose with correct remittance in stamps or coin (although coin is sent at own risk). Add 12c for one of the Fashion Catalogs and send to Pattern Department, American Agriculturist, 461-4th Avenue, New York City.

The Little Shepherd of Kingdom Come-By John Fox, Jr.

IT was Georgie to whom Chad—fast learning the ways of gentlemen—sent a pompous challenge, that the difficulty might be settled “in any way the gentleman saw fit.” Georgie insultingly declined to fight with one who was not his equal, and Chad boxed his jaws in the presence of a crowd, felled him with one blow, and contemptuously twisted his nose. Thereafter open comment ceased. Chad was making himself known. He was the swiftest runner on the football field; he had the quickest brain in mathematics; he was elected to the Periclean Society, and astonished his fellow-members with a fiery denunciation of the men who banished Napoleon to St. Helena—so fiery was it, indeed, that his opponents themselves began to wonder how that crime had ever come to pass. He would fight at the drop of a hat, and he always won; and by-and-by the boy began to take a fierce joy in battling his way upward against a block that would have crushed a weaker soul. It was only with Margaret that that soul was in awe. He began to love her with a pure reverence that he could never know at another age. Every Saturday night when dusk fell, he was mounting the steps of her house. Every Sunday morning he was waiting to take her home from church. Every afternoon he looked for her, hoping to catch sight of her on the streets, and it was only when Dan and Harry got indignant, and after Margaret had made a passionate defence of Chad in the presence of the family, that the General and Mrs. Dean took the matter in hand. It was a childish thing, of course; a girlish whim. It was right that they should be kind to the boy—for Major Buford’s sake, if not for his own; but they could not have even the pretence of more than a friendly intimacy between the two, and so Margaret was told the truth. Immediately, when Chad next saw her, her honest eyes sadly told him that she knew the truth, and Chad gave up then. Thereafter he disappeared from sports and from his kind in every way, except in the classroom and in the debating hall. Sullenly he stuck to his books. From five o’clock in the morning until ten o’clock at night, he was at them steadily, in his room, or at recitation—except for an hour’s walk with the schoolmaster and the three half-hours that his meals kept him away. He grew so pale and thin that the Major and Caleb Hazel were greatly worried, but protest from both was useless. Before the end of the term he had mounted into college in every study, and was holding his own. At the end he knew his power—knew what he *could* do, and his face was set, for his future, dauntless. When vacation came he went at once to the Major’s farm, but not to be idle. In a week or two he was taking some of the reins into his own hands as a valuable assistant to the Major. He knew a good horse, could guess the weight of a steer with surprising accuracy, and was a past master in knowledge of sheep. By instinct he was canny at a trade—what mountaineer is not?—and he astonished the Major with the shrewd deals he made. Authority seemed to come naturally to him, and the Major swore that he could get more work out of the “hands” than the overseer himself, who sullenly resented Chad’s interference, but dared not open his lips. Not once did he go to the Deans’, and neither Harry nor Dan came near him. There was little intercourse between the Major and the General, as well; for, while the Major could not, under the circumstances, blame the General, inconsistently, he could not quite forgive him, and the line of polite coolness between the

neighbors was never overstepped. At the end of July, Chad went to the mountains to see the Turners and Jack and Melissa. He wore his roughest clothes, put on no airs, and, to all eyes, save Melissa’s he was the same old Chad. But feminine subtlety knows no social or geographical lines, and while Melissa knew what had happened as well as Chad, she never let him see that she knew. Apparently she was giving open encouragement to Dave Hilton, a tawny youth from down the river, who was hanging, dog-like, about the house, and foolish Chad began to let himself dream of Margaret with a light heart. On the third day before he was to go back to the Bluegrass, a boy came from over Black

story that Chad brought back and told to the Major, on the porch under the honey-suckle vines, but it seemed to surprise the Major very little: how old Nathan had sent for him to come to his death-bed and had told Chad that he was no foundling; that one of his farms belonged to the boy; that he had lied to the Major about Chad’s mother, who was a lawful wife, in order to keep the land for himself; how old Nathan had offered to give back the farm, or pay him the price of it in live stock, and how, at old Joel’s advice, he had taken the stock and turned the stock into money. How, after he had found his mother’s grave, his first act had been to take up the rough bee-gum coffin that held her remains, and carry

where the old University reared its noble front was the very heart of that rose. There were the proudest families, the stateliest homes, the broadest culture, the most gracious hospitality, the gentlest courtesies, the finest chivalry, that the State has ever known. There lived the political idols; there, under the low sky, rose the memorial shaft to Clay. There had lived beaux and belles, memories of whom hang still about the town, people it with phantom shapes, and give an individual or a family here and there a subtle distinction to-day. There the grasp of Calvinism was most lax. There were the dance, the ready sideboard, the card table, the love of the horse and the dog, and but little passion for the game-cock. There were as many virtues, as many vices, as the world has ever known. And there, love was as far from lust as heaven from hell.

It was on the threshold of this life that Chad stood. Kentucky had given birth to the man who was to uphold the Union—birth to the man who would seek to shatter it. Fate had given Chad the early life of one, and like blood with the other; and, curiously enough, in his own short life, he already epitomized the social development of the nation, from its birth in a log cabin to its swift maturity behind the columns of a Greek portico. Against the uncounted generations of gentle-people that ran behind him to sunny England, how little could the short sleep of three in the hills count! It may take three generations to make a gentleman, but one is enough, if the blood be there, the heart be right, and the brain and hand come early under discipline.

It was to General Dean that the Major told Chad’s story first. The two old friends silently grasped hands, and the cloud between them passed like mist.

“Bring him over to dinner on Saturday, Cal—you and Miss Lucy, won’t you? Some people are coming out from town.” In making amends, there was no half-way with General Dean.

“I will,” said the Major, “gladly.”

The cool of the autumn was already in the air that Saturday when Miss Lucy and the Major and Chad, in the old carriage, with old Tom as driver and the pickaninny behind, started for General Dean’s. The Major was beautiful to behold, in his flowered waistcoat, his ruffled shirt, white trousers strapped beneath his highly polished, high-heeled boots, high hat and frock coat, with only the lower button fastened in order to give a glimpse of that wonderful waistcoat, just as that, too, was unbuttoned at the top that the ruffles might peep out upon the world. Chad’s raiment, too, was a Solomon’s—for him. He had protested, but in vain; and he, too, wore white trousers with straps, high-heeled boots, and a wine-colored waistcoat and slouch hat, and a brave, though very conscious, figure he made, with his tall body, well-poised head, strong shoulders and thick hair. It was a rare thing for Miss Lucy to do, but the old gentlewoman could not resist the Major, and she, too rode in state with them, smiling indulgently at the Major’s quips, and now, kindly, on Chad. A drowsy peace lay over the magnificent woodlands, unravaged then except for firewood; the seared pastures, just beginning to show green again for the second spring; the flashing creek, the seas of still hemp and yellow corn. And Chad saw a wistful shadow cross Miss Lucy’s pale face, and a darker one anxiously sweep over the Major’s jesting lips.

Guests were arriving, when they entered
(Continued on Page 26)

The Story Thus Far

CHAD leaves “Lonesome” with his dog, “Jack.” His foster parents are both dead from the plague and plans have been laid to bind Chad out to a hard fisted neighbor. After the funeral, Chad collects a rifle, some powder, and shot and a haversack and with “Jack” by his side, starts out for unknown parts. He meets the sons of Joel Turner from over the mountain who take him home. Chad’s cleverness at school gains the admiration of Caleb Hazel, the schoolmaster. They become close friends. Hazel tells Chad of the “Bluegrass Country” beyond the hills. Logging operations take Chad to a distant city where he gets lost and starts home on foot. He is picked up by Major Calvin Buford. It appears that Chad is also a Buford and is believed to be a kinsman of his new found friend, who takes him to his home in Lexington in the heart of the “Bluegrass.” Chad accepts the Major’s offer of a home and an education. He suffers humiliation at the hands of the neighbor’s children and returns to Kingdom Come, but after much urging again returns to school, accompanied by Caleb Hazel. Chad is invited to a party given by his former playmates, the children of General Dean, Major Buford’s neighbor. It is while Chad is dancing with Margaret Dean that young George Forbes openly insults the boy from the hills.

Mountain with a message from old Nathan Cherry. Old Nathan had joined the church, had fallen ill, and fearing he was going to die, wanted to see Chad. Chad went over with curious premonitions that were not in vain, and he came back with a strange story that he told only to old Joel, under promise that he should never make it known to Melissa. Then he started for the Bluegrass going over Pine Mountain and down through Cumberland Gap. He would come back every year of his life, he told Melissa and the Turners, but Chad knew he was bidding a last farewell to the life he had known in the mountains. At Melissa’s wish and old Joel’s, he left Jack behind, though he sorely wanted to take the dog with him. It was little enough for him to do in return for their kindness, and he could see that Melissa’s affection for Jack was even greater than his own: and how incomparably lonelier than his life was the life that she must lead! This time Melissa did not rush to the yard gate when he was gone. She sank slowly where she stood to the steps of the porch, and there she sat stone-still. Old Joel passed her on the way to the barn. Several times the old mother walked to the door behind her, and each time starting to speak, stopped and turned back, but the girl neither saw nor heard them. Jack trotted by, whimpering. He sat down in front of her, looking up at her unseeing eyes, and it was only when he crept to her and put his head in her lap, that she put her arms around him and bent her own head down; but no tears came.

* * *

XVII

CHADWICK BUFORD, GENTLEMAN

AND so, returned to the Bluegrass, the mid-summer of that year, Chadwick Buford, gentleman. A youth of eighteen, with the self-poise of a man, and a pair of level, clear eyes, that looked the world in the face as proudly as ever, but with no defiance and no secret sense of shame. It was a curious

it down the river, and bury her where she had the right to lie, side by side with her grandfather and his—the old gentleman who slept in wig and peruke on the hill-side—that her good name and memory should never again suffer insult from any living tongue. It was then that Major took Chad by the shoulders roughly, and, with tears in his eyes, swore that he would have no more nonsense from the boy; that Chad was flesh of his flesh and bone of his bone; that he would adopt him and make him live where he belonged, and break his damned pride. And it was then that Chad told him how gladly he would come, now that he could bring him an untarnished name. And the two walked together down to the old family graveyard, where the Major said that the two in the mountains should be brought some day and where the two brothers who had parted nearly fourscore years ago could, side by side, await Judgment Day.

When they went back into the house the Major went to the sideboard.

“Have a drink, Chad?”

Chad laughed: “Do you think it will stunt my growth?”

“Stand up here, and let’s see,” said the Major.

The two stood up back to back, in front of a long mirror, and Chad’s shaggy hair rose at least an inch above the Major’s thin locks of gray. The Major turned and looked at him from head to foot with affectionate pride.

“Six feet in your socks, to the inch, without that hair. I reckon it won’t stunt you—not now.”

“All right,” laughed Chad, “then I’ll take that drink.” And together they drank.

Thus, Chadwick Buford, gentleman, after the lapse of three-quarters of a century, came back to his own: and what that own, at that day and in that land, was!

It was the rose of Virginia, springing, in full bloom, from new and richer soil—a rose of a deeper scarlet and a stronger stem: and the big village



AMERICAN AGRICULTURIST

Classified Ads

A Place to Buy, Sell or Trade



DOGS AND PET STOCK

COLLIE PUPS, eligible to register. **CARL SCHWARTZ**, Kendall, N. Y.

PEDIGREED CHINCILLA RABBITS. Highland strain. Good quality. Reasonably priced. **JOHN PARRY**, Camden, N. Y.

(WIRE) FOX TERRIER PUPPIES, pedigreed. Males, \$50.00, Females, \$35.00. **ROCKHURST KENNELS** (Reg.), High Falls, N. Y.

FLEMISH GIANT RABBITS for sale. Fully pedigreed and healthy. Write wants. **WILSONA RABBITRY**, Marion, N. Y.

FOR SALE—Full-blooded, long-eared fox hound pups, four months old; also white muscovy ducks. **WILLIAM A. SHERMAN**, Schuylerville, New York.

FARM DOGS, excellent ratters and cow dogs, \$4. Eng. Bull terrier \$20., Irish setter, \$10. Fox or coon hounds, \$15-20. **DAWSON**, Tuckerton, N. J.

FREE DOG BOOK. Polk Miller's famous dog book on diseases of dogs. Instructions on feeding, care and breeding with symptom chart. 48 pages. Illustrated. Write for free copy. **POLK MILLER PRODUCTS CORP.**, 1021 W. Broad St., Richmond, Va.

COCKER SPANIEL \$20. Cooner running good \$25, started Cooner \$15, Skunk dogs \$5, \$10., Setter \$15, good Foxhounds \$30, \$35, started Foxhounds \$10, \$15, Beagles \$10 to \$20, Rabbit hounds \$10 to \$25, female Coonhound \$50. State wants. I can fill the bill. Dogs exchanged. **JOHN BILECKE**, North Attleboro, Mass.

LIVE STOCK

Cattle

T. B. TESTED COWS FOR SALE—20 very large registered cows, 20 high grade cows fresh and close springers also several registered bulls and heifers. **SPOT FARM**, Tully, N. Y.

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GUERNSEY BULL, six months old, A.R. dam, spotted Poland Chinas, bred gilts. **JOS. KENNEL**, Atglen, Pa.

HOLSTEINS FOR SALE. Pure bred. Thirty cows, calves, heifers and bulls. **PHILIP LEHNER**, Princeton, Wisconsin.

FOR SALE—Guernsey bull calves, choice bred heifers, A. R. cows. Accredited and neg. to blood test. Write your wants. **EDGAR PAYNE**, Penn Yan, N. Y.

Goats

BRED SAANAN GOATS \$75. Purebred California Giant Nubians \$85. Grades \$50. Toggenburgs, Worlds healthiest milkers for babies, invalids. **GOLDSBOROUGH REGISTERED GOATERY**, Mohnton, Pa.

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BIG, HEAVY WOOLED Rambouillet ram lambs, 3 Shropshire ewes, 2 ram lambs. **H. C. BEARDSLEY**, Montour Falls, N. Y.

POULTRY

EARLY SPRING BROILER CHICKS—Butchers. Market men pay extra prices for your purebred Rocks, Reds, Wyandottes, Orpingtons. Descriptive Picture Folder Free, showing best varieties money making market chickens. **FARM SERVICE**, Route A1, Tyrone, Pa.

KWALITEED BLOOD TESTED Rocks, Reds, Leghorns. Bred for color, egg production, and bloodtested four years for Bacillary White Diarrhoea by the Virginia State Department of Agriculture. All chicks shipped under State label. Catalog and price list free. Order early, so we can supply your wants. **HARRISON-BURG HATCHERY, INC.**, Box 223, Harrisonburg, Va.

BOOKING ORDERS for Husky Broiler Chicks, Barred and White Plymouth Rocks, Reds, White Wyandottes, Leghorns. From large selected free range stock. State number you need and we will quote special prices. **HIGHLAND FARM**, Sellersville, Pa.

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Orders for these columns must be accompanied by bank references

POULTRY

BEAUTIFUL BUFF ROCK cockerels, thirty years exclusive breeding. **EDGEWOOD FARM**, Ballston Spa, N. Y.

PEAFOWL, Pheasants, Bantams, Pigeons, Guinea. Free circular. **JOHN HASS**, Bettendorf, Iowa.

50 JERSEY GIANT pullets for sale, \$2.25 each. **INDIAN LADDER FARM**, East Stroudsburg, Pa.

WHITE WYANDOTTE COCKERELS; Mammoth Pekin ducks; drakes, Pearl guineas. **LAURA DECKER**, Stanfordville, New York.

KEISER'S SINGLE COMB Brown Leghorns and Golden Buff Orpingtons. Excellent matings. Catalogue. **F. KEISER**, Gramplan, Pa.

FOR SALE—Single Comb White Leghorn chicks. **L. H. HISCOCK**, Skaneateles, N. Y. Circular on request.

RHODE ISLAND RED Cockerels. Single and Rose Comb. \$2., \$2.50. **W. EARL AKLEY**, DeKalb Junction, N. Y.

BARRED ROCK COCKERELS, \$2.50 up. White Crested Black Polish, \$5.00 pair. Collie pups, eligible, \$10.00 up. **PAINE**, South Royalton, Vt.

FOR SALE—Barred Rock cockerels from good profitable flock. \$4 and \$5 each. **MERIBETH SLEIGHT**, Poughkeepsie, R. No. 3, N. Y.

SINGLE COMB REDS—Barred Rocks. Eggs. Chicks. Extraordinary matings. Fine type. Bred for winter production. Catalogue. Low prices. **GRAMPIAN HILLS POULTRY FARMS**, Gramplan, Pa.

AMERICAN MOTTLED ANCONAS—Record Layers. Lay large white eggs. Extra large type. Exceptional markings. Fine matings. Low prices. Catalogue. **AMERICAN ANCONA FARMS**, Gramplan, Pa.

PRODUCTION BRED CHICKS that live. Large type S.C.W. Leghorns, \$20-100; \$180-1000; Invest now and take profits in 1929. **ADAM SEABURY**, Sayville, L. I.

JERSEY BLACK GIANTS, big bone, yellow skin; won first at the Ohio State Fair in 1928. 30 Shropshire ewes bred to imported ram. **C. E. MOORE**, Frazeysburg, Ohio.

SUNNYFIELD EXTRA LARGE Single Comb Black Minorcas. Exclusively. Chicks. Eggs. Stock. Extraordinary layers. Lay exceptionally large white eggs. Two matings. Low prices. Catalogue. **SUNNYFIELD MINORCA FARMS**, Gramplan, Pa.

REGAL DORCAS WHITE WYANDOTTES—Eggs, chicks, stock, 256 egg record. Ledger. North American contest. Winter layers. Excellent type. Fine matings. Low prices. Catalogue. **KEISER'S WHITE ACRES**, Gramplan, Pa.

PEDIGREED S.C. White Leghorn cockerels from 200 egg or better trapnested hens bred for quality and long time heavy production, \$6.00 to \$20.00. Will improve farm and hatchery flocks. **W. R. DEWSNAP**, Owego, New York.

TURKEYS—DUCKS—GEESE

PUREBRED MAMMOTH BRONZE Turkeys. Well developed. Splendid markings. May hatched. Reasonable prices. **FLORENCE LEE**, Lowville, N. Y.

MAMMOTH BRONZE TURKEYS. Bird Bros. strain. Toms \$10. Hens \$8. **MRS. F. J. SCHNEIDER**, La Fargeville, N. Y.

MAMMOTH TOULOUSE GEESSE, \$6., Ganders, \$7. White Muscovy Ducks, \$3., Drakes, \$4. **CHARLES E. HALLOCK**, Mattituck, N. Y.

TURKEYS—DUCKS—GEESE

SOME OF AMERICA'S best Mammoth bronze turkeys. Original Gold Coin strain. Yearlings and young stock from prize winners. **MRS. S. OWEN**, Seville, Ohio.

TURKEYS MAMMOTH BRONZE Bourbon Red, Narragansett, White Holland hens, toms, unrelated pairs and trios, highest quality. Reasonable prices. **WALTER BROS.**, Powhatan Point, Ohio.

TURKEYS, DUCKS, GEESSE, GUINEAS. Leading varieties. Satisfaction and safe arrival guaranteed. Special prices. Catalog free. **HIGHLAND FARM**, Sellersville, Pa.

TURKEYS—PUREBRED MAMMOTH Bronze toms and hens. Best strain. No diseases. **MRS. SPENCER LANE**, Lowville, N. Y.

TURKEYS—Large, purebred, Mammoth Bronze, vigorous, healthy birds, highest quality, splendid markings, satisfaction guaranteed. **CLIFTON LEE**, Lowville, N. Y.

MAMMOTH TOULOUSE GEESSE leading winners at Madison Square Garden since 1906. Circular. **WEBSTER KUNEY**, Seneca Falls, N. Y., Box A.

COLORED MUSCOVY, MAMMOTH PEKIN DUCKS. Extra large stock. Drakes \$3.00; pairs \$5.50; trios \$8.00, for immediate shipment. **SHADYLAWN POULTRY FARM**, Hughesville, Pa.

PUREBRED MAMMOTH BRONZE turkeys bred from hens that layed 150 eggs, originated from Madison Square Garden prize winners. **MRS. CHAS. T. ABBEY**, R. 5, Lowville, N. Y.

AGENTS WANTED

EVERY HOME A PROSPECT: make big money, employ crew; sell dependable trees, shrubbery; all or part time; landscape service; experience not essential; full cooperation; com. paid weekly; we deliver, collect. Write **WILLEMS, SONS' NURSERIES**, Desk A, Rochester, N. Y.

RELIABLE MEN WANTED to sell guaranteed trees, shrubs and roses. Steady work. Pay weekly. Start now for Spring business. Wholesale and retail. **WEBB NURSERY CO.**, Rochester, N. Y.

MAKE \$50 to \$75 weekly this winter taking orders for our quality Nursery Stock. Fruits from our trees have won first prize at the Syracuse State Fair for years. Free replacement. No investment. No experience necessary. Free outfit. Pay weekly. **KNIGHT & BOSTWICK**, Newark, New York State.

HELP WANTED

WANTED: Couple for dairy farm. Must be experienced milker. Farm in Hillsdale, New York. **G. B. DIOGUARDI**, 214 East 58th St., New York City.

A TRAINING SCHOOL FOR COW-TESTING association testers will be held at the College of Agriculture, Ithaca, N. Y., January 21st to Feb. 2, 1929. Students should be about 20 years old and farm reared; those from vocational schools preferred. Address **G. W. TAILBY, Jr.**, Department of Animal Husbandry, Ithaca, N. Y.

FARMS WANTED

YOUNG MARRIED MAN, experienced farmer, desires good farm about 80 acres near State Road, with stock and tools, to work on shares with privilege of future purchase if satisfied. **HARRY COFFIN**, Clyde, N. Y.

FARMS FOR SALE

EXCELLENT SEVENTY ACRE farm near Fair Haven, N. Y. Thirty acres deep muck, sixteen under cultivation. Balance fine loam soil. Good buildings and wonderful location. For particulars write. **R. L. ACRE**, Sterling Sta., N. Y.

AT A BARGAIN, 50-acre fruit farm, near Burlington, New Jersey; trees 12 years old, all late varieties of apples; seven-room brick house with bath and heater; six-car garage; fine building sand on farm; \$15,000; will help finance. **DR. MARCUS W. NEWCOMB**, Browns Mills, N. J.

DEL-MAR-VA—6,090 SQUARE MILES FINEST AGRICULTURAL OPPORTUNITIES. Within three to ten hours by motor truck over splendid concrete highways to New York, Philadelphia, Baltimore and Washington markets. Pennsylvania Railroad System permeates entire Peninsula. Mild, equable climate. Very little snow and freezing. Farms, town and waterfront homes, low-priced. Good schools, low taxes. Handsome descriptive booklet, FREE. Address 164 Del-Mar-Va Building, Salisbury, Md.

LUMBER—BUILDING SUPPLIES

ROOFING PAPER, 3-ply, \$1.35 per roll, 100 sq-ft. Prepaid. Asphalt shingles, roofcoating, paint. Send for price list. **WINIKER BROS.**, Mills, Mass.

SEEDS—NURSERY STOCK

PEACH AND APPLE TREES \$5; \$7.50 per 100 and up. Complete assortment fruits, berries, vines, ornamental trees, vines, shrubs, evergreens. Catalog in colors free. **TENNESSEE NURSERY COMPANY**, Box 102, Cleveland, Tenn.

PEACH AND APPLE TREES \$5 per 100 and up. Fruits, ornamental trees, vines. **TENNESSEE NURSERY CO.**, Box 202, Cleveland, Tenn.

PEDIGREED SEED POTATOES, Cobblers, Mountains, Russets, Peachblow. Write for catalogue. **ROY HASTINGS**, Malone, N. Y.

MISCELLANEOUS

USED CIVIL WAR ENVELOPES with flags, designs, etc., \$1 to \$15 paid. Other stamps on envelopes before 1871 bought. **W. RICHMOND**, Cold Spring, N. Y.

BARRELS of slightly damaged crockery, hotel chinaware, cookingware, glassware, pottery. Write **SWASEY COMPANY**, Portland, Maine.

PURE EXTRACTED BUCKWHEAT honey, 5 lb. pail, 90c post paid. **EDWIN RICKARD**, Schoharie, N. Y.

WANTED TO BUY old bags. We pay excellent prices. Write for prices. We pay freight. **OWASCO BAG CO.**, Rochester, New York.

HAVE YOU EVER considered weaving rugs at home to make money? An enjoyable business, now more profitable than ever. Our new catalog will interest you. Write for it today. **UNION LOOM WORKS**, 332 Factory St., Boonville, N. Y.

TABLE CARROTS, CABBAGE—100 pounds, \$2.00. **PATTINGTONS**, Merrifield, N. Y.

FOR SALE—Bartley No. 1 saw mill complete. **CHARLES W. JONES**, Woodbourne, New York.

WANTED—HAY, GRAIN, Potatoes, Apples, Cabbage, Carloads. Pay highest market prices. **THE HAMILTON CO.**, New Castle, Pa.

PURE HONEY. Satisfaction guaranteed. 5 lbs. clover, \$1.00; 10 lbs. \$1.90; buckwheat \$1.65. **C. N. BALLARD**, Valois, N. Y.

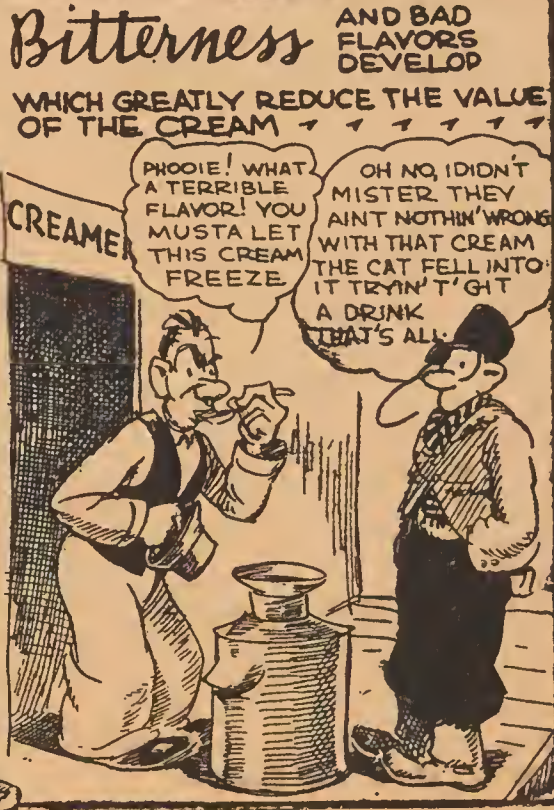
TWO COPIES of your favorite snapshot or photograph enlarged to 8x10—\$1.00. Best work. **C. F. FLICK**, Mt. Kisco, N. Y.

Additional Classified Advertising | **On Next Page**

HANDY ANDY Says "Here's How"

To Take Care of Cream

By Ray Inman



Our Boys' and Girls' Page

How To Attract Winter Birds -- How to Make a Windmill

NOW is the time when old Mother Nature is taking her rest. Most of the birds have flown to warmer countries and we are left behind without their cheerful company. The trees are bare, the grass is brown and dead, or covered with a white blanket of snow. That is the way it looks from the outside, but as I have said again and again, good Mother Nature has many little secrets which she tells to those who love and understand her ways.

If you want to bring the chickadees, the juncos, the downy woodpeckers and other winter birds to your place, all you need to do is to feed them. A suet stick, is a sure attraction for them. With a large-sized bit, bore several holes about an inch deep in an ordinary stick of firewood with the bark still on. The bark offers a good grip for the birds as they feed on suet which can be stuffed into the holes. A large hook or wire through a screweye in the end of the stick leaves it dangling for all to see and feed from. Of course, cats should be kept away from such a feeding place.

While you are bringing such bird and vegetable life to your own home, down underneath the surface of the earth things are getting ready to shoot up when the first warm days of spring come. Inside those trees without leaves the sap is flowing slowly and

careful that what you do pick doesn't split too easily when you drive a nail into it.

Any fairly stiff wire as heavy as baling wire is excellent for the shaft; and you will need five or six small washers.

The foundation piece A is just a foot long. On one end of it saw a notch that will make a tight fit for the thick end of your shingle S. But don't drill the hole in the middle of the shaft at F yet. We don't know just where it will need to be put for perfect balance until later on.

Make the two uprights B and C four and three inches long, respectively; and before you nail them into place as illustrated, put through each one, half an inch from the top, a hole large enough to accommodate easily the wire you are going to use for the shaft.

Pick a piece of your best one-inch-square wood at least twelve inches long for the propeller, and whittle it down into the proper shape. In the center drill a hole small enough so that your

spot on the foundation A where the whole thing balances. At that spot bore the hole that is to take the bolt F.

Mount your windmill on an upright stick nailed to a post or to a corner of a building and the little man will do his stuff whenever there's a breeze.

—C. T. LITTLE.

The Little Shepherd of Kingdom Come

(Continued from Page 24)

tered the yard gate, and guests were coming behind them. General and Mrs. Dean were receiving them on the porch, and Harry and Dan were helping the ladies out of their carriages, while, leaning against one of the columns, in pure white, was the graceful figure of Margaret. That there could ever have been any feeling in any member of the family other than simple, gracious kindness toward him, Chad could neither see nor feel. At once every trace of embarrassment in him was

devil, with the ready tongue of a coffee-house wit and the grace of a cavalier. There was Elizabeth Morgan, to whom Harry's grave eyes were always wandering, and Miss Jennie Overstreet, who was romantic and openly now wrote poems for the *Observer*, and who looked at Chad with no attempt to conceal her admiration of his appearance and her wonder as to who he was. And there were the neighbors roundabout—the Talbotts, Quisenberrys, Clays, Prestons, Morgans—surely no less than forty strong, and all for dinner. It was no little trial for Chad in that crowd of fine ladies, judges, soldiers, lawyers, statesmen—but he stood it well. While his self-consciousness made him awkward, he had pronounced dignity of bearing; his diffidence emphasized his modesty, and he had the good sense to stand and keep still. Soon they were at table—and what a table and what a dinner that was! The dining-room was the biggest and sunniest room in the house; its walls covered with hunting prints, pictures of game and stag heads. The table ran the length of it. The showy tablecloth hung almost to the floor. At the head sat Mrs. Dean, with a great tureen of calf's head soup in front of her. Before the General was the saddle of venison that was to follow, drenched in a bottle of ancient Madeira, and flanked by flakes of red-currant jelly. Before the Major rested broiled wild ducks, on which he could show his carving skill—on game as well as men. A great turkey supplanted the venison, and last to come, and before Richard Hunt, Lieutenant of the Rifles, was a Kentucky ham.

(To be Continued Next Week)

Additional Classified Advertising

MISCELLANEOUS

CLOVER HONEY—5 lbs. \$1.15; 10-lbs. \$2.00 post paid. 1 60-lb. can \$7.20 here. J. C. ABBOTT, Northampton, Mass.

EMERSON BRANTINGHAM three plow tractor, used little, suitable for sawmill or heavy farm work. Plows new. DEAN THOMPSON, Little Falls, N. Y.

VANILLA FLAVOR, \$1 per quart. Direct from manufacturer. Sent C.O.D. Parcel Post prepaid to any address. A. E. SNELL, 34 Scott St., New York.

GODFREY FARMS. JOHN GODFREY & SONS. Several cars of good feeding hay at \$12 per ton. F.O.B. cars Pennellville, N. Y., O. & W. R. R.

PATENT ATTORNEYS

PATENT SENSE—Valuable book (free) for inventors seeking largest deserved profits. Established 1869. LACEY & LACEY, 665 F. St., Washington, D. C.

PRINTING—STATIONERY

250 BUSINESS ENVELOPES printed, postpaid \$1.00, 25 Trap Tags, 30c postpaid. Samples free. WALTER G. COLLINS, Cohocton, N. Y.

TOBACCO

GOOD SMOKING TOBACCO, 10 lbs. \$1.50. Chewing 10 lbs. \$2.50. Send no money; pay when received. Pipe free. ALBERT FORD, Paducah, Kentucky.

CIGARS from factory, trial 50 large Perfectos postpaid \$1. SNELL CO., Red Lion, Pa.

WOOL—HIDES—FURS

WANTED—RAW FURS, Ginseng, Minks, Raccoons, especially broad stripe Skunk, 1.50. STERNS FUR CO., New Brunswick, N. J.

WE WANT YOUR FURS, Wool and Hides. Top market prices. Free price list. Write today. HOWE FUR COMPANY, Coopers Mills, Maine.

WOMEN'S WANTS

SWITCHES—Combings made up. Booklet. Flannelette house dresses \$1.50. EVA MACK, Box 293, Ithaca, New York.

LADIES SILK and WOOL Bloomers, white, grey, tan, 36-44. 2 pair \$1.50. Good openings for agents. A. H. TALBOT SALES COMPANY, Norwood, Mass.

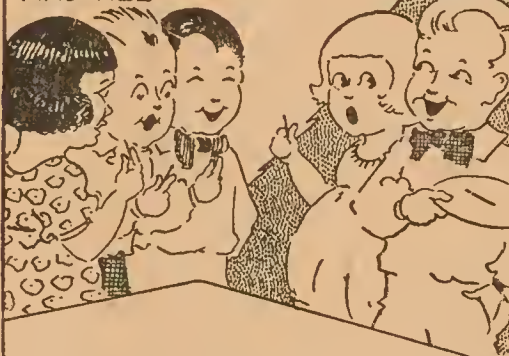
Six pounds clippings for patchwork. Extraordinary value. Send no money. Pay postman \$1.00 plus postage. Also silks in beautiful colors, 3 lbs. for \$1.00. Satisfaction guaranteed or money refunded. SATTLEB MFG. CO., Dept. 27, Whitman, Mass.

CHILDREN, YOUNG GIRLS, OLD GIRLS. Fur Tams or "Beret", latest thing made in White Sheared Coney imitation beaver or seal. Price \$4.00 post paid anywhere. Your money back if not satisfied. Send head size. TACONIC VALLEY FUR CO., Berlin, N. Y.

LOOKS IMPOSSIBLE

PLACE FIVE MATCHES ON A PLATE. ASK FIVE PEOPLE TO EACH TAKE A MATCH YET LEAVE ONE ON THE PLATE.

The Solution THE LAST PERSON TO PICK UP A MATCH TAKES PLATE AND ALL



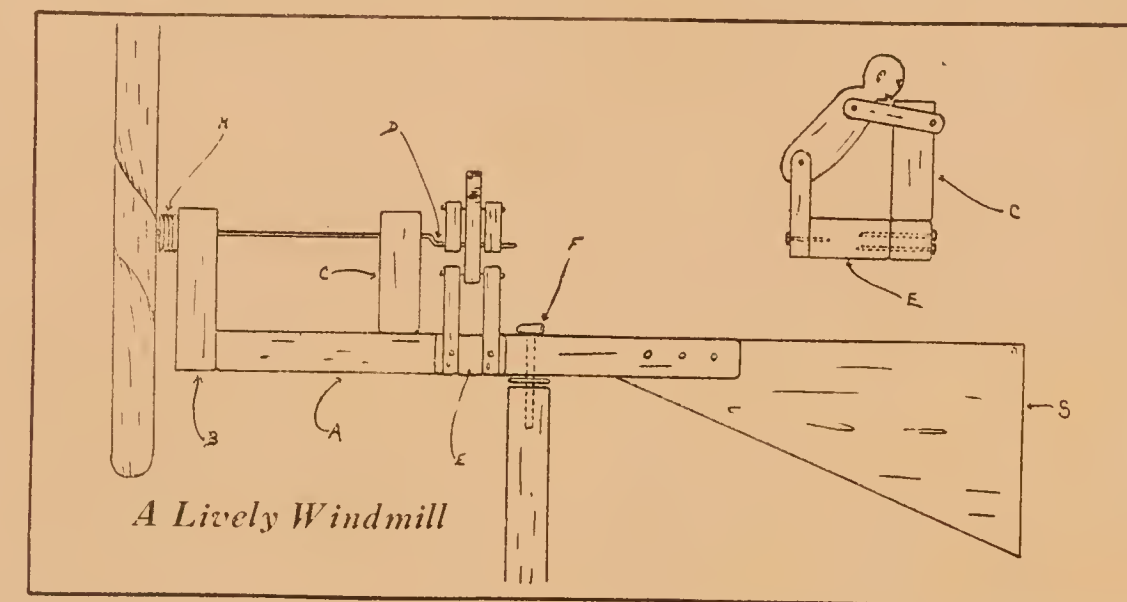
life is there although the tree looks so lifeless from the outside.

Those grass roots too are ready to push up green shoots very quickly if encouraged by a few bright, mild days. And so it goes; we should not think of winter as a time of dreariness when nature is dead. Everything needs to rest at some time or other and Mother Nature takes winter as her time to get ready for a fresh start in the spring.

A Lively Windmill

WHEN a good stiff nor'wester is blowing down across the flats your little man on the windmill will be the busiest person on the farm.

With the exception of the little fellow himself and the shingle used for the rudder, the whole windmill is made from one-inch-square soft wood. If you can, pick some straight-grained white pine. If that is not possible be



A Lively Windmill

wire fits very tightly. Find the correct place for this hole by balancing the finished propeller on some blunt edge.

Now assemble all the parts you've made so far and nail the shingle solidly into the rear of the foundation piece in the groove you made for it. When you are putting the propeller on don't forget the washers at H.

Bend the wire at D as illustrated, but be sure not to get it more than half an inch off center.

Now for the little man himself. His legs and arms are four pieces of material about half an inch thick, half an inch wide and all of them two and a half inches long. His body is of the same half-inch material, a little over an inch wide and four inches long. The holes drilled at his shoulders and hips are two inches apart. Be very careful not to get them any closer than that or you will run into trouble later on.

Wire him together so that his arms and legs move freely without being loose. Now notice in both drawings the piece E. This piece is one inch thick, two inches wide and just two inches long. Nail it on the side of the foundation half an inch back of the upright C.

Slip your man's hands over the wire shaft and carefully nail his feet to the side of the piece E. Because of the danger of splitting his feet use only a couple of long thin nails for each leg. Or better yet, drill the holes through his legs for the nails.

By turning the propeller now you can tell whether the tightness of his arms and legs is correct. Don't be afraid to have him a bit stiff; he'll loosen up pretty soon after you put him outdoors.

Our final task is to find the exact

gone, and he could but wonder at the swift justice done him in a way that was so simple and effective. Even with Margaret there was no trace of consciousness. The past was wiped clean of all save courtesy and kindness. There were the Hunts—Nellie, and the Lieutenant of the Lexington Rifles, Richard Hunt, a dauntless-looking dare-

Bunny Monogram L




If you do not wish to wait for the series to run on the Boys' and Girls' page, for ten cents you can obtain proof sheets of the entire alphabet. Address Editor Boys' and Girls' Page, American Agriculturist, 461-4th Avenue, New York City.



The Service Bureau

A Department Devoted to the Interests, Welfare
and Protection of A. A. Readers



Figuring the Profits

THE following statement is taken from a circular put out by a firm advertising to sell muskrats for \$45 a pair.

"We believe a conservative increase from pen raised muskrats to be twenty per year from each pair. Suppose you started with four pairs and waited two years before pelting. On this basis there would be an increase of 80 the first year and you would have a total of 88 at the beginning of the second year. The increase the second year would be 880. Estimating an average price of \$2.50 per pelt, your return would be \$2200 at the end of the second year. The carcasses are now becoming valuable, and some packing

inity. He offered to give me a check for the value of the crates which I was to keep until he returned the crates. I told him I would trust him with them. Now the \$200 check came back protested."

UPON investigating we are unable to locate Mr. Longo in Port Chester. Our letters have been returned by the Post Office, and at present it looks as though our subscriber will be obliged to accept this loss. This is just another instance of the outcome of dealing with firms unless you are absolutely sure of their reliability. If this man should approach any of our readers in the future, we ask that they immediately notify their local peace officer and report to the Service Bureau.

"Rabbit Queen" Arrested

SOMETIME ago we commented on the Belgian-Florida Rabbit Association. At that time they were starting a big rabbit ranch in Florida but so far as we could learn had neither a ranch nor any rabbits.

Now we learn that Mrs. Marie Fulton has been arrested and held for trial, following an investigation of the scheme by the U. S. Post Office Department. The Post Office Department, of course, does not care how extensively anyone raises rabbits so long as they do it with their own money. Fortunately, they do concern themselves as to how other people are persuaded to part with their money.

Watch Out for This Man

"An agent recently came here offering goods that he said were unclaimed goods belonging to the railroad. He offered a dozen full sized bed sheets for \$1.50, a dozen Irish linen towels for \$1.50 and a dozen large Turkish towels for \$1.50. A friend ordered some but now wonders whether it may not be a swindle."

WE believe it is safe to say that goods cannot be sold honestly for that price. We advised our reader so and also wrote to the nearest State Trooper Barracks. A few days later we received the following letter:

"Your letter and Troopers arrived on time. The men with the goods did not

Chicken Thief Reward Goes to Madison County

AT four fifteen on the morning of October 18th, the Oneida Barracks of the New York State Troopers received a phone call from our subscriber Mrs. A. C. Maxwell of Canastota. Mrs. Maxwell stated that Mr. Maxwell had captured a chicken thief and would hold him until the troopers arrived.

Two troopers responded immediately and arrested the thief, Arthur Hart of Canastota. Hart admitted that he had been in the Maxwell poultry house and had stolen chickens only the night before. He also said that he had stolen chickens from Earl Eddy and Owen Carey of Madison County.

Hart was taken to the Madison County jail and held for grand jury.

show up. It looks as if the man was selling the goods he had on hand and took orders for a bluff."

The following comment comes from the Rochester Better Business Bureau:

"Many inquiries have come to the Bureau from hospitals, beauty-parlors, and business firms who have been approached by a rapid-fire, high-pressure salesman with a Scotch or Irish brogue. This salesman offers 'unclaimed' merchandise including sheets, pillow-cases, fabrics, silk shirts, towels, and other items at ridiculously low prices. This man claims to be selling the goods for some railroad and says he represents the Atlantic and Pacific Salvage Company of New York City. He travels in a blue Hudson car and evidently travels fast as investigators have been unable, up to the present time, to apprehend him."

An "Order" May Be a "Contract"

"I am writing you concerning the company. I am in the feed business and one of their representatives called and sold me some of their stock salt. I

Promptness Appreciated

RECEIVED your draft from the North American Insurance Company recently for my accident claim. I think your paper and its service is wonderful.

The insurance is so reliable although it is very cheap. If I had not received this I wouldn't have had a thing to show for my five weeks' forced illness. We all enjoyed the serial of "The Little Shepherd of Kingdom Come" and we all hope the next serial is as interesting.

Sincerely yours,
James Struble,
West Danby, N. Y.

signed a trade acceptance for it and since then I have heard that their methods of doing business are not what they should be. They guarantee free veterinary service to the user of the salt they sell so long as the stock owner should use their products according to directions. They also claim to pay the stock owner for every head of stock that may die while using their products."

WE cannot see how any firm can possibly live up to such a guarantee and continue in business. The mere fact that any company publishes such a guarantee might make the prospective buyer rather skeptical regarding the value of the product.

As to the business methods of the company, while not illegal, they might be called "high pressure." You signed a contract and will doubtless be forced to pay or suffer endless annoyance.

Your Annual Inventory What Is It Worth?

- 1—It shows you what you own and what you owe.
- 2—It helps you to decide whether to auction off or carry on.
- 3—It provides a list of property in case of fire.
- 4—It enables you to give your bank a credit statement.
- 5—It helps you to use bank credit instead of store credit.
- 6—It makes a business of your farm and a better business man of you.

plants in the West have been offering twenty cents each for them."

We have considerable faith in the future of the fur industry but we feel that such wild statements as this cannot help but damage its natural, legitimate development. Statements similar to the above have at various times been made to show the wonderful profits possible from raising poultry. It is possible to quote the number of chickens that could be raised from one hen in five years, and thus show that it would be a very simple matter to get rich from hens in that length of time. Our advice is to go slow on fur farming unless you have made a thorough study of it.

"Tipster Sheet" Owner in Trouble

THE owner and editor of the "Trend Of The Market" and "The Stock Market Reporter"—publications known as "tipster sheets" are in trouble with the authorities.

Tipster sheets as a class claim to give reports on the stock market and while they give some reliable information they always recommend highly, a particular stock of doubtful value. It is reported that one victim, after losing \$20,000, most of which was borrowed, committed suicide.

A Check Has No Value Unless the Maker Has An Account

"I have a case for your Service Bureau. On November 10, a Mr. Luigi Longo of Port Chester, N. Y. came along here in a big truck buying pigs, calves and hens. I sold him hogs to the amount of \$200 and he gave me his check for the same. He also wanted to know if I would loan him the use of 19 poultry crates for a few days while he collected some poultry he had bought in this vic-



The Sign of Protection



-and now for 1929!

Now that the holidays are over it is time to get down to serious business and plan the work ahead for the new year. With the New Year good wishes still ringing in our ears, we are all ambitious to make 1929 bring us better profits, better living conditions and more satisfactory results from our efforts.

This calls for many improvements around the farm and the farm home—extra equipment and materials that will make labor easier, the results more sure and the home more attractive and comfortable. In this "Farm Service" Hardware Store you can expect and will get full cooperation in helping with the furthering of these plans. Our personal service in assisting you to select just the right mechanical and home hardware items will be of great help to you.

We invite you to come in often to inspect any item we have in our stock as often as you wish and to ask us for any information we have or can get for you.

Your "Farm Service"
Hardware Men.

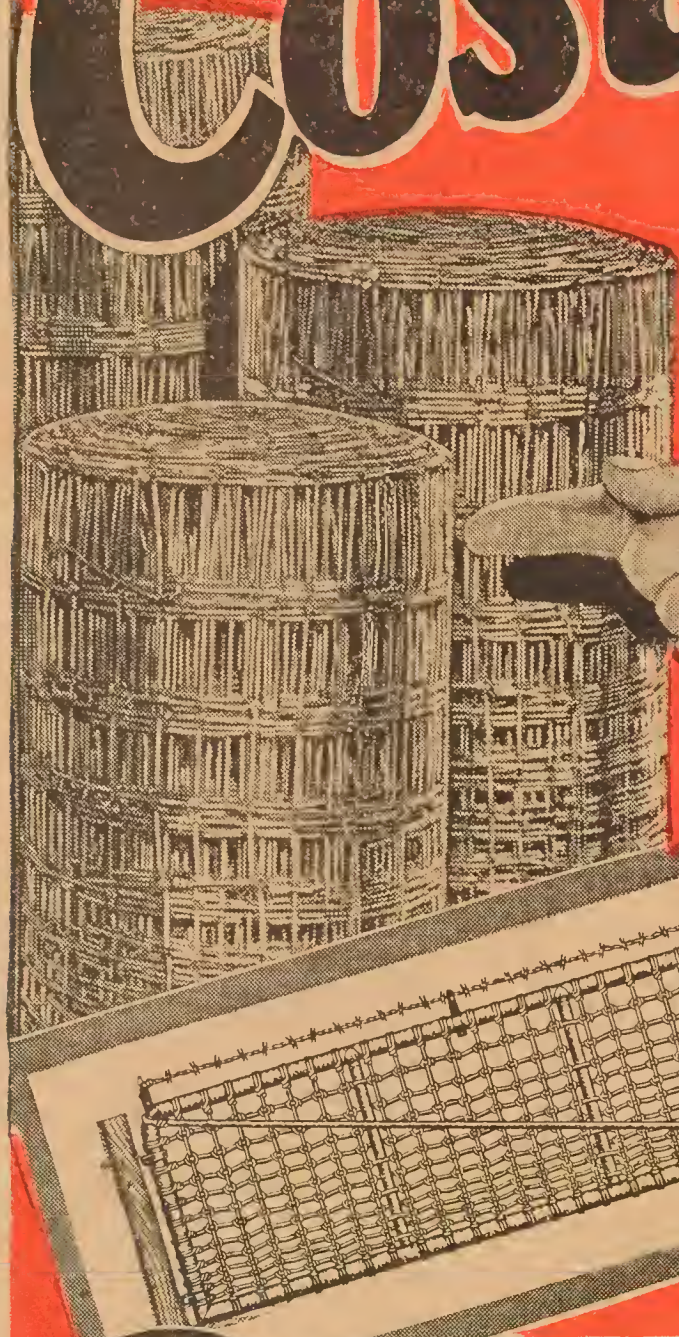
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"I have compared your prices with others and find you saved me 12c a rod on my fencing."
J. L. Sibley,
Benton, Miss.

Saved \$20.00 On the Order
"Received shipment of fence and find everything O. K. We saved about \$20.00 by ordering from you."
Aaron Y. Davis,
Madison, Wis.

Best Fence At Any Price
"I have ordered over 500 rods of fence from you and it's not only the best fence for the money, but the best fence at any price."
J. A. Walker,
Tigrett, Tenn.

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Now just a word about QUALITY. Low prices don't mean a thing unless the quality is right; that's the point I want to emphasize; I believe I make and furnish my customers with the BEST QUALITY Fence, Gates, Steel Posts, Furnaces, Barb Wire, Roofing, Paint, etc., that it is possible to produce. That's why everything you buy from my factories carries my own personal guarantee—a guarantee that insures you quality and satisfaction.

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\$1.00 Per Year

January 12, 1929

Published Weekly



In Business for Himself

The Fruit Outlook In The East — Page 3

The QUESTION BOX



When to Trim Apple Trees

Will you kindly advise me if I can trim apple trees in the fall or what month is the best?—A. A., New York.

GOOD orchardists tell us that the proper time to trim a tree is whenever you have a sharp knife or saw at hand. It is becoming a common practice in many orchards to make trimming a year round proposition. It appears to make little difference to a tree whether it is pruned in mid-June or mid-February. We would advise that you do the work when you have spare time. Many orchardists find that winter is the most convenient. A word of caution may be worth while. Most authorities agree that the average grower prunes too severely.

The Value of Manure

Can you give me some idea as to the relative fertilizing value of the urine of farm animals compared with the solid matter excreted? Is it a good plan to drain the liquid part into a tank and apply it separately or pump it over the manure just before it is drawn out?—H. B., New York.

ABOUT two-thirds of the nitrogen and four-fifths of the potash excreted by animals is in the urine. It contains almost no phosphorus. It is usually considered better to absorb the liquids with plenty of good bedding rather than to drain them into a storage tank. It is easier to handle and there is probably no more loss in handling it that way.

Does It Pay to Buy "Run Down" Farms?

We hear a lot about run down soils. Is it not a fact that it is possible to build up any soil to a point where it will produce bumper crops?

IT is perfectly possible to build up an unproductive soil but it is costly both in time and money. It is considered more profitable to buy a farm that is naturally fertile, especially with farms as cheap as they are now.

Treating Shingle Roof to Prevent Fire

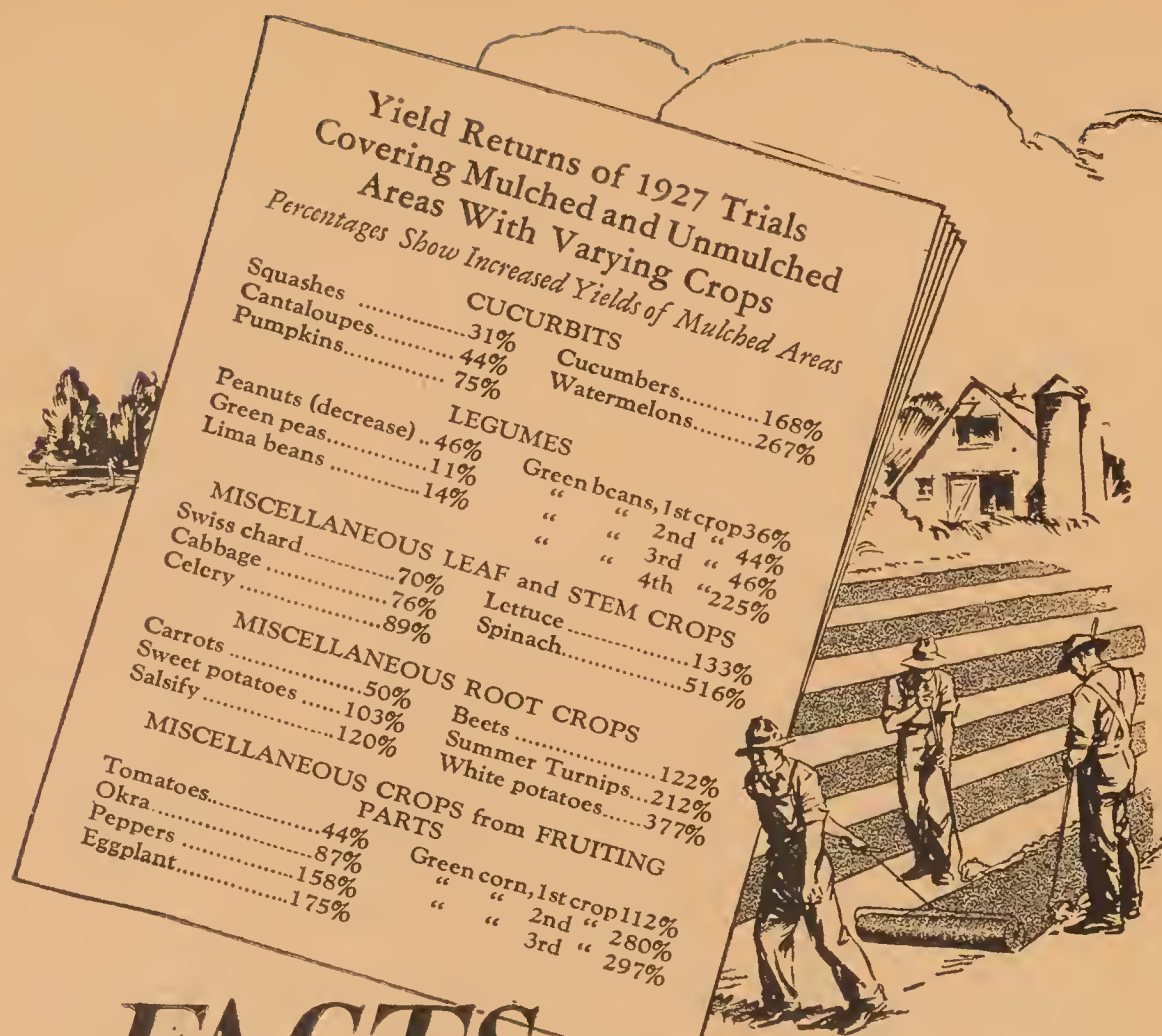
"We hear of so many roof fires from sparks dropping on wooden shingles that I should like to have you tell me how I am to prevent this danger, both with new and old wooden roofs.—J. J. S.

NEW shingles can be fairly well fireproofed by dipping them into some of the commercial fireproofing paints. Most of these paints are based on sodium silicate or water glass. Apply two or three coats of equal parts sodium silicate and water, letting each dry before the next is applied. Before the last coat has set hard, apply a coat of lime water. This will unite with the silicate of soda and make silicate of lime, which is insoluble in water and will not wash off, as the water glass alone would do.

Curled Shingles a Fire Hazard

Wooden shingles already laid and in good condition can be made much more resistant to sparks by two or three coats of the same paint and finished up with the lime wash, provided the paint is worked up under the butts as much as possible. If the shingles are starting to lift or curl, such paints will do but little good, since a spark is likely to blow up under a shingle, where conditions are ideal for starting a fire. Such shingles should be removed and a coated asphalt, asbestos cement, or other fire resistant roof put on.—I.W.D.

Another agricultural surplus which hurts the farmer is the surplus of low quality produce.



FACTS NOT THEORIES CONCERNING MULCH PAPER RESULTS NOT PROMISES!

STUDY the figures in the chart carefully. They show what Mulch Paper means in terms of greater crop yield, and increased profits from the same acreage. But that is only a part of the wonderful story of this miracle of Mulch Paper. Equally important, often of greatest importance, is the earlier harvesting while prices are highest—sometimes weeks before the crops of neighboring unmulched areas are ready for market. And more—the saving of back-breaking labor—Gator-Hide Mulch Paper practically eliminates all cultivation and weeding.

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no chemical reactions in the soil that are injurious to plant life. Unrolled directly over prepared soil *before* planting and anchored by rocks, battens, wire, earth or other suitable material, it stimulates plant growth by storing up solar heat and at the same time retarding moisture evaporation. Planting is accomplished *through* holes made in the paper or *between* successive strips of the paper.

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This year let Gator-Hide Mulch Paper work for you. Let it help produce on a single acre what you formerly pro-



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duced on two to four acres. Get your crops in early. Reduce to a minimum the back-breaking labor of cultivating and weeding.

Remember when you consider paper mulch, that neither the principle nor the idea is new. For fourteen years, the pineapple growers of Hawaii have been using it to stimulate plant growth and to eliminate weeds. \$500,000 worth of Mulch Paper is used in Hawaii each year and the estimated resulting increase in yield is 30%. For years, too, agricultural authorities of this country have experimented with it and approved its use.

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Is There a Future for the Apple Grower?

Effect of Other Sections on Eastern Business

By RALPH W. REES,
Horticultural Agent, New York Central Lines

IN view of the rather meager returns from apple growing in New York State during the past five or six years, growers are very much interested in the future of the industry. This interest concerns both the care of present plantings and the planting of additional trees. During the past ten or fifteen years the developments of commercial cold storage and rapid transportation and efficient refrigerator cars have placed a new aspect on the apple industry. Fruits and vegetables even of the more perishable kinds may be successfully moved through summer heat or winter cold from one part of the country to another. This condition brings products from all parts of the country into competition.

There has been a tremendous increase in the production of lettuce, celery, asparagus, spinach and a number of other vegetables which are on the market nearly every day in the year. They are taking a greater place in the diet and tend to reduce the consumption of apples.

Strawberries, cherries, and early peaches from the south compete with cold storage apples. Oranges, grapefruit, and bananas on the breakfast menu or in salads give competition to baked apples, applesauce and apple pie.

The competition which apples receive from canned fruits is frequently overlooked. Only a few years ago canned pineapple was practically unknown and at present we use between eight and nine million cases of canned pineapple annually in the United States. Canned peaches, apricots, cherries, and pears have increased 175% in ten years' time. Apple growers are interested

in not only the competition which comes from other fruits and vegetables but also in the competition which may be expected from other apple producing sections. Considering the United States as a whole, there has been a reduction of fully one-third in the number of apple trees since 1910. This has not been reflected in a decreased

Requirements for Success

IF you grow fruit, or plan to grow fruit, the article on this page by Mr. Rees on the "Outlook for Apple Growing" will be of interest and value to you. It is our editorial policy to give our readers constant information on the fundamentals that underlie your business. There is one fact of which we are becoming more and more convinced, and that is that farming is getting to be a very specialized business. This is especially so of fruit growing. Summing it all up, we believe that there is a good outlook for the apple grower who makes it a trade and educates and equips himself so as to put his trade on a scientific and businesslike basis.—The Editors.

commercial production, as the loss of the trees came primarily in general farm orchards and in districts where, due to climatic conditions, production was uncertain. Present apple orchards are in the hands of better growers than ever before and larger yields per tree and per acre are being received.

The so-called box apple states, Colorado, California, Oregon, Idaho, and Washington, produce almost one-half of the commercial apple crop. The Watsonville district of California has been a heavy producer of Newtons and Bellflowers but the production of this district is declining as new orchards have not been planted to replace the older ones that are going out. The situation

in the Watsonville district is of particular interest to the Western New York apple growers as Watsonville is one of the very heavy producers of evaporated apples. The yearly output of evaporated apples from this district amounts to around five thousand tons. This production will probably continue due to comparatively cheap labor and fuel; also to the fact that apples from this district do not have as good market quality as those from some other western sections. In

the Sebastopol district, north of San Francisco, the Gravenstein is an important variety and reaches our Eastern markets early enough to compete with locally grown early varieties. Due to the high percentage of young trees, production in this district will increase.

In Oregon, the much famed Hood River Valley district, noted for the high quality of its Newtowns and Spitzenbergs, has passed its peak of production and now has a declining apple acreage. The trend in this district is to reduce the production of apples and increase the production of pears and cherries.

In Idaho, noted for the high color on its two important varieties, Jonathan and Rome Beauty, production has passed its zenith.

The state of Washington, by far, is the leading box apple state. The apple industry is centered in the Yakima and Wenatchee districts. As in the other sections of the Northwest, the orchards in these districts were planted 18x18 feet or 20x20 feet and the trees now occupy the entire bearing surface of the land and diagonal rows are having to be removed. This coupled with the

(Continued on Page 7)

Readers Dissatisfied With Egg-Grading Law

We Give the Arguments on Both Sides and Ask for Suggestions

By H. L. COSLINE
Associate Editor, American Agriculturist

SOME time ago, the New York State Department of Agriculture and markets put into effect new regulations on egg grading commonly known as the New York State Egg Grading Law. Briefly this law not only removes the distinction between fresh and cold storage eggs but also defines the quality which must be held by various grades very definitely. The law applies to eggs sold at retail and does not directly affect the producer in case he sells eggs to the middleman or if he sells to consumers so long as he only sells eggs produced on his own farm.

It might seem, from the fact that the producer is not required to grade eggs, that the law would have little interest to him, yet a number of letters received by us indicate that there is much dissatisfaction concerning the way in which this law is working out. One cause of this dissatisfaction is a feeling that it has resulted in the lower prices now being received by producers. It seems to some that in view of the 4 per cent fewer laying hens on farms as reported by the U. S. Department of Agriculture, that prices should be higher than last year at this time. As a matter of fact, on most grades, they are several cents lower.

When two events occur at the same time it is only natural to conclude that one is the cause and the other the effect. However, there is another factor which enters into the situation on the other side of the picture which is that cold storage holdings are much higher than they were last year at this time. On December 1st, in the entire country there was approximately a half

million more cases of eggs in storage than last year and 139,000 more cases than the five-year average for December 1st. There is some evidence that buyers last spring paid more than the market would warrant and that they are at present taking some losses on storage eggs. This cannot help but have some effect on prices as

these eggs must either find their way into consuming channels or become a total loss. Another cause of dissatisfaction with the law is the fact that local grocers seem very hesitant about buying from nearby producers because they apparently do not wish to assume the responsibility of grading the eggs. In discussing this recently with the officials of the New York office of the Department of Agriculture and Markets, they expressed the opinion that local grocers are more concerned over this than need be. The tendency, where grocers do buy from their customers, is to put the eggs into the unclassified grade rather than to attempt to grade them. This works a distinct hardship on the small producer who does not have enough eggs to pay to ship to the larger markets. If the grocer refuses to buy from him he has to find another market and if the grocer buys and puts them into the unclassified grade they must be sold at a price which is below their real value.

In a recent letter from a reader the following statement was made: "One of the chief weaknesses of the law as pointed out by some of the State Inspectors has been the presence of the unclassified grade. This grade has allowed retailers to escape, almost entirely, the provisions of the law. The reason they have done this, is that they do not wish to go to the trouble of being responsible for the grading of the eggs. I believe that some changes should be made to improve the working of the law but I am certainly not in sympathy with any move to repeal it. I believe that it is a step in the right direction."

"Suggestions have been made to eliminate the unclassified grade and also to do away with the fancy or higher grade, thereby having the highest

(Continued on Page 18)



H. L. Cosline



A well graded product. Judging from the smile, it pays.

Editorial Page of the American Agriculturist

AMERICAN AGRICULTURIST

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Vol. 123 January 12, 1929 No. 2

The A. A. 1929 Editorial Platform

- I. For lower and better adjusted farm taxes.
- II. For better dirt roads.
- III. For protection against frauds and robberies of all kinds.
- IV. For adjustment of the farm trespass problem.
- V. For honoring and dignifying agriculture by conferring the title of Master Farmer on worthy nominees.
- VI. For guaranteed advertisements.
- VII. Last but by no means least, for giving you every week in the year the biggest, most interesting and best issues of A.A. that have ever been published.

Governor Roosevelt To Discuss Farm Problems At Agricultural Society Supper

ONE of the gatherings to which several hundred people interested in agriculture look forward with anticipation each year is the annual meeting and old-time supper of the New York State Agricultural Society. This year it is to be held in Albany on Wednesday, January 16th.

From time immemorial the Governor of the State has been the chief speaker at the Society. More than usual interest is associated with Governor Roosevelt's speech this year because it will be the first time that the new Governor will address a farm audience on agricultural problems. Governor and Mrs. Roosevelt have very graciously extended to the members of the Agricultural Society an invitation for an informal gathering at the Executive Mansion at 4:30. This will be followed by the old-time supper at the DeWitt Clinton Hotel at 6:30 P. M.

Dr. Daniel A. Poling, one of the best known radio ministers and president of the American Youth Council, will be one of the speakers following the supper. His subject will be "What Age Owes to Youth". Hon. Mark Graves of the State Tax Commission will outline the tax problem that now confronts the farmer. Henry Morgenthau, Jr., will explain the recommendations that were made by the committee of representative farmers, of which he was the chairman, for the relief of the farm tax situation. This part of the program will be closed then by the speech of Governor Roosevelt, which is expected to be one of the most important messages of the entire year.

The business meeting of the Society will be opened in the State capitol building promptly at 10 o'clock in the morning. During the afternoon

there will be an important discussion of the proposal to hold an annual winter farm products show in the city of Albany.

It is expected that this is going to be the largest and most important meeting the State Agricultural Society has ever had, and it is therefore suggested that those planning to attend should notify immediately Mr. C. H. Baldwin, secretary of the Agricultural Society at the State Department of Agriculture and Markets, Albany.

What About Your Grass Seed?

IT is quite a long spell yet before we can expect the warm days of spring, but none too early for the fore-handed farmer to begin to make careful plans for the coming season's work. We want to call your attention especially to the need of looking after your clover and alfalfa seed purchases immediately.

With both of these legumes, unfortunately, there is a short crop of good seed and more care than usual will have to be given to see that you get northern grown seed of high quality. Southern seed will be much cheaper and plentiful on the market, but it is a waste of money to plant the southern seed in most of the A. A. territory. Stick to Grimm alfalfa or to hardy Idaho, Utah and South Dakota common seed.

With clover, it is said that foreign grown seed will probably be from five to seven dollars a bushel lower than good domestic seed, but this foreign seed, particularly if it comes from the South of Europe, is expensive at any price, no matter how low that price is. It is also true that some domestic seed, if it is grown in southern sections, is not hardy enough to stand New York winters.

What Is a Fresh Egg?

WE cannot help believing that the new regulations covering the packing and sale of eggs are having some adverse effect on the quality of eggs which the consumer buys. We speak from the experience of a consumer when we state that it is almost impossible to get really fresh eggs out of the retail market in the large cities. It seems to us that it is more difficult in recent months since the egg regulations have gone into effect.

These regulations make it possible to call a cold storage egg a grade A egg, and sell it as such on the market. But to a person farm reared, who really knows what fresh eggs are, the cold storage egg can never be a fresh one by any stretch of the imagination.

Every farm-reared boy well knows that an egg whose contents can be shaken, showing some evaporation of the inside moisture, is not fresh. In fact, in plain language, we used to call them rotten. Yet, we are sorry to say, most of the eggs that reach the ultimate consumer will rattle at least a bit when they are shaken.

Maybe there is no way around this, for it is a long way from the hen's nest to the consumer's table. But the fact remains that consumption of eggs could be greatly increased if they were strictly and really fresh when the consumer gets them. Read Mr. Cosline's article on this subject on Page three.

"Sold For Taxes"

TO the farmer of today who owns a little real estate in name only, the words "sold for taxes" have almost as ominous and dreadful sound as "over the hills to the poorhouse" had for his Yankee forebears. On our desk as we write there is an entire page of an up-state country weekly completely filled with a notice of sale of property for taxes. More than two hundred different properties are listed for one county alone. Think of the tears, the heartache, the blasted hopes, that practically every one of those two hundred tax sales indicates. One has only to notice any of the hundreds of publications that contain these long lists of the sales of farm property for taxes to realize how necessary it is that

something be done and soon, to relieve this distressing situation.

Of course, in these lists of tax sales, there is represented some inefficiency on the part of the owners. Probably there is listed also considerable land that never would pay a profit in farming even if there were no taxes at all. But on the other hand, all farm land, both good and bad, is struggling under a burden of taxes which is doing more than any other single factor to hold back farm prosperity. AMERICAN AGRICULTURIST has worked on this problem for many years. When we started, no one paid very much attention to what we said about it, but by keeping everlastingly at it, we have secured the cooperation of other individuals and organizations trying to serve agriculture. More and more study has been made of the actual details of taxation and at least we have secured the sympathetic attention of men in high places in the government, including Governor Franklin D. Roosevelt.

The result of this work is that we begin to see some light ahead. Good things come slowly, but there are now real indications that an honest effort is going to be made to readjust the levying of taxes so that the farmer will not be paying so much more than his rightful share.

Stop Reclamation Projects

IT sometimes seems that our Federal government likes to work on the policy of not letting its right hand know what its left hand does. For years now there has been a determined effort to get some kind of farm relief law through Congress. At the same time that this fight for farm relief legislation goes on, the same Congress is giving serious consideration to various kinds of reclamation schemes that will put more land into cultivation at the expense of American taxpayers, including the farmers. What absurd inconsistency!

It is recognized that the great problem of American agriculture is over-production. The government has considered various schemes, planning to spend millions of dollars to take care of America's farm surplus. At the same time, it plans to spend other millions to increase that surplus by bringing more land into cultivation by means of great dams and irrigation projects.

Just at present, there is a bill in Congress authorizing the Secretary of the Interior to make surveys to determine the lands to be embraced in the Columbia Basin reclamation project and recommend the best source of water and method of irrigation of the territory. This bill has already passed the Senate. It would bring in cultivation, under irrigation paid for by the government, nearly two million acres of new land.

Eastman's Chestnut

SOMETIMES when you were in a hurry, did you ever ride an old razor-back farm plug bareback after the cows and feel the next day or two as if you wanted to take your meals off the mantelpiece? If you have had such experience, I am sure you will sympathize with the small boy in the following story:

When the iceman came out of the house he found a small boy sitting on one of his blocks of ice.

"Ere," he roared, "wot are yer a-sitting on that for? Git off of it!"

The small boy raised a tear-stained face. "Was you ever a boy?" he queried faintly.

"Of course I was," said the iceman, fuming. "But—"

"And did you ever play truant?" cut in the youngster.

"Of course I did," snarled the iceman. "Now then you—"

"An' when you got home, did yer father take a stick an'—"

"Sit where you are, my little man," the iceman said, gulping, "I understand."

It Advanced the Cause of Agriculture

Sentiments of Those Who Attended Master Farmer Gathering

WE thought the A. A. family would be interested in some of the reaction we have had from the Master Farmer banquet when Governor-elect Roosevelt conferred the title upon twenty-two Master Farmers and their wives. Letters are still coming in, some of the finest and most encouraging we have received in a long time, and because they express the real motive and ideals of the Master Farmer movement to honor all agriculture and to emphasize its merits, we are printing below a few of these letters received by Henry Morgenthau, Jr., our publisher.

The first article is the brief speech given by Mr. Morgenthau as toastmaster at the banquet when he opened the program. The second article is the short address given by Dean A. R. Mann of the State College of Agriculture. Unfortunately, we did not have a stenographic copy made of the other speeches, but hope to get some of them later for you from those who gave them. All of them are worth reading, for they emphasize the great underlying thought of the Master Farmer movement so well expressed by George Washington when he said:

"Agriculture is the most healthful, the most useful, and the most noble employment of man."

* * *

Purpose of the Gathering

By Henry Morgenthau, Jr.

WE are gathered here from all parts of the State of New York and New Jersey to do honor to twenty-two men who have made a real success of their lives on the farm. The men and women gathered here tonight represent many varied interests and I wish to take this opportunity to welcome them here and to thank them for joining hands with us in doing honor to these most unusual men.

In these times when we hear so much talk about farm relief it seems to me most refreshing to find twenty-two men who would not exchange their method of living for any offer that the city might have to give. Many men and women leave the farms each year and flock to the city and this is a most serious problem which all of us have to face. Therefore, is it not encouraging to know that there are men here tonight who started out 35 years ago, whose entire inventory of worldly goods consisted of a good wife and a good name. Several of these men today are worth more than \$100,000, and one of them is worth over a quarter of a million dollars—all made out of farming. These same men have not only been able to make

an excellent living for themselves and their families, but also have found time to take an active part in their community welfare.

It is most fitting at this time that we should give credit for the Master Farmer idea to our sister publication—the *Prairie Farmer* of Illinois. Furthermore, we wish to thank Dean Mann and the College of Agriculture at Ithaca for their help in preparing the work sheets of the master farmers and also for their assistance in checking up on the various candidates. We also wish to thank Commissioner Pyrke and his department, the officials of the State of New Jersey, and Mr. C. L. White and Mr. Harris of the Pennsylvania Farmer for their kind cooperation. Furthermore, we are greatly indebted to the Board of Judges who took great pains and time in the selecting of the twenty-two Master Farmers.

In terms of agriculture, New York State is really the Empire State.

New York State ranks first in production of hay, second in value of dairy products, second in fruit and vegetables, second in potatoes, second in apples, second in farms operated by owners, sixth in total cash income, first in farm owned radios, fourth in value of farm implements, second in purebred livestock, third in total dairy cattle, sixth in value of chickens and eggs.

The cash income of New York farmers is more stable and has increased more over the past 15 years than that of any other state in the Union. Stability is due to dairying, since dairying is the backbone of New York agriculture and since New York farmers have at their door the best market in the world—New York City.

* * *

A Lot of Good Citizens on the Farms

By Dean A. R. Mann

A DISTINGUISHED educator has said that the purpose of education is to enable the student to master the art of earning a good living, thus justifying his existence by productive labor in the great world of things; and to master the art of living a full life, thus justifying his existence in the great world of ideas and ideals. In strikingly similar mood the Master Farmer movement has come forward to recognize and honor farmers who, first, have mastered the art of earning a good living for themselves and their families by intelligent, productive labor in the great world things, and who in addition thereto have mastered the art of living full lives, participating in the economic and social movements of the day, thus justifying their existence in the great world

of citizenship. It is a conception of fundamental significance in our national life, this public measuring of success in terms which take cognizance not only of economic rewards but equally of quality of life in the family and in the community. If there is any single phrase which gathers up into a single symbol all of the attributes desired in the ideal Master Farmer, it is high quality of life, life that is economically sufficient, socially stimulating and serviceable, personally upright and straight-forward. Quality of life and of living is the net end product and the revealing expression of the business, the family, and the community behavior of the individual. In placing the work of public approval on outstanding quality of farm life in its personal, family, and community relationships, the agricultural press of this country is doing a commendable thing.

The score-card by which Master Farmers are chosen is an attempt to tabulate analytically the elements in one's personal character and in his home, business and public activities which mark him as a successful man in the best sense. Here is a standard by which others may judge themselves, by which farm youth may be stimulated to shape their courses so that they may attain an approved ideal of success. We ought not to overlook the value of keeping this score-card before farmers because of its emphasis on the well-rounded life which should become the purpose of every thoughtful person. If the Master Farmer movement engenders even in a small degree competition for recognition on the basis of good farming and good citizenship it will have served a useful purpose. Anything which encourages pride in worthy achievement is beneficial.

I particularly like the fact that the Master Farmer movement seeks out and honors those who have achieved success in farming, in family life, and community service in quiet ways. It is not the spectacular thing which is here emphasized, but the quiet, day-to-day performance in the ordinary course of events which makes one a good father and an esteemed neighbor. The spectacular thing may win the loudest acclaim, but the strength of the nation lies in the quiet, even discharge of good citizenship. There is a lot of good citizenship on the farms—and it is heartening to have it appropriately recognized. Others equally deserving will be discovered and honored in future years.

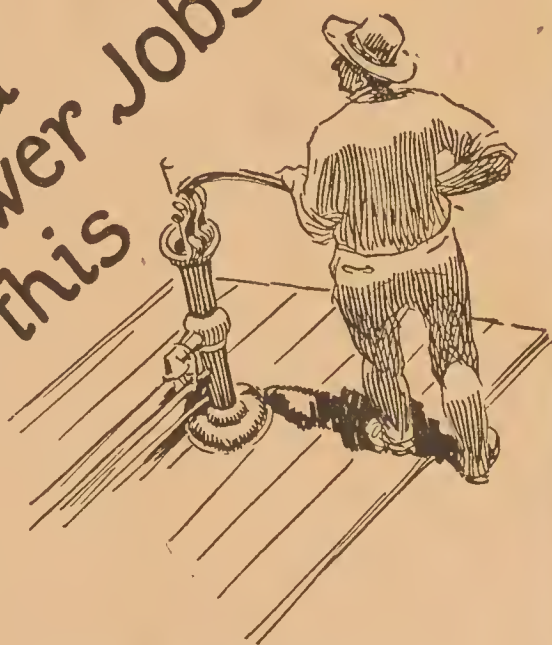
An examination of the records or credentials placed before the judges in selecting this first group of Master Farmers in the east reveals the

(Continued on Page 21)



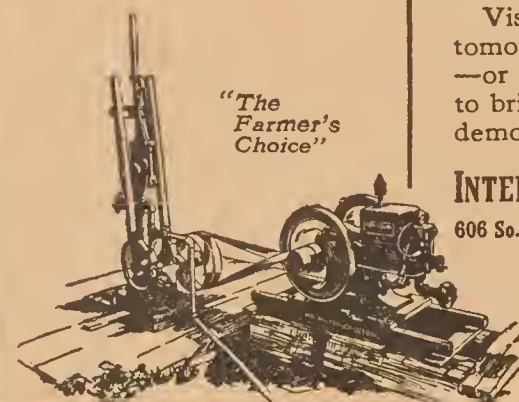
A picture of the Master Farmer banquet given in New York City December 19. The speakers' table is at the extreme end of the hall.

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**A.A.'s Western New York
Farm and Home Talk**



Thoughts on Master Farmers

By M. C. BURRITT no man is perfect and that he only approximately approaches the high standards set. It is never difficult to find flaws. The only justification for naming a few men "Master Farmers" is to honor agriculture through them. Men of many other occupations have been honored for their contributions to and achievements in their professions—engineering, law, medicine, manufacture, commerce. Why not recognize that agriculture requires "the same concentration of mind and effort, the same keen analysis, the same amount of managerial skill that goes into the creation and maintenance of a successful business anywhere"?



M. C. Burritt After nearly a week away from home attending meetings, it was a relief to climb into an apple tree again and start the winter's pruning. To one who is used to plenty of fresh air and exercise in the big out-of-doors far away from great buildings, subways, smoke and noise, a farm is a quiet, restful, healthful place. One or two days in stuffy hotel rooms or in dusty streets soon has its physical effect in slowing up both body and mind. And yet this is in a measure offset by the nervous stimulus of the big things and the big ideas of the city. The countryman needs such a stimulus frequently and he may get it either from such trips or from reading.

One of these big ideas is the "Master Farmer" movement. As one of those who have been recently honored with the designation and burdened with the responsibility of being called "Master Farmer", I am minded to set down in these notes a few thoughts on the subject. While I assume to speak only for myself, some remarks I have heard the others make so check with my own thoughts that it may be I shall speak for some of the other twenty also.

Others Will Be Selected

I am certain that the first reaction of all of us to the information of our selection was our reluctance to be picked out from among so many deserving farmers—in many cases more deserving than some of us at least—to be thus honored. It seems an injustice to those who are worthy of the honor but not yet recognized. The only answer to this objection is that the selection must start somewhere—all cannot be discovered at once. It is to be hoped that all such men will be found and awarded the honor subsequently. Then, too, each man knows, or ought to know, his own failures and shortcomings better than any one else and has a certain sense of unworthiness. The designation of "Master" especially if one attaches to it the original meaning as the final achievement of the "apprentice" and the "journeyman" carries with it an assumption of power, control or mastery over one's crop or occupation which few of us who deal with the earth, the weather and growing things would ourselves lay claim to. And yet to be a master in the fullest sense of the good old English word is an ideal well worth striving for.

Name Carries Responsibilities

The name of "Master Farmer" carries with it certain responsibilities to live up to the standards set. No longer will weeds in the corn or scab on the apples be tolerated. There will be those who will be looking for proof that men are not what they are thought to be. Those who do not fully understand the significance of the designation will nevertheless have their own ideas of what a Master Farmer ought to be and they will be constantly measuring him by these standards. And there are the ideals of good citizenship and public service equally as important as good farming—all of these must be maintained. There must be no fall from grace—no smoking of corn-cob pipes behind the barn.

After all it must be recognized that

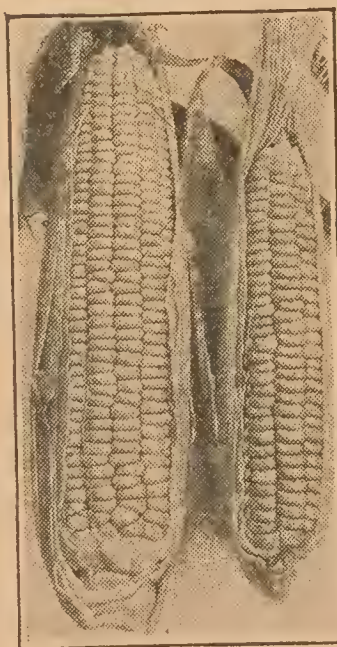
Much Depends on Mother

One or two of the many qualifications more or less truthfully assigned to us we will all admit. One is that the wife who on a farm more than in any other calling shares the life and the work of the man, makes success possible. Without her contribution to home and country living, particularly the rearing of the children in the fine environment of a farm, success would hardly be possible. Her courage, her willingness to sacrifice, her sense of values, are indispensable. Another qualification we admit of is our love of our profession. Born to the life and reared in it, farming is not only our source of a livelihood, but a mode of life to us and we love it.

Finally, as at the University, degrees are awarded for a period of preparation successfully passed at a time called Commencement so may the awarding of the degree of Master Farmer mark but the beginning of better farming, better living and better citizenship for "Master Farmers." So, too, may it be an inspiration to better things alike to recipients and to all other farmers as well in the days to come.—M. C. Burritt, December 29, 1928.

Persons who take part in rural dramatics may be interested in a Cornell bulletin on play production for the country theatre. As long as the supply lasts, copies will be sent to those who ask for them. They should write to the college of agriculture at Ithaca, N. Y., mentioning number E 82.

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Is There a Future for the Apple Grower?

(Continued on Page 3)

fact that there have been comparatively light plantings in recent years indicate something of a reduction in future crops. We will expect a reduction in Jonathan, Rome Beauty, Winter Banana and a few other varieties with material increase in Delicious and Winesap.

From the Northwestern states we can expect a continued competition for many years to come, but with a tendency for the volume to decrease rather than increase.

In the Central States, the Ozark district of southwestern Missouri and northwestern Arkansas is the leading apple producing center. It is noted for the production of Ben Davis and Gano which form 90 to 95% of the apple output. Due to the comparatively short life of orchards in this district, it is necessary to maintain a high percentage of young orchards if the volume of production is to be kept up. This ratio of young orchards has not been maintained.

The Shenandoah - Cumberland - Potomac district, extending from southern Pennsylvania across Maryland and West Virginia into Virginia, is a real competitor with New York State and New England. Apples from this district compete with the northern apples both in the export and domestic markets. In this district, roughly speaking, about one-third of the trees may be classed as full bearing; one-third as partial bearing, and one-third just coming into bearing. This gives a possibility of considerable increased production. However, it will not be as great as the number of trees would indicate, for there are large acreages located where profitable production is impossible. On the other hand, there is a sufficient acreage favorably located, and in the hands of good growers, to give important future competition to our locally grown apples.

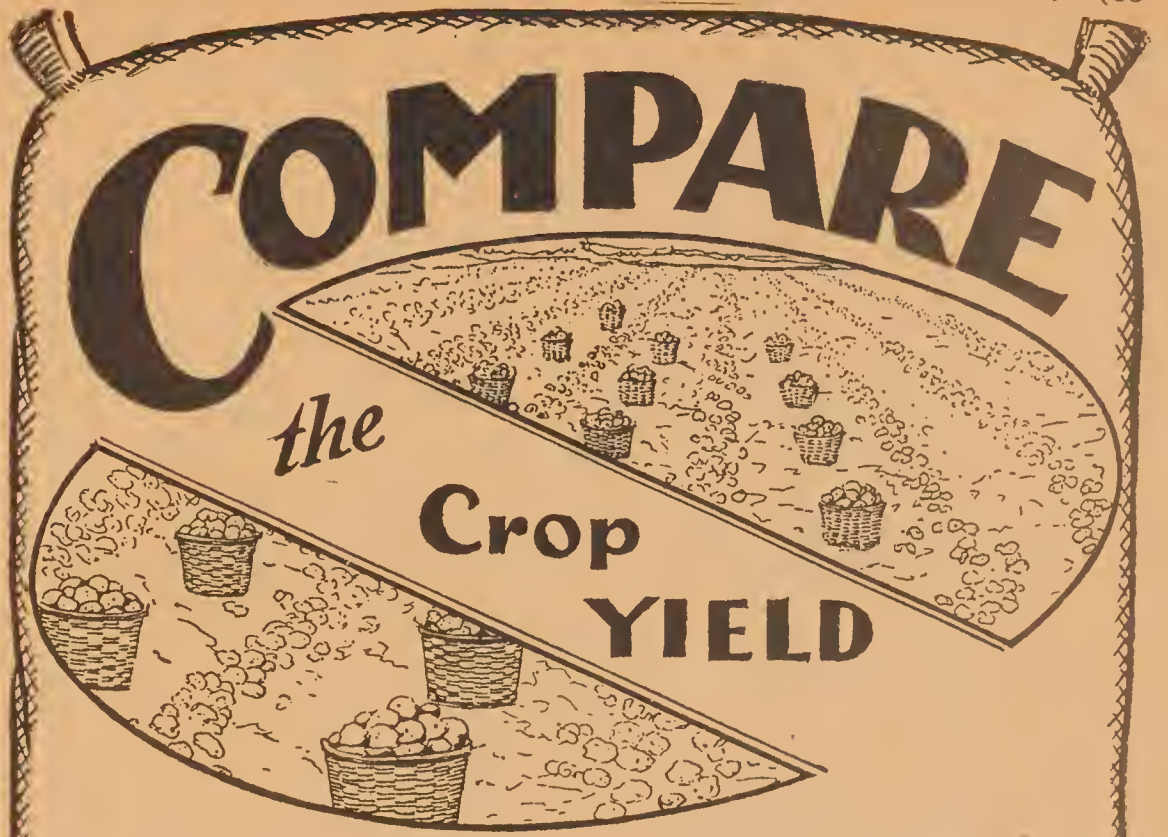
While there has been a very rapid decline in the number of apple trees in New England in the past fifteen or twenty years, the decline has not materially affected commercial production. At present New England has about six million bearing apple trees and about two million not yet in bearing. As the young orchards are pretty generally in the hands of good growers, this indicates a material increase in production. From a commercial standpoint the greatest percentage of increase will be McIntosh.

Many have predicted a rapid decline in the New York State apple industry. It is true there may be something of a decline so far as total production is concerned, but there will not be a material reduction in the near future in the commercial crop. Commercial production of Baldwins and Greenings will be maintained. McIntosh are making a very important gain while such varieties as Northern Spy, King, and Russets, are decreasing.

The future of early varieties in the latitude extending from Michigan to New England is not encouraging. There will be a continued increase in the production of early varieties extending from southern Illinois to New Jersey and Delaware. The early varieties from this section of the country reach the market earlier in the season and are of better color than those in the northern states. For this reason, the planting of early varieties in the northern latitude cannot be encouraged.

The present outlook would not justify the inexperienced man going into apple growing in New York State. The experienced apple grower probably may extend his plantings and not find as much competition when new orchards comes into bearing as he faces at the present time.

To be successful in meeting the future competition in apple growing it is necessary that varieties be selected which the market wants, that they be planted on sites where they can be grown to perfection, giving comparatively regular crops of high yield and that efficiency be practiced in every step of producing, packing and marketing the crop.



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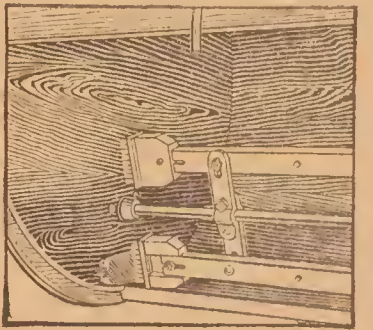
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Farming In Macedonia

Some First Hand Experience In Ancient Lands

EDITOR'S NOTE:

By H. B. ALLEN

This is the first of several letters from Mr. H. B. Allen who is with the Near East Relief in Greece. Several years ago Mr. Allen taught agriculture in the high school at Westfield, N. Y. Later he was assistant professor of agricultural education at the New Jersey State College of Agriculture. Mr. Allen's next letter will appear in an early issue.

Athens, Greece.

November 3, 1928.

IN a recent letter you mention that your readers might be interested in an occasional letter from me relating some of my experiences and observations as I travel about in the agricultural sections of historic Greece. First of all, I wish to make a suggestion to readers. Secure a good map of Greece in order that you may follow me on my trips about the country with more interest and pleasure. But be sure the map is up-to-date. Greece, like most of the other countries in this part of the world, has undergone so many changes in recent years that a map only ten years old is entirely out of date. To represent modern Greece, the map must show no Greek possessions in Asia Minor, but it must include Macedonia and Western Thrace as a part of Hellenic territory rather than as a part of Turkey.

A few days ago I returned from an interesting trip into Macedonia. The journey took me by over-night travel to Salonica (The Thessalonica of Bible times), and then six hours more by train to a town in eastern Macedonia called Drama. This village is not far from old Philippi (now only a few ruins), and the Philippian river where the Apostle Paul first baptised in Europe. This whole region is now a great tobacco country and some of the finest cigarette tobacco in the world is raised here. Most of the important tobacco companies of America have purchasing organizations and factories (Magazines) in this territory. The growing of tobacco has been going on for so many years, and the crop has come to have such an important place in the farm program, that the very structure of the village home has been influenced by this "weed". But more about this later.

Farmers Here Have Problems, Too

I found that the farmers of Macedonia were faced with many of the same problems, and were discussing many of the same questions as concern farmers of New York or New Jersey at this time of the year—lack of rain, fall plowing, prices. There is little or no rain in this region during the summer, but by October the winter rains usually commence. The present season seems to be an exception, however. Having had no rain for months, the fall plowing could not be started and all work was held up. It was time for sorting and baling ("manipulating") the tobacco crop, but the delicate leaves could not be handled until a moister atmosphere prevailed and the leaves became less brittle. What would be the price of tobacco when it began

to move? The farm-

ers report that there is only about 80% of a crop this year due to the unusually hot, dry weather of the past season. A representative of an American tobacco concern told me that this was merely a rumor to help boost up the price. From my own observations, both on this occasion and on a previous trip, I would say that the farmers are more nearly correct. The harvest this year is smaller, but the quality of the crop is better than usual. I should state for your information that an average price may be said to be around 100 drachmas per oke. A good yield on ordinary soil is 150 okes per stremma. (a drachma is worth around 11-3 cents, an oke is approximately three pounds, and a stremma is equivalent to about 1/4 of an acre. Figure it all out for yourself).

Commercial Fertilizers Not Used

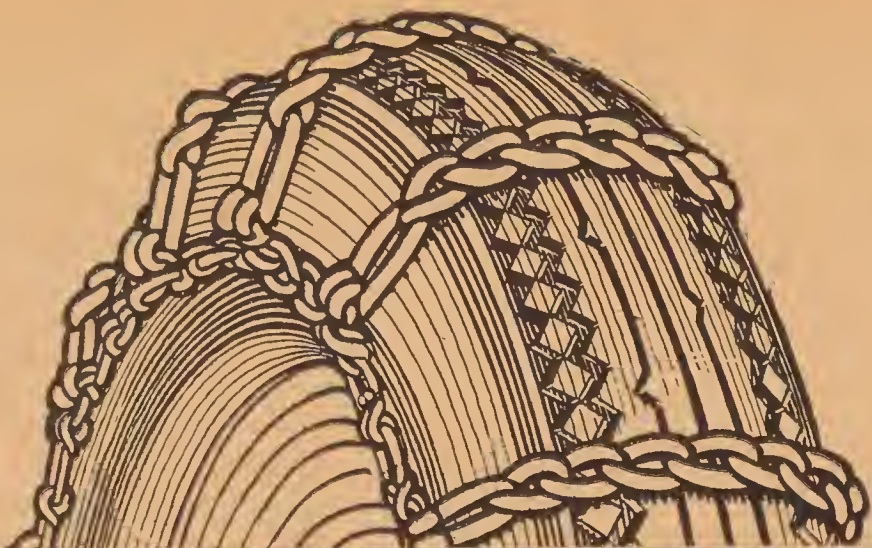
While driving along the road between Drama and Cavalla, I observed what I thought to be a farmer spreading manure on a field. This is so unusual a sight for this part of the world that I immediately stopped to make examination. I discovered to my surprise that the man was spreading ordinary dirt. It was then explained to me that this soil had been taken from the bottom of a pond and was being spread over the field as fertilizer. Since there is almost no rain here during the summer season various means (not all of them very scientific), are employed to conserve the rains of the winter. As an aid in this problem nearly every farmer has a small pond where surplus water may be stored until spring. In the fall of the year, before the rainy season begins, many farmers scrape the fine silt from the bottom of these ponds and scatter the material over their fields. I should add that the use of mineral fertilizers is almost unknown, and animal manure all too frequently is used as fuel.

I find that I have no space this time to describe, as I intended to do, one of the typical farm homes in which I was entertained. Consequently I shall have to leave this for my next letter.

Potato Rate Case Near End

What disposition has been made of the complaint of the Maine Potato Growers before the Interstate Commerce Commission relative to freight rates on potatoes from New York.

THIS case was decided on October 19th, and so far as New York potato growers are concerned the decision is entirely satisfactory. The commission failed to find any case where preference existed in favor of New York shippers. The commission however, does direct that certain rates to a limited number of stations be revised, entering no order in the case, but stating that the defendants (New York shippers) will be expected to file tariffs in accordance with the findings within ninety days. At a later date those affected will be mentioned in these columns.



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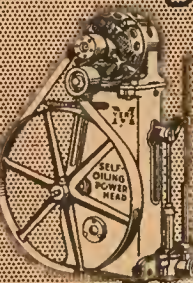
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Getting More Milk for a Short Market

IT is encouraging to see that leaders in the dairy industry of the New York City milk shed are bestirring themselves to find a remedy for the regular fall shortage in the milk supply, without a further extension of the present source of supply. The remedy seems as easy as to "roll off a log," if they would only take time by the forelock and use commonsense methods.

I notice that the AMERICAN AGRICULTURIST in its last issue has an editorial article with the caption "breed your winter cows earlier." That is all right as far as it goes, but there are difficulties in the way that must be met and overcome. It is a well-known fact that the time of freshening cannot be moved backward very much in any one year, if at all. It is an equally well-known fact that the time of freshening can be moved forward at the will of the owner, if the dairy sire is kept on a chain, instead of being allowed to run with the herds. It is also a well-known fact that a fresh cow that is kept farrow can be held up to almost her maximum yield for a long period by judicious feeding and care.

Spring Freshening Cows the Main Reliance

The main reliance, therefore, lies in the spring freshening cows rather than the fall cows. This does not mean more fresh cows in the spring but rather taking better care of spring freshening cows during the summer and fall.

If a sufficient number of spring freshening cows are kept farrow this coming spring until about Dec. 1st and judiciously fed, they will take care of next fall's shortage. After that, as far as the Dairymen's League milk is concerned, the responsibility rests with its officials rather than with its membership.

Each member has already signed a contract (Art. 4) that provides that "The producer will endeavor to follow the instructions of the Association as to the proportionate quantities of milk produced during the several months of the year, in order that an adequate supply for consumers at all seasons of the year may be assured."

The Board of Directors surely have power to make a rule that the proportion of each producers' milk sold at Class 1 price in the spring months of surplus shall be contingent on the number of pounds furnished in the previous fall shortage months.

This program, if followed, will kill two birds with one stone. It will reduce the surplus in the spring months, while taking care of the shortage in the fall. A wise manipulation of that "log" will keep enough producers on each side of it to take care of the yearly increasing consumption. In other words a better price must be paid for fall milk.

Article 4 of the individual pooling

contract has been a dead letter too long. It was put there for a purpose by men of broad vision.

This short article is dedicated to the thinking men in the Board of Directors.—O. W. MAPES.

Breeding Up a High Producing Herd

DOUBTLESS the quickest way to get a high producing herd of cows is to buy mature animals with good records, either testing association or official. However, it takes a lot of money to do this, which is a serious objection with most of us. It is a slower task to breed up a herd but there is more satisfaction in it than in buying the finished product of another man's genius.

Perhaps the most important single step is the purchase of a herd sire. There are three methods of selecting him, namely by his appearance as an individual, by his pedigree, or by the records which his producing daughters have made. The latter method is the surest of getting a sire whose daughters will produce higher than their dams, but proven sires are scarce and expensive and the average breeder must select a herd sire by looking at the individual and by studying the records of his ancestors.

Study the Sire's Pedigree

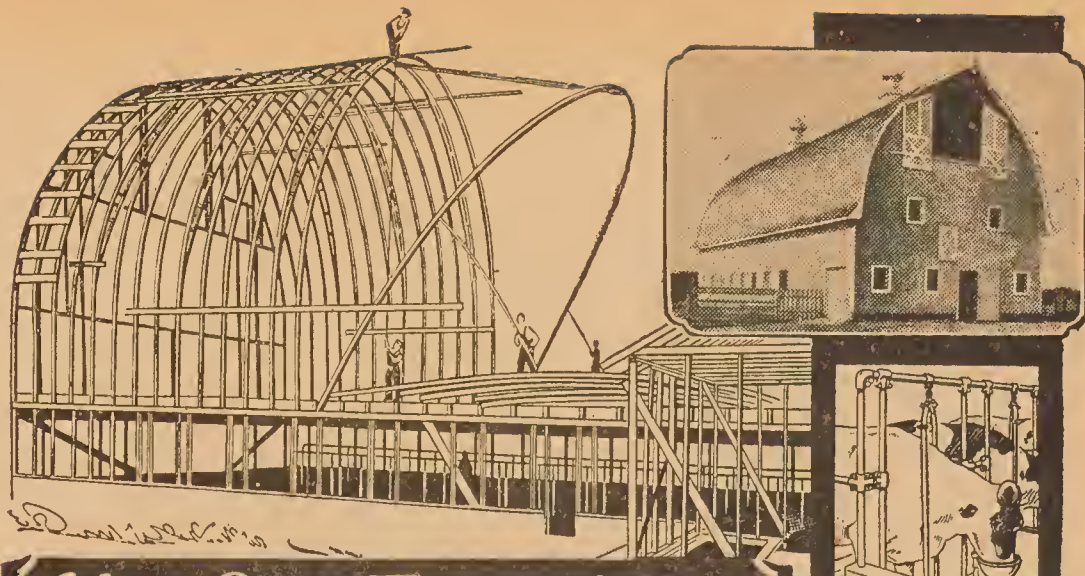
In this connection it is a good idea to remember that the bull with a pedigree showing uniform high records for several generations is likely to be more valuable than the bull with a very famous animal appearing several generations back in the pedigree.

The question of how much to pay for a herd sire is an important one. We believe it is safe to say that more dairymen pay too little than pay too much. By this we do not mean that a dairyman whose chief returns are from fluid milk should pay a financier's price. However, the man with twenty or thirty cows can well afford to pay the market price for a herd sire that will increase the average production of his dairy.

We hear much about "raising calves from the best cows" but at best this will about keep the dairy up to its present standard unless the sire of the calves raised is better than their dam. If no constructive breeding work is done it is likely that a herd will grow continually poorer. It takes some work to keep any herd as good as they now are and a lot of work to breed a herd whose average production increases every year. It is a lot of work but it pays both in money and in satisfaction.

Many successful breeders started in with a grade herd and a purebred bull. It seems that it is more difficult to

(Continued on Page 11)



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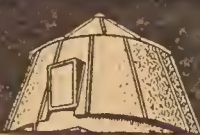
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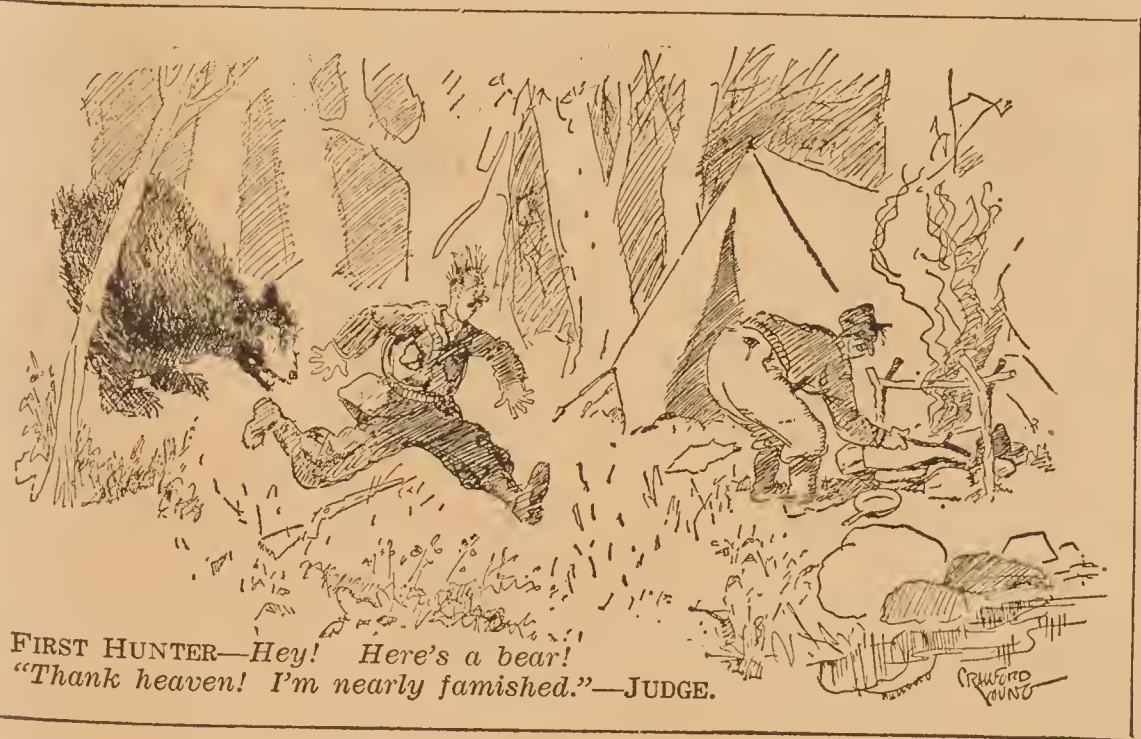
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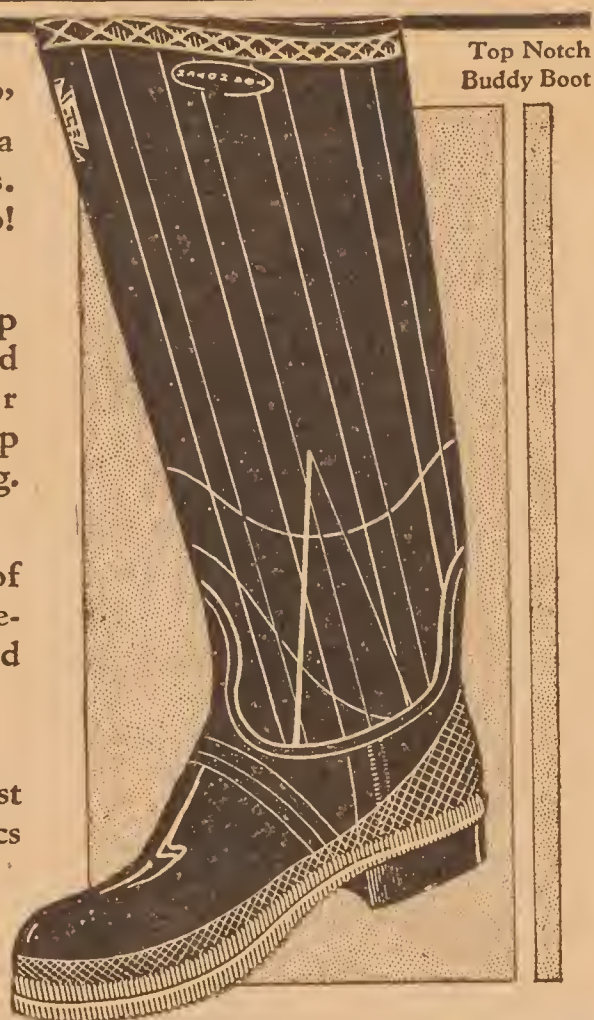
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How the World's Biggest Hog Was Raised

"DAZZLER," the world's biggest hog, tipped the scales at 1,320 pounds as he started on his tour of state fairs. He was exhibited by his owner, William Deichmann, of Leigh, Nebraska.

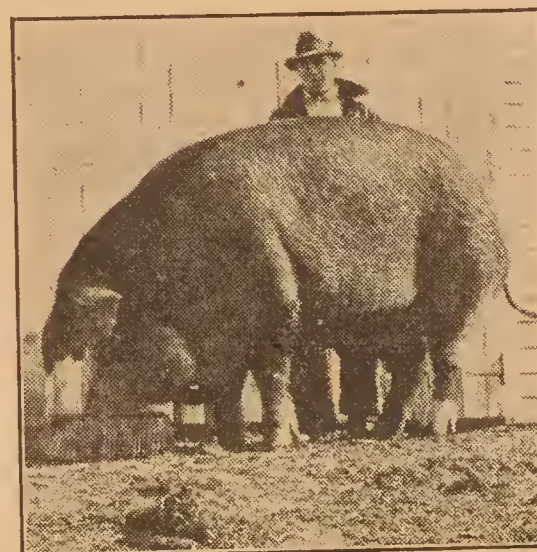
The big porker is a purebred Poland China hog. He was bred by G. N. Neeley, of Scribner, Nebraska and sold in dam to C. G. Luedtke, of Creston, Nebraska. His sire was the "Armistice Boy" and his mother was "Clan's Mayflower". He was farrowed on March 10, 1925, and was named "Dazzler".

"Dazzler" was seven months old when he was purchased by Mr. Deichmann on October 3, 1925. From that time until the following fall he was used as a herd boar and was given the average care that would ordinarily be given to any such animal. Corn, oats

mixed with water, tankage and oil meal.

The relative size and weight of the big hog can best be judged as he stands alongside of his owner. Mr. Deichmann is a man of average size, five feet, six inches tall. Dazzler reaches well up to his shoulder.

Dazzler measures seven feet and nine inches from snout to tail and stretches the tape line nine feet and four inches over his back between the same points. He stands 54 inches high and tips the scales at 1,320 pounds.



This hog, said to be the world's largest, weighs 1,320 pounds.

and water made up his daily ration. Hogs raised on the Deichmann farm are always given the right housing and Mr. Deichmann is a believer in hog lot sanitation which he has practiced for many years.

No particular attention was paid to "Dazzler" during the winter months of 1926-27 except that a commercial conditioner was given at periods along with regular food.

Throughout the summer months of 1927 Dazzler had the free run of a fine blue grass pasture along with a herd of 20 head of Poland China hogs. He began to take on unusual proportions during those months but his owner did not take the trouble to weigh him.

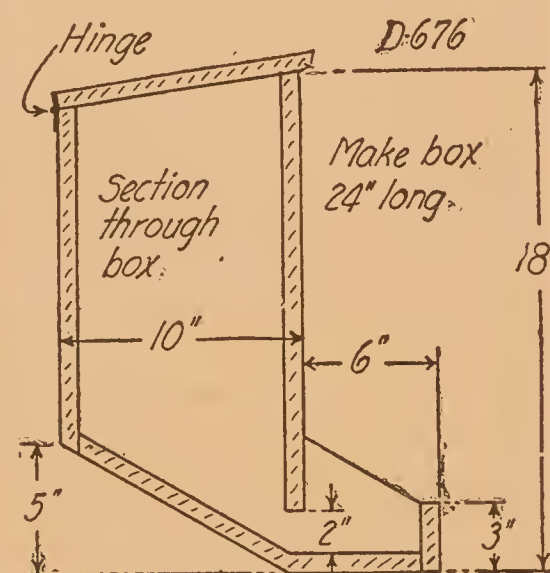
By the first of December, when the hogs were brought into the yards for the winter, Dazzler was so large that "the neighbors began to sit up and take notice". Weighing him disclosed the fact that he balanced the scales at an even thousand pounds, very much to the surprise of Mr. Deichmann.

On January 1, 1928, he weighed 1,040 pounds, an average gain of ten pounds per week. Tankage and oil meal were added to his feed during January with the result that he gained 5 pounds during the shorter month of February. Interest in the hog's remarkable weight has become such that Mr. Deichmann has weighed him once each week, every Monday, since that time. There have been weeks when his gain has exceeded ten pounds and by the first of April he had reached 1,210 pounds. During the three months that have passed since then 110 pounds have been added and the big hog's bulk now stands at 1,320 pounds.

There has never been a time, according to Mr. Deichmann, when Dazzler has eaten as much as the other hogs in the yards. An average hog weighing 500 pounds, when being fattened, will eat a gallon of corn at a feeding, or two gallons of corn per day. Dazzler has never eaten more than one quart of corn at a feeding. In addition to this amount of corn he eats three-fourths of a gallon of ground oats

A Handy Salt Box for Stock

I AM sending you diagram (D-676) and description of a handy box for salting cattle and other livestock, which I have used for four years and like very much. It keeps the salt clean at all times and there is no waste. The one I am using holds 50 pounds of salt. If the salt cakes or gets hard so it won't self-feed, all that is needed is to punch it down from the top with a stick. It can be nailed to



a couple of posts in the pasture or along the side of the barn or shed, at a height which the stock can reach in conveniently.

The dimensions for the different parts of the box are shown in the diagram. It can be made of any old lengths of lumber handy, such as old dry goods boxes, and so on. It will be well to set a post with braces at each corner to prevent the stock from jamming against it.—I. W. Dickerson.

Breeding Up Farm Flocks

By MARK J. SMITH

LACK of standardization and of uniformity characterize the large percentage of commercial farm flock breeding ewes. Numerous types are found in one flock—some with black or brown faces and others with mottled or white markings. This situation together with a wide variation in size, conformation and fleece qualities tends to make a flock less valuable. The lambs from such a flock—even if sired by a pure-bred ram are sure to lack uniformity.

Farmers love to talk about their ideal type of ewe—what they would like to have or what they, at one time, had—comparatively few work out their ideals. Here and there we find a farmer who has blended the blood of finewools, longwools or mediumwools until he has developed a flock of ewes that approach his ideal. Such flocks are very productive both in producing wool and lambs—all goes well for a time then the ewes begin to get old—crossing to perpetuate the flock is difficult and finally the flock is gone. Occasionally there lives a man with more vision who carries on his ideal type during his lifetime—such a man was Halsey Gano, who lived some years ago in central New York. He wanted a

(Continued on Opposite Page)

(Continued from Opposite Page)

sheep that would weigh 200 pounds and shear fifteen pounds of wool—his method was to cross the large Cotswold with heavy-shearing Merino ewes. These general utility crossbreds could be crossed with Longwools or Mediumwools for the production of market lambs—unlike most other sheepmen Mr. Gano determined to maintain the type and standard of his ewe flock. To this end, he kept a few Merino ewes and a Cotswold ram to produce the ewe lambs with which he replenished his main ewe flock as the ewes grew older or were culled out and sold.

A Registry of Crossbred Sheep

A few years ago I was talking with a retired New York sheepman and as usual he told me how he built up a flock of crossbred ewes and added that there should be a flock register for such sheep. This man did not realize it but he was talking up-to-the-minute sheep sense—the very topic on which much thought was being given. The only way to perpetuate the crossbred flocks is to mate them with a crossbred ram—this was seldom done because of the farmer's deeply grounded abhorrence of inbreeding. Therefore many of these outstanding productive commercial flocks soon disappeared.

Ohio has been and is at the present time a great sheep state—for many years a large proportion of their sheep were of the Delaine type of Merino and they were bred straight. The western range country has been importing and breeding some Corriedales for a general purpose range sheep. This breed is of the cross bred type having been developed from crossing longwool rams on Merino ewes—over thirty years of selecting and mating has fixed the type so that it breeds true as is the case with all our established breeds. Jimmie Laidlaw of Idaho has developed a breed he calls the Panama. Another man R. C. Harvey has crossed the Romney and Rambouillet and evolved the Romnells. The United States Government at their sheep experiment station at Dubois, Idaho, is developing a new crossbred breed of sheep which they call the Columbia.

Anyone familiar with sheep can develop a strain of sheep with a government or state appropriation to back them but these farmers and sheepmen who have devoted their lives in evolving a better type of sheep for practical purposes have done a good work.

Building Up a High Producing Herd

(Continued from Page 9)

weed out a pure bred herd. There is a greater tendency to raise all calves, regardless of their worth. It would seem to be wiser to pay more for a high grade bull, than to put the money into pure bred cows at the start. Later when the herd is on a profitable basis, a few pure bred cows can be added to the herd and so in time the entire herd will be pure bred. Sometimes it is possible to buy an excellent cow who is nearing the end of her useful days for a reasonable sum. With good luck the owner may get several calves from her as a foundation for the future herd.

Cows Are Not Camels

WE are great advocates of drinking cups. We have been users of drinking cups for some time and would not think that we could do without them in the dairy business. They will last for a long time if you give them a little care, that is to clean them once in a while and keep them screwed up tight. Nothing will give service if you do not give it some care. However, they are a great asset to the dairy business. In the first place you do not have to let your cows out when it is not fit for them to be out. In a herd of cows there are some boss cows, which will get all they can drink and stand by the drinking place and keep the balance of the cows from getting a drink. Oftentimes some of them are returned to the stable without a drink and have got to go dry until they are watered again. Perhaps some other boss cow will get

by the water place and keep them away and they are returned again without water and when they get a chance to drink they will drink too much for their own good.

With water bowls or drinking cups a cow drinks a little and often which does her a lot of good; she will consume a lot of water which makes milk. Milk is 85 per cent water and you have got to supply it to get milk. Furthermore cups are great labor savers; we

think that they will pay for themselves in one winter, in the increase of milk.

We enjoy some drink with our meals; at least some of us do and so does a cow. If you could place a meter on your water supply as we have you would notice how often the cows will drink during the night. We can hear the cows drinking all times at night, by the meter running. They will take some food and then some water, the same as we do when we eat our meals.

We can truthfully say that they are a great asset to the dairy business. We do not let our cows out in the winter as they will be short on the milk if it is cold and bad, but we always let them out in nice weather. We could not see where it does a cow any good to stand around humped up like a camel all day. They will oftentimes lie down and get the udder chilled and there is a case of garget to look after. We certainly recommend drinking cups.



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Down in New Jersey, Maryland and Delaware, you will find a group of poultrymen—constantly growing in number—who are profiting to the utmost on Bull-Brand Feed.

As M. Alwater, Brooklyn, Md., writes: "I have fed B-B Laying Mash to my 124 white leghorns and have gotten as many as 97 eggs a day during November. Through fall and the entire winter I have received never less than 80 eggs a day. I am convinced that B-B is absolutely the best..."

Further north, in New York and Pennsylvania, you find both dairymen and poultrymen receiving enviable milk and egg production.

Horace Renschler, of Hamburg, Pa., netted \$210 profit per head from his 8 cows last year. Woglom Bros., of

Prince's Bay, N. Y., say that their leghorns laid 65% in July, after laying 80% and 85% all winter long.

Still further north, in New England, you find a number of dairymen who have tried all feeds but refuse to use any but Bull-Brand.

Frank Bristol, Fair Haven, Vt., has used B-B Dairy Ration for 4 years and says: "It is the best I have ever fed and I will not buy any other."

It was enough for B-B to gather this kind of friends in the natural course of business.

Is Your Business Our Business?

But we have begun to look at the matter in another light; we asked ourselves: "How far are we obligated to tell our story to non-customers? Are they any concern of ours?"

You men who have never used Bull-Brand: if you are getting 10 quarts of milk a day per cow, and could just as well make that 13 or 14—are the profits you have lost in the past years any business of ours?

If you are getting 50% laying production from your hens, instead of the 75% to 85% B-B entitles you to—are the profits you have lost "any bark off our tree?"

Perhaps not. But we do feel that we owe you something. There's what we'd call a "moral obligation." We're going to try to discharge our debt to you by running a series of announcements in this magazine and giving as much information about B-B Feeds as possible.

Right now you are at liberty to take advantage of this offer: Buy B-B; feed it according to directions. If you find that it does not give you *per dollar of feed cost*—

Biggest Milk Production, or—

Biggest Egg Production, or—

Fat, Husky Pullets without the usual losses,

bring back the empty sacks and receive a complete refund of all the money you paid. That's our guarantee.

And if there is any information you'd like about feeding, just write to me, care of the Maritime Milling Company—I'll be glad to give it to you.

Maritime Milling Co., Inc., Buffalo, N. Y.



M-121

The World's Most Modern Mill



FEED BULL-BRAND

Dairy Ration (24%), B-B Red-E-Mixt (20%), B-B Hi-Test (20%) or B-B Marmico (16%), whichever is most suitable for your roughage. Use the Bull-Brand full line of Poultry Feeds

Reviewing the Latest Eastern Markets

Milk Prices

The following are the January prices for milk in the basic zone of 201-210 miles from New York City.

Dairymen's League prices are based on milk testing 3.5%. Sheffield on the basis of 3%.

Class	Dairymen's League	Sheffield Producers
1 Fluid Milk...	3.42	3.17
2 Fluid Cream		2.30
2A Fluid Cream	2.46	
2B Cond. Milk...		
Soft Cheese...	2.71	
3 Evap. Cond. Milk Powder		2.30
Hard Cheese	3.00	
4 Butter and American cheese. Based on New York City Market quotations on butter and American cheese.		

The Class 1 League price for January 1928 was \$3.37 for 3.5% milk and Sheffield's \$3.27 for 3%.

The above prices in each class are not the final prices the farmer receives. The final price received from the dealer is the result of the weighted average.

Butter a Shade Lower

CREAMERY	Jan. 2	Dec. 26	Jan. 4, 1928
SALTED			
Higher than extra...	49 -49½	51 -51½	52½-53
Extra (92s).....	48½-	50½-	-52
84-91 score.....	44 -48	44½-49½	41 -51
Lower Grades.....	43 -43½	43 -44	40 -40½

As was expected, the butter market went a shade off during the holidays. The butter market does not get a great deal of consideration at that time, because of the fact that specialties take the center of the stage. All in all, however, a fair amount of business was transacted. The big buyers had stocked up quite heavily some time previous to the holidays, but the small fry, who are

unable to carry heavy stocks, were buying in a small way, almost sufficient to keep the floors clear, which is the great ambition of the receivers at this time of the year. Considering the fact that Chicago suffered a sharp decline and that the market there was in rather unsatisfactory state, New York can consider itself quite fortunate.

On January 2 a fair amount of business was transacted, considering the fact that it was the first day of the new year, and on the whole there was an apparent feeling of confidence. For one thing, the sudden change to colder weather, had a very apparent influence on buying. On the whole, sentiment in the market indicated that we are on a fairly safe trading basis for this time of the year. A fair amount of storage creamery is moving into distribution but the trend of the buying is to fresh goods.

The steamer direct from Auckland is at this writing unloading beef and mutton at the Bush Terminal in Brooklyn. None of the butter on board is being taken off as the London market can use it at a better price than is being paid here.

The year closed with slightly over 20,000,000 pounds of butter in the four largest cities, which was slightly over 4,000,000 pounds less than the holdings in the same cities at the close of 1927. From December 21st to December 28th the withdrawals from storage in the same four cities was slightly over 2,000,000 pounds, which was approximately 1,300,000 pounds less than the withdrawals during the same period a year ago.

Cheese Market Unchanged

STATE	Jan. 2	Dec. 26	Jan. 4, 1928
FLATS			
Fresh Fancy	25½-27	25½-27	
Fresh Average.....			
Held Fancy	27½-29	27½-29	29 -29½
Held Average			

The cheese market has made no change. As usual, at the Christmas and New Year Holiday period, trading was very restricted, but at the same time there was no weakness apparent. In fact there has been a slightly more satisfactory movement out of storage.

The make in Wisconsin has been moderate, and it still continues very light in New York State. The few fresh State flats that are coming from northern New York are usually held at around 26c. The usual prices of trading in cured State flats are 28c to 28½c.

Heavy Supplies Cut Egg Prices

	Jan. 2	Dec. 26	Jan. 4, 1928
NEARBY WHITE			
Hen'y Sel. Extras...	46-47	50-51	51-52
Hen'y Av'ge Extras...	44-45	48-49	49-50
Extra Firsts.....	30-42	39-47	47-48
Firsts	28-40	31-45	45-46½
Undergrades	26-27	30-31	40-44
Pullets	35-38	35-42	40-43
Pewees	30-33	30-34	34-37
NEARBY BROWNS			
Hennery	47-48	52-54	52-
Gathered	28-46	31-51	47-51

On January 2nd, several of the large egg receivers had a heavy supply rolled in on them, with more to come, mostly fresh mixed colors. There was a scramble to unload, and as a result the market went into an unsettled position. The weather is going to have a lot to do with the final outcome, but we cannot get away from the fact that a lot of eggs are coming this way; really more than we need. There is a very apparent feeling of nervousness permeating the trend, due to the apparent liberal lay combined with a sluggishness to the demand. Combined with these factors we have the problem of storage eggs so that all in all, there is

not much promise for the immediate. The receipts of white eggs have been cleared with a great deal of difficulty, and fresh receipts from the Pacific coast have led to a downward movement, dragging the nearbys with them. At this writing, the entire trade seems to be holding its breath in anticipation of what is to come. As the bids go for Pacific coast stock, so will the rest of the trade go.

The ten cities making daily reports were holding, on December 28, according to advices, 1,047,000 cases of eggs, compared with the 871,000 the year previous. The fact that storage eggs are weak is having a depressing effect on the market. The situation at this writing is so indefinite that it is practically impossible to make any statement as to the trend. The outcome of auctions later in the week will determine which way the wind is blowing.

Live Poultry Market in Doubt

	Jan. 2	Dec. 26	Jan. 4, 1928
FOWLS			
Colored	35-	25-32	31-32
Leghorn	35-	25-36	23-26
CHICKENS			
Colored	35-37	30-31	26-30
Leghorn	32-35	25-26	
BROILERS			
Colored	42-50	34-40	32-40
Leghorn			-30
CAPONS			
TURKEYS			
Colored	45-50	40-45	-45
DUCKS, Nearby	25-30	35-38	30-45
GESE			
Colored	31-32	30-32	29-33
Nearby	25-28	25-30	26-27

At this writing, the live poultry market is a little problematic. The posted receipts for the week ending January 5th, are heavy, and if the weather were inclined to be mild, we would undoubtedly look for an easier trend. However, the reverse is true. As far as the weather is concerned, it is colder and the inclination is for the market to hold, especially on fowls. Chickens are a little more in doubt, although small birds are holding fairly steady. Broilers have been in light supply, but in view of the fact that there has not been much of a demand for them, we look for other prices. Ducks are holding steady. Some farm fed birds that rated as extra choice have been moving out above the quotations named above. Turkeys are dull, and farm fed geese are not selling any too well.

Feeds and Grains

	Jan. 2	Last Year
FUTURES		
(At Chicago)		
Wheat (Mar.)	1.16¼	1.30½
Corn (Mar.) .....	.87½	.87½
Oats (Mar.) .....	.47½	.54¼
CASH GRAINS		
(At New York)		
Wheat, No. 2 Red	1.54½	1.56½
Corn, No. 2 Yel.	1.04½	1.06¼
Oats, No. 2 .....	.59	.66¼
FEEDS		
(At Buffalo)		
Grade Oats	37.50	36.00
Spring Bran	34.50	35.00
Hard Bran	37.00	37.00
Standard Mids	34.50	34.00
Soft W. Mids	43.00	43.00
Flour Mids	39.00	39.00
Red Dog	42.00	42.00
Wh. Hominy	39.00	41.00
Yel. Hominy	38.50	38.50
Corn Meal	38.50	37.00
Gluten Feed		39.50
Gluten Meal		48.50
36% C. S. Meal	46.50	44.50
41% C. S. Meal	51.00	49.50
43% C. S. Meal	53.00	51.50
34% O. P. Linseed Meal	58.50	47.00

The above quotations are those of the local Buffalo market and are F. O. B. They are reported in the weekly letter of the N. Y. State Department of Agriculture and Markets.

Meats and Live Stock

Somebody tied a sky-rocket to the live calf market, for some choice veals ranged as high as \$20.00 as the year came to a close. At this writing the market is a little easier and the tops failed to pay better than \$19.50. In spite of that, that is some price for veal.

The steer market is a little irregular and inclined to be somewhat slow. Tops are said to range \$14.35, but there are precious few that have brought \$13.50.

Bulls are steady. A few good ones have ranged \$9.75 but most of the good arrivals are bringing from \$8.50 to \$9.50, with the poorest stock as low as \$7.25.

The cow market is fairly steady. A few good ones have ranged \$8.75. Reactors sell anywhere from \$5.00 to \$8.00.

There has been an active demand for lambs. The market holds firm with choice stock ranging as high as \$16.00. Mediums are bringing from \$12.50 to \$13.50. Culls \$10.00 to \$12.00.

Sheep are steady. Mediums to prize ewes selling from \$5.00 to \$7.00, with culls as low as \$2.00.

Potatoes Gain a Notch

The potato market went up a peg since last week. We will be satisfied if the movement will only keep within reason now. State and Pennsylvania stock in bulk has advanced 15 cents per 180 pounds which is about a nickel a bushel. Sack goods from up-State are bringing from \$1.75 to \$1.85 per 150 pounds. Here and there some few lots are exceeding top quotations of \$2.50. Long Island in sacks have not shown any improvement. Long Island bulk goods are selling 10 cents higher than what they were a week ago, now ranging from \$2.85 to \$3.10. Maines have also advanced from 10 to 15 cents on sack goods as well as bulk, 150 pound sacks now ranging from \$2.00 to \$2.10, and on bulk goods from \$2.00 to \$2.15 per 180 pounds.

Bean Market Quiet

There has been nothing in the bean market to warrant much comment. Business has been actually dull. Marrows of jumbo quality are generally selling from \$11.50 to \$12.50. Pea beans are selling anywhere from \$9.50 to \$10.00, while red kidneys are quoted at \$8.00 to \$8.75.

Hay Market Fully Supplied

The hay market is well supplied at this writing. Fortunately receipts have fallen off a peg and the trend is on the pick up. A lot of very poor grade hay, however, has got to be cleared out before we can look for any improvement. Timothy grading No. 1 is somewhat scarce, and such brings \$26.00. Other grades range all the way from \$24.00 down to \$13.00.

Timothy containing mixtures of grass and clover range anywhere from \$15.00 to \$24.00. Oat straw is \$14.00 to \$15.00; rye straw is \$22.00 to \$24.00.

Vegetable Growers Meet At Utica

THE New York State Vegetable Growers' Association will hold its annual meeting at the Hotel Utica, in Utica, on January 22nd and 23rd.

This meeting marks the debut of the Empire State Potato Club and awards will be made to ten "Premier Potato Growers of New York". These are to be selected from among 43 contestants on the basis of methods, yield and cost. This award corresponds to the 400-bushel clubs of other states but takes fuller account of economy in production.

The general vegetable program carries a larger proportion of talks by growers than usual. Reginald Brownsey of Schenectady will speak on Vegetable Forcing; C. F. Mason, Williamson, on Celery Grading; Roy A. Porter, of Elba, on Vegetable Tariffs; and J. D. Ameele, of Williamson, on Celery Blight. Mr. A. L. Wilson, of the Utah Experiment Station, will tell of the vegetable industry in that far Western state. H. E. Crouch and Ray Huey will represent the Department of Agriculture at Albany. U. P. Hedrick, C. E. Ladd, Hugh Glasgow, C. B. Sayre and F. O. Underwood are expected from the Geneva Station and from the New York State College of Agriculture. C. R. White, President of the New York State Farm Bureau Federation, will speak on Bureau service for vegetable men.

The potato sessions will include talks on fertilizers, weeds, machinery, marketing, cost of production, storage and other topics. Among the speakers are Dr. W. H. Martin of New Jersey; F. H. Bateman of Philadelphia, Pa.; H. R. Talmage of Riverhead; E. V. Hardenburg of Ithaca; H. S. Duncan of Rochester; Daniel Dean of Nichols; and others.



AGENTS! SELL SHIRTS

Bostonian

Start without investment in a profitable shirt business of your own. Take orders in your district for nationally-known Bostonian Shirts. \$1.50 commission for you on sale of 3 shirts for \$6.95 color. No experience needed. Complete selling equipment FREE!

GOOD PAY FOR HONEST WORKERS

Big earnings for ambitious workers. Genuine broad-cloth in four fast colors. Write for money-making plan, free outfit, with actual cloth samples and everything needed to start. Name and address on postal will do. Write TODAY! SURE!

Bostonian Mfg. Co., A33, 89 Bickford St., Boston, Mass.

SHIP YOUR EGGS

WHITE AND BROWN

To R. BRENNER & SONS

Bonded Commission Merchants

358 Greenwich St., New York City

Live Broilers and Poultry Wanted

HIGHEST PRICES CHECKS SENT DAILY
Oldest Live Poultry house in New York City. Established 1883, offers you an unlimited outlet for your live poultry. Write for shipping tags and free holiday calendar folder K 27.
Krakaur Poultry Co. Inc.
West Washington Market, N. Y. City

EGG CASES Wholesale dealer and shipper of second hand egg cases. Car lots a specialty.
LOUIS OLOFSKY, 685 Greene Av., BROOKLYN, N. Y.

BEST GRADE Chester, Berkshire and Poland China Pigs. 3 months old, \$12.00 each; 6-8 weeks old, \$7.00 each. (Express Paid). Bred Sows and Boars.
C. E. BOSSERMAN, York Springs, Pa.

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B A B Y

C H I C K S



Fairport Quality Chicks

are bred to make money for you. Strong, healthy, vigorous from the world's best and heaviest laying strains such as—Tancred, Ferris, Owen Farms, Daniels, Thompson, Martin, Shepard, Fishel and others. Free range flocks, scientifically culled and supervised, Smith Hatched. 100% live delivery guaranteed. 16 breeds 9c and up. Postpaid. Members International Baby Chick Association. Send now for free poultry book and prices. Buy Hatchery Chicks for Greater Profits.

FAIRPORT HATCHERIES Box 44 Fairport, N. Y.

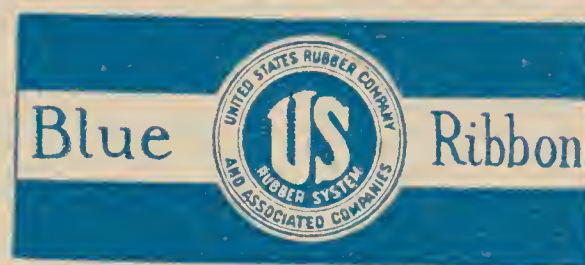
California jury values feet at \$75,000!

Have your feet a cash value? Yes! A California jury recently awarded \$75,000 for a pair of permanently disabled feet! And accident insurance companies in their standard policies set the very conservative figure of \$11,200 as the *average* cash value of a pair.

You wouldn't set *any* price on *your* feet or their *comfort*! Feet that are busy every day, rain or shine, cleaning the barn or feeding the stock, certainly need to be kept warm and dry. That is why there is nothing that deserves to be made with greater care than your boots and overshoes.

And now a new and finer comfort is yours because of the skilful designing and longer wearing qualities of the new "U. S." Blue Ribbon rubber footwear. These super foot-protectors are built to fit like an old glove and wear like a mule's hide. From start to finish they are made to outwear others. 'Finer quality of rubber and workmanship never went into boots. And to make extra wear double-sure, the Blue Ribbon Testing Laboratories put this merchandise through 12 punishing tests far more severe than your every-day service requirements.

United States Rubber Company



This explains the longer wear

In the "U. S." Blue Ribbon Testing Laboratories a machine presses the sole against swiftly revolving emery—very much like holding a boot against a grinding wheel. The soles in some brands of rubber footwear chafe away at the rate of 4-5" per hour. The standard of "U. S." Blue Ribbon Rubber is 1-5" per hour. *No wonder many farmers say these amazing Blue Ribbon Boots outwear others!*

The 300-Farmer Test

All told, Blue Ribbon Footwear must pass 12 laboratory tests. On top of that, 300 farm workers



help us check up Blue Ribbon wear in the hard grind of actual service. They wear cross-mated boots—a "U. S." Blue Ribbon Boot on one foot and a competing boot on the other. By watching these results we make *certain* that Blue Ribbon Boots outwear others!

Make this test yourself

Twist a "U. S." Blue Ribbon Boot. Then let go and watch it snap back! It's as live and elastic as a rubber band. You can stretch a strip cut from the upper more than five times its own length! Where constant bending cracks inferior footwear *this rubber stands up!*

"U. S." Footwear for the Whole Family

1. Notice the liveness of the uppers and the tough, oversize soles of these sturdy "U. S." Blue Ribbon Boots. Heavily reinforced against wear by from 4 to 11 layers of Blue Ribbon rubber. Made with gray soles and red or black uppers.

2. "U. S." Blue Ribbon boots of the same construction as above are made in three lengths—knee, medium, hip. They have gray soles and red or black uppers.

3. The "U. S." Blue Ribbon Walrus (all-rubber arctic). Slips right over your leather shoes. Kicks off in a jiffy. Washes clean like a boot. Gray soles, red uppers. 4 or 5 buckles.

4. This good-looking "U. S." Portland (galosh) has a long-wearing gray or red sole and a fleece-lined cashmerette upper. 4 and 5 buckles.

5. This "U. S." Blue Ribbon Giant Bootee has a white upper and a black extension outsole. Made with 6 eyelets or 4 eyelets. Well reinforced and shaped to the foot. Other bootees with red or black uppers and red, gray or black soles.

6. "U. S." Blue Ribbon Rob Roy (high, lace boot). A light weight, gray-soled, red or black upper, high

lace all-rubber shoe. Plain vamp; corrugated toe. Made snug at ankle and snow-excluding. 2 heights, 10" and 15".

7. "U. S." Rubbers are made in whatever type you prefer—storm, high-cut, footholds, for heavy service or dress.

8. Keds are the most popular boys' and girls' shoes in America. Made only by the United States Rubber Company. They give barefoot freedom—encouraging the foot to healthful exercise—yet afford the protection you want.

9. Gaytees is the trade-marked name of the new tailored overshoes made only by the United States Rubber Company. Beautifully designed. New styles, new patterns, new fabrics. Smart as a Paris slipper. See them! Also a complete line of overshoes with Kwik-glide fasteners. Of course, for women's use around the farm, nothing will ever beat the trim "U. S." cloth-top, buckle galosh.



"U.S."
BLUE RIBBON
heavy footwear



FREE BOOK! *The Care of Farmers' Feet*

Every farmer who wants comfortable, healthy feet should get this free book. Written by Dr. Joseph Lelyveld, Podiatrist, Executive Director of the National Association for Foot Health, it discusses such problems as bunions, corns, ingrown nails, chilblains, callouses, fallen arches, how to care for itching feet, and many precautions that lead to health and comfort for those feet of yours.

It also tells how to greatly increase the life of your rubber footwear by following a few simple rules. Write for "The Care of Farmers' Feet." Address the United States Rubber Company, Dept. 101, 1790 Broadway, New York.





The Sure Way to Buy Good Seed

YOU CAN'T raise good crops from poor seed any more than you can make water flow uphill. No matter how well you prepare the soil, you must sow good seed if you expect to get a profitable harvest.

What have you a right to expect in quality seed?

It must be pure and free from weeds. Two or three per cent of weed seed will do untold damage to your land and will establish a growth that you may be years getting rid of.

It must be of the right variety, true to label so that it will produce what you want, not some cheaper, less useful variety.

It must be strong and full of growth. Weak seed just barely alive cannot grow into profits or fill your hay mows and bins.

It must be of a strain suitable to your climate and local conditions.

Remember that it takes just as much work to prepare the land, just as much work to sow the seed, and just as much work to harvest the crop whether the harvest is

abundant or thin. Figure the total expense of producing a crop and you will discover that the cost of seed is a comparatively small item. A few dollars apparently saved on the price of seed may mean a hundredfold loss on the harvest.

The one sure way to buy good seed is to deal with the men who advertise seed in the columns of this paper. They have a good product. They have built up their businesses on quality. Their testing laboratories are maintained to protect that quality and to protect you, the purchaser.

Cheap seed is one of the worst enemies of profitable farming. There is no surer way to lose money than to attempt to economize by buying cheap seed. Buy good seed from the advertisers in this paper and an abundant and profitable harvest will be your assurance of good judgment.

Buy Quality Seed from Our Advertisers

243 cash prizes!

BIG, EASY-TO-WIN

To guide us in our work of encouraging farmers to build modern, attractive, sanitary, economical and permanent farm buildings, or improvements, we want more information about how our product helps farmers.

Naturally we don't expect you to give us your time for nothing. To make it worth your while to tell us your experiences, we have set aside for farmers \$3075 in cash. To make it easy for any entrant to be a winner, we will award a total of 243 prizes. And to make sure that everybody who helps us is rewarded, we will send a valuable Registered-Number, Double-Duty Key Chain to every farmer who enters the contest.

Prizes will be awarded to farmers for letters on the subject "How Building with Concrete Improved Conditions on My Farm." The judges will give extra consideration to letters accompanied by photographs, specifications, and working drawings (even though crude), of the concrete construction you write about.

Read over again the long list of big prizes and then decide right now to be one of the winners. The replies which in the opinion of the judges will benefit large numbers of farmers, will be awarded the prizes. The judges will be guided in their decisions on how you answer such questions as:

1. Why you undertook this construction.
2. Why you used concrete instead of other materials.
3. How you planned and did the work.

Cost figures should be included, but all concrete work, no matter how common-

Lehigh Farm Building Contest

1	Grand Prize	\$1,500.	in cash
2	2nd Prizes	100.	each
5	3rd Prizes	50.	each
10	4th Prizes	25.	each
25	5th Prizes	10.	each
50	6th Prizes	5.	each
150	7th Prizes	2.50	each

Total 243 Prizes \$3,075 in cash

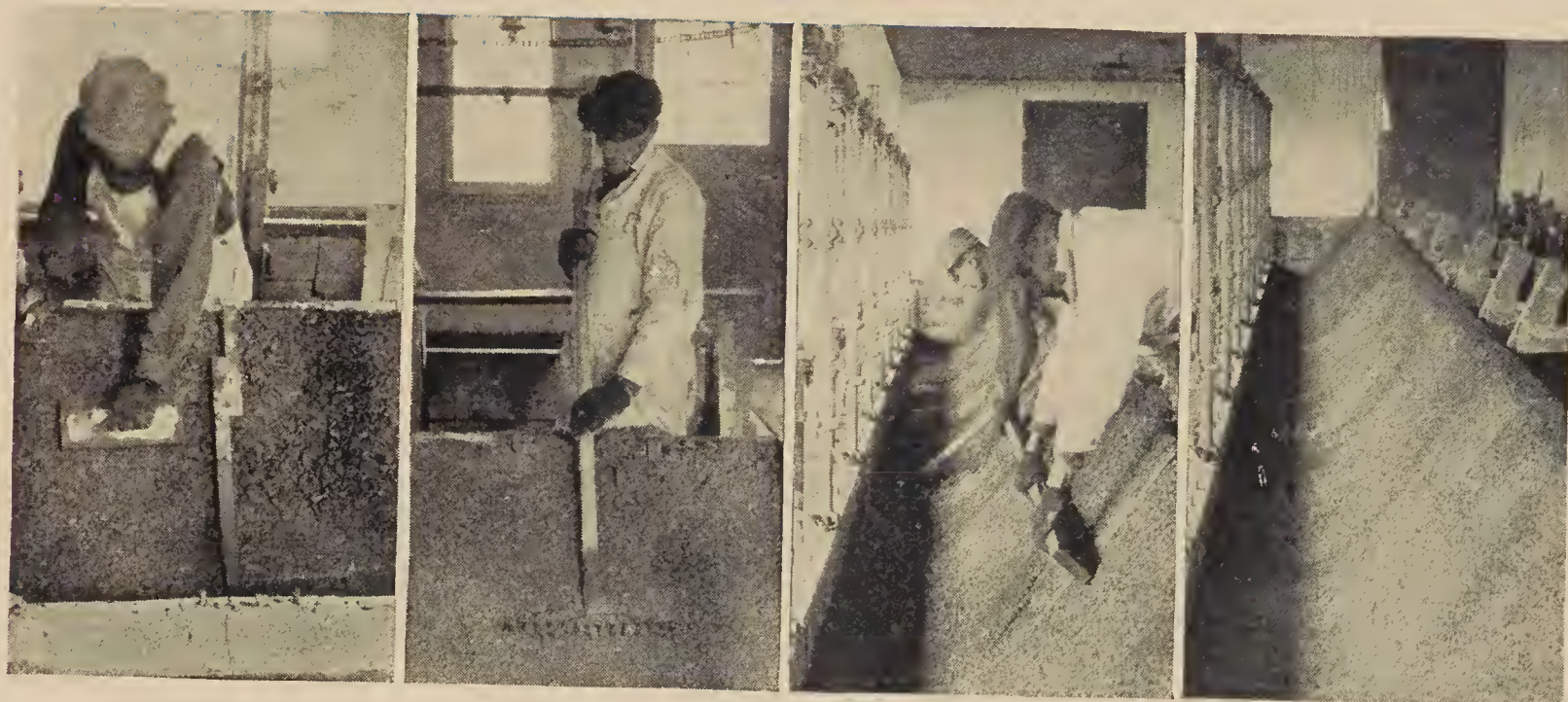
place, has an equal chance of being the subject of prize-winning letters.

The contest is open now. All letters must be mailed by midnight, May 31st, and all building must be under construction by that time.

It is easy to win a prize. Your ideas may seem very commonplace to you but very important to the judges. We're not looking for fine language or fancy writing. It's ideas we want and ideas that count.

Read the rules in the column headed "How to Win." Then mail your letter, photographs and drawings. You can secure an official entry blank from a Lehigh dealer (we'll send you the name of one near you). The dealer can furnish you with the Lehigh Farm Structograph Book or make other suggestions to help you win.

Lehigh Portland Cement Company
Allentown, Pa. Chicago, Ill.
Offices in Principal Cities



Concrete is firmly tamped. The stiff mixture gives an excellent bond to top coats.

A thin layer of 1:3 cement mortar (one part cement and three parts sand) is now placed.

Striking off the concrete, using the metal templates as guides for the straightedge.

Second course completed. This brings the concrete to the level of the templates.

Above are typical photographs from the Lehigh Farm Book of Structographs

HOW TO WIN (Rules of Contest)

1. All letters must be on the subject "How Building with Concrete Improved Conditions on My Farm."
2. The contest is now open. All building must be under construction by May 31st, 1929, and all letters must be mailed by midnight of that date to Contest Editor, Lehigh Portland Cement Co., Allentown, Pa.
3. All entries must be accompanied by an official entry blank which can be secured without obligation from your Lehigh dealer.
4. Name and address of writer must appear at top of each page of letter.
5. All letters, photographs, specifications and working drawings to be the property of the Lehigh Portland Cement Company.
6. Your letter must list definitely all materials used, and their quantities.
7. In case of tie, each tying contestant will receive full amount of prize.
8. Employees of the Lehigh Portland Cement Company are not eligible.
9. All prize winners will be notified by mail. The first 93 awards will be published in the August, 1929, issue.
10. The judges: William Boss, Chairman American Soc. of Agr'l. Eng.; R. U. Blasingame, Head of Farm Machinery Dept., Penn'a State College; I. W. Dickerson, Agr'l. Eng. Editor, Standard Farm Papers.

A Free Book to help you win

Get the Lehigh Farm Structograph Book. Farmers call it the most helpful construction book they have ever had. It tells by pictures and short descriptions how to use Lehigh Cement on the farm. (Only a few words to read.) You will find it full of building suggestions farmers have given us, and among them may be ideas that will help you win the contest. The photographs on this page are part of the series showing each operation in the building of a dairy barn interior. Use the coupon or write for the Structograph Book, today, or get it from your dealer. It is free.



Free to all contestants

After you enter the contest you will receive this Registered-Number, Double-Duty Key Chain. It has a tag bearing a serial number and the words: "If found, notify Lehigh Portland Cement Co., Allentown, Pa." We keep a record of serial numbers and to whom each key chain belongs. In case of loss your keys are returned to us, and we forward them to you, thereby avoiding any misuse if found by an unscrupulous person. The chain also has an ingenious device for separating the keys you use continually from the keys you use infrequently.



LEHIGH CEMENT

LEHIGH

MILLS FROM COAST TO COAST

Lehigh Portland Cement Company, Allentown, Pa.
Gentlemen: Without obligation on my part, please send complete details of the Farm Building Contest and a copy of the Lehigh Structograph Book.

Name _____
Address (Street or R. F. D.) _____
Town _____
State _____

28-A



One of these fine RADIOLAS is the right radio for your home

RADIOLAS are built for two kinds of operation—from the electric light circuit or with batteries.

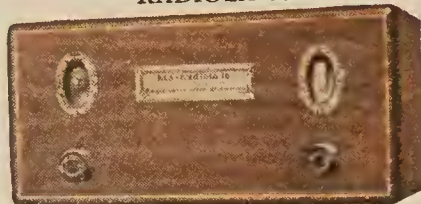
The quality of broadcast reception is the same in both classes of instruments. Musical range and fidelity of tone—realism of reproduction—are independent of the kind of power used.

If your home is not served by an electric power line, Radiola 16 is the instrument for you to use.

If you have the advantage of alternating-current service from a central station, you have the choice of the battery-operated "16," or the new Radiola 18 that does away with batteries. This receiver operates directly from the electric outlet just like an electric fan or vacuum cleaner. It takes no more current than a 50-watt electric lamp.

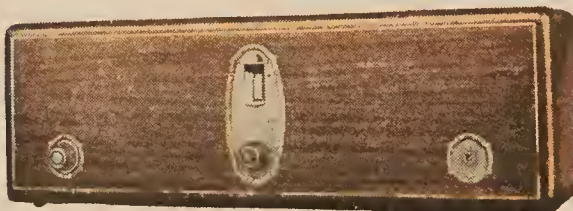
Whether you choose a "16" or an "18," you will have a radio receiver to be

RADIOLA 16



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New York Farm News

Governor Roosevelt Emphasizes Farm Relief

SURROUNDED by a large audience of great distinction and with solemn ceremony, Franklin D. Roosevelt was inaugurated Governor of the Empire State on New Year's Day. The exercises were held in the Assembly Chamber of the State Capitol at Albany and were attended by representatives of all sections of the State, including public officials and leaders and citizens of both political parties.

Of especial interest to all those interested in agriculture was the thought expressed by Governor Roosevelt in his inaugural address about farm relief. He said:

"Lastly, I want to refer to the difficult situation to which in recent years a large part of the rural population of our State has come. With few exceptions it has not shared in the prosperity of the urban centres.

"It is not enough to dismiss this problem with the generality that it is the result of changing economic conditions. It is time to take practical steps to relieve our farm population of unequal tax burdens, to install economics in the methods of local government, to devise sounder marketing, to stabilize what has been too much a speculative industry; and, finally, to encourage the use of each acre of our State for the purpose to which it is by nature most suited.

"I am certain that the cities will cooperate to this end; and that more and more we as citizens shall become state-minded."

An Era of Good Feeling

In closing his inaugural address, which was very short, the new Governor made a plea for cooperation to bring about a new "Era of Good Feeling" and said:

"May I, as your newly elected Governor, appeal for your help, for your advice, and, when you feel it is needed, for your criticism? No man may be a successful Governor without the full assistance of the people of his own Commonwealth.

"Were I as wise as Solomon, all that I might propose or decide would be mere wasted effort, unless I have your constant support. On many of the great State questions that confront us, the platforms and the public pledges of candidates of both parties are substantially agreed.

"We have passed through a struggle against old-time political ideas, against antiquated conservatism, against ignorance of modern conditions, marked by serious disagreements between the legislative and the executive branches of the government. As I read the declarations of both parties in asking the support of the people at the polls, I can see little reason for further controversies of this kind.

"There is a period in our history known in all our school books as the 'Era of Good Feeling.' It is my hope that we stand on the threshold of another such era in this State. For my part, I pledge that the business of the State will not be allowed to become involved in partisan politics and that I will not attempt to claim unfair advantage for my party or for myself, for the accomplishing of those things on which we are all agreed.

"You have honored me greatly by selecting me as your Chief Executive. It is my hope that I will not fail you in this critical period of our history. I wish that you may have a continuance of good government and the happiest of new years."

On the next day, January second, the Legislature opened its first session and listened to Governor Roosevelt's message. Space will not permit printing all of it here, but parts of it, especially the references to farming, are so important that we give them below:

I come before the Legislature, not only in accordance with the constitution to communicate the condition of the State, but also to express the hope and belief that neither you nor I are entering upon our offices with partisan purpose. From the day of our election we become indi-

vidually and jointly the representatives of all the people of the State.

Most of our problems are not political; they can be solved by the same kind of cooperation on your part which I as the Executive of the State hereby offer to you. A few are matters of an honest difference of opinion; most of these also can, I hope, find practical solution by frank discussion and honest effort to obtain results.

Finances

... From a preliminary examination of anticipated receipts, and of expenditures which are either mandatory or essential for the carrying on of existing business and of authorized projects, I am confident that we can arrive at a balanced budget, or, in other words, keep our expenditures within the figure of our anticipated income.

This does not, however, make allowance for new State undertakings, of which some are vital, nor does it make allowance for readjustment or reduction of certain taxes which now bear too heavily upon portions of our rural population. In spite of previous studies, little progress has been made in the formulation of a plan for a more scientific and equitable distribution of taxation. I urge the appointment of a non-political commission to this end.

Agriculture

I want the agricultural problems studied without regard to partisan politics and it is my hope that through appointing an agricultural commission composed of members of the Legislature, master farmers, representatives of the College of Agriculture, the Grange, the Farm Bureau, the Home Bureau, the Dairymen's League and other farm cooperatives, the Legislature from their recommendations will be able to act favorably and constructively on this important subject.

It may be that adequate investigation will show that many of the farms abandoned within the period of agricultural depression since 1920 should not be restored to agriculture but should be devoted to growing a future timber supply for the people of the State. Also we do not want the present alarming rate of farm abandonment to continue; we must therefore make special efforts to make it possible for those who are now engaged in agriculture on suitable agricultural land to continue under more favorable and more profitable conditions.

I hope that this agricultural commission will make a special study and investigation of the whole farm assessment and tax situation in order to obtain a fairer adjustment of the farmers' taxes. The ultimate goal is that the farmer and his family shall be put on the same level of earning capacity as his fellow American who lives in the city.

The problem of distribution of farm products should also be studied to the end that the unnecessarily high differential between what the farmer receives and what the consumer pays may be materially lowered, giving a better price to the farmer for his products and a lower cost to the consumer for what he buys.

Water Power

On the subject of the development of water power sites, owned in part or in whole by the people of the State, I am convinced of two facts: First, that there is a definite demand for the undertaking of their development—not several years hence but this year; second, that the title and constant control of the power generated at the sources shall remain definitely in the people and shall not be alienated by long-term leases. This is one of those questions on which I hope we can reach an agreement.

Highways

It seems almost unnecessary for me to stress the necessity for the continuation of the present large program of highway construction and reconstruction, the building as rapidly as practical of new roads and the rebuilding of old roads, now worn out or inadequate to meet modern traffic requirements.

There is no doubt that under the pres-

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Town..... State.....

ent system of distribution of cost between State and counties the burden of completing the State and county highway system and bridges falls in unfair measure on the less prosperous rural communities. The fairest measure should be the actual relative wealth of each community. The whole problem, however, is so involved in the broader subject of taxes and of budget that I will present it to you at a later time.

As both major parties have in their platforms recommended that the whole cost of maintaining State and county highways should be borne by the State, the provision of law requiring towns to contribute \$50 a mile for this upkeep should be repealed. This will add about \$600,000 next year to the State's expense.

County and Town Governments

I can see no object in being anything but frank with you in regard to the business efficiency of our system of town and county governments. In recent years our system of State government has been brought to a high level of efficiency. Why should any of us pretend any longer that our county and town governments do not require the same kind of overhauling which we have given to the affairs of the State?

Even the school children know that we maintain many useless offices in our towns, that many functions now exercised by town officials should be assumed by county management, that there is an almost complete lack of budgeting, and, in the final analysis, that the average taxpayer does not know why or where his tax money is being spent.

It would be a fine thing if you and I, laying politics and partisanship aside, could take definite steps at this session of the Legislature toward this reform, which everybody knows is so vitally

necessary. I am confident that the public will support an honest effort on our part, for I am not enough of a cynic to believe that the public is indifferent to wasteful or outworn governing methods.

Education

Under the present method of apportioning State funds to rural school districts, the poorer districts in many instances fail to receive their fair share. The method of apportionment should be simplified and made to conform more closely to the relative wealth of the districts.

For Service Above Partisanship

In my inaugural address to my fellow citizens I have already pledged myself to seek no mere personal or partisan advantage in the performance of my duties as Governor. I feel sure that the legislators of both parties will join me in this pledge. He best serves his party who best serves his State.

Let us all at this session rid ourselves forever of that blighting dread of following in the rear guard of another's triumphal procession along the road to better government which has too often in the past prevented any progress whatsoever. It is of small moment who first points out that road. The important thing is, having once seen the proper course, that we should turn toward it, fight for its adoption and march shoulder to shoulder with the others toward the goal.

In conclusion may I urge you all, individually, to come to me with problems, with suggestions, with honest differences of opinion as often and as freely as I hope you will let me come to you. The verdict on our relations that I most desire from you is that I have at least been fair—and reasonable—and friendly. Let a common desire to serve our State unite us in a common friendship.

FRANKLIN D. ROOSEVELT.

"Oatmeal" Pullets

vs. "Corn" Pullets



**Oatmeal
Flock
626 eggs**



LET this report show you what to do for your baby chicks this spring: Last year, at the Quaker Poultry Experiment Farm a flock of baby chicks was divided into two pens—

PEN No. 1—raised on Quaker Ful-O-Pep Chick Starter, and Ful-O-Pep Growing Mash, in which cornmeal was substituted for the regular oatmeal content.

PEN No. 2—raised on regular Quaker Ful-O-Pep Chick Starter, and Growing Mash, with the usual content of good, pure OATMEAL. (These are the feeds that you can buy.)

THE "OATMEAL PEN" (No. 2) developed into big, vigorous pullets of fine laying type with smooth plumage. And in the first 28 days of egg record, this pen of 50 oatmeal pullets laid 626 eggs.

The "CORNMEAL PEN" (No. 1) 50 cornmeal pullets laid only 72 eggs in the same period. They were excitable, and lacked the apparent vigor and good flesh of the oatmeal-raised birds. They were the long-legged, long-necked, shallow-bodied type you recognize instantly as inferior producers.

Raise your baby chicks the Ful-O-Pep way. Ful-O-Pep Chick Starter contains both cod liver oil and cod liver meal, and just the proteins and minerals that enable the good oatmeal to do its best work. It costs less to use because it goes farther. Easy to feed, too.

Near you is a Quaker Dealer who can help you have the most profitable flock of baby chicks you have ever enjoyed. They'll live, they'll thrive, they'll be good producers, or better meat birds if you start them right on Quaker Ful-O-Pep Chick Starter.

**Quaker
FUL-O-PEP
CHICK STARTER**

THE QUAKER OATS COMPANY
CHICAGO, U. S. A.

BUY THE FEEDS IN STRIPED SACKS



Readers Dissatisfied With Egg-Grading Law

(Continued from Page 3)

grade denominated as "A", second grade as "B" and all other eggs in the third or "C" grade. There are very good reasons why this could be done to the advantage of the fresh egg producer.

Many producers feel that it was a step backward to remove the legal distinction between fresh eggs and cold storage eggs. Following is a portion of a letter from a reader on this subject:

"I am not in favor of the law and think the quicker it is repealed the better off New York State producers will be. Under the new law, we have to compete with cold storage eggs more than ever. In our own city of Corning, there are but one or two stores that pay for and handle the best grade of eggs. Even these have a very small trade in these eggs. All other eggs sold locally must be placed with cold storage or gathered eggs, marked unclassified and paid for accordingly. I do not think that it is fair to poultrymen of the state to be forced to put fresh eggs in this class. The poultry press and farm papers have worked for years and much money has been spent to educate the consuming public to eat more of and demand the best quality of eggs. Then the barrier between fresh eggs and storage eggs is removed and the consumer does not know whether he is getting storage or fresh eggs. Will the consumer be very quick to increase the consumption of eggs? Many years and many dollars were spent to get storage eggs branded and sold as such, and I believe, with the stroke of a pen, all this effort has been lost."

As with most questions, there are two sides to this situation. Years ago, before cold storage was developed, the price of eggs was exceedingly cheap during the summer and exceedingly high during the winter. However, this helped the producer little, as he had few, if any, to sell at the high prices.

A large part of the demand for eggs in the spring comes from those who intend to store. This demand obviously raises prices above what they would be were eggs not stored. We are pointing out these facts to show that cold storage instead of being a damage to egg producers is really a legitimate economic feature. Without it many producers feel that the poultry business would be in much worse condition than it is at the present time. If this is granted, the question resolves itself into an argument as to whether producers would fare better by labelling as "cold storage", all stored eggs, or by selling eggs on a quality basis regardless of whether they have been in storage or not. One factor that enters in here is the claim that storage eggs deteriorate rapidly and eggs that were "A" grade when candled may not be "Grade A" when they get to the consumer.

A suggestion recently came to us that all egg grades be abolished and the money spent in enforcement be spent to inform the public as to what constitutes quality in eggs. The idea back of this suggestion is that consumers would then demand quality according to the price paid, and that the matter of grades would take care of itself. The author of this suggestion also stated that retailers should be taught that eggs need the same care that butter and milk do.

Still another suggestion has been made that the law be changed to provide that the grading be done by producers instead of by middlemen. This suggestion was made with the idea that it would do away with the objection to the present unclassified grade. If the suggestion could be carried out, it would enable grocers to buy from local producers without assuming the responsibility for grading. Frankly, we do not feel that this suggestion would work out any better than present regulations.

It is quite evident that the situation

at the present time is not satisfactory. One subscriber writes: "I believe that the original intent of the law was entirely for the good of the poultry industry. It was hoped by the framers of the measure that the grading of eggs as well as the sale of them on the basis of quality would do away with the disappointment which housewives frequently meet in the purchase of eggs and that it would insure receiving exactly the quality they asked for and encourage them to consume more eggs. This has been the result of a similar law in Canada. Due to a number of factors the law in this state has not resulted in all the benefits which were hoped of it."

In this article we have merely tried to state both sides of the question as they have come to us without making any definite recommendations. It is only fair to say that conditions before the present regulations went into effect were not altogether satisfactory. It was commonly believed that many of the best storage eggs were sold as fresh eggs and only the poorer ones labelled "storage". At the same time it was absolutely legal to call any egg "fresh" that had not been in cold storage. The ideal to strive for, as we see it, is a system that will make it possible for the consumer to know what he is buying.

Those of our readers who are interested in studying the exact grades may secure a copy of them by writing to the State Department of Agriculture and Markets, at Albany, N. Y., or to the American Agriculturist. We will be very glad to receive comments from our readers and publish such of them as offer constructive suggestions that might result in the improvement of the present unsatisfactory conditions.

Fleas Again

I WAS interested in the question about hen fleas sent in by J. F., New York. My flock has been bothered with the very same things for several years. Several of our neighbors find them a terrible pest for which we have found nothing to be very effective. I find them plentiful in the wood shed or wherever there is rotten wood.

I have a small sprayer which I use for kerosene and carbolic and use my power tree sprayer for liquids which will not harm it. I think when the spraying begins they quickly leave until it is over. I will try the coal tar which you recommend. I have thought they were the same as dog fleas for they look just the same. Unless at some time of the year they have a certain place where they can be fought, I have little faith in exterminating the pests as they are outside the roosts as well.—E. W. H.

Treatment for Turkey Cholera

"I am writing to see if you can tell me of some remedy that will cure turkey cholera. Their droppings are of a bright yellow and they are free from lice. Also can you give me any information about turkey raising?"

THE only symptom you give us is not very satisfactory. Yellow droppings alone will not make me sure your turkeys had cholera or any serious trouble. You do not say what or how you feed or the age of birds. Not knowing anything about your turkeys, I would suggest you give them some epsom salts once a week in their drinking water, also turpentine once a week in drinking water, but not the same day. Fix about the amount of water they will drink in a few minutes when they are thirsty, then empty the dishes and wash them to be ready for clean water. Use a teaspoonful of salts to a pint of water

(Continued on Opposite Page)

BABY



CHICKS

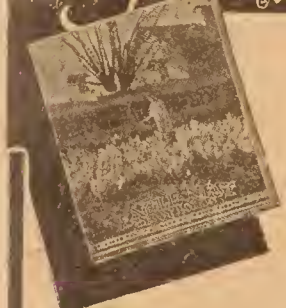


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START NOW to build your flock of the finest all-purpose fowl ever developed. Prolific layer of white-shelled eggs, fine table fowl, develops early, grows fast and will command top prices. Day-old chicks, \$1.00 each; settings, \$5 to \$50. Order now to insure delivery.

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Wh. Wyandottes	\$4.50	\$8.50	\$16.00	\$77.50	\$150
Rocks or Reds	4.00	7.50	14.00	67.50	130
Wh. Leghorns	3.50	6.50	12.00	57.50	110
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Light Mixed	3.00	5.50	10.00	47.50	90

From carefully selected free-range flocks. 100% arrival. Postpaid. Valuable illustrated 96-page booklet FREE. Telling all about poultry.

The Commercial Hatchery,
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HEAVY BROILER CHICKS—\$14.00 PER 100

Consisting of Rocks, Reds, Wyandottes, Orpingtons. Sent C.O.D. Pay after arrival. Postage prepaid. Live delivery. Immediate shipment. We hatch all year. Send for folder. **SCHOENBORN HATCHERY**, 355 Main St., Hackensack, N. J. Phone 1603 or 1604.

FERRIS STRAIN CHICKS WHITE LEGHORN

Send orders now for March and April. \$12 per 100--\$57.50, 500--\$110, 1000 Junia Poultry Farm, Richfield, Pa.

(Continued from Opposite Page)

and one teaspoonful of turpentine to two quarts of water. Another good remedy is common baking soda, a teaspoonful to a pint of water—this sweetens their crops.

There is a great deal of trouble with turkeys from indigestion instead of so many of the troubles called blackhead, cholera, and many others. Much trouble comes from worms and that is what the turpentine is used for. There is no set rule for feeding turkeys but there are a few rules that must be followed for any kind of success. One is strong breeding stock, fed a balanced ration, kept in clean, well ventilated quarters, careful handling and care of the eggs, not feeding the poults too soon, giving them plenty of fresh air without drafts, not overfeeding, keeping all feed and water dishes perfectly sweet and clean, furnishing quantities of grit and green feed and also using a large amount of common sense and care.

HIGH GRADE CHICKS

Blood Tested and Utility Stock

Leghorns, Rocks, Reds, Wyandottes, Anconas, Black Minorcas and Mixed. Pekin Ducklings.

Write for circular and prices.

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S. C. Reds	\$4.00	\$7.50	\$14.00	
Barred Rocks	4.00	7.50	14.00	
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500 lots 1/2 less, 1000 lots 1c less. Free range. 100% delivery. Circular. **W. A. LAUVER,** McAlisterville, Pa.

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DUCKLINGS \$33; EGGS \$14-100 "Duck News" Free. **ROY PARDEE,** Islip, L. I., N. Y.

SPECIAL FALL prices for breeding Turkeys, Geese, Ducks, and Guinea. Write your wants and for mailing list. **PIONEER STOCK FARM, TELFORD, PA.**

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Quality Chicks

Leghorns Rocks (Reds Wyandottes)



Have This Important Book Before You When You Order Chicks This Year

This beautiful free book should be in the hands of every man and woman interested in making money with poultry which is one of the most fascinating means of increasing your income or of achieving financial independence.

The book, which is finely illustrated in four colors, describes my breeds fully; tells of my careful methods of mating and rearing; discusses the

most profitable sizes for flocks; contains house plans, construction details and concise and easily-followed Feeding and Rearing Charts. It is a book that you will find full of suggestions and inspirations and which you will want to keep handy for frequent reference. Some of my customers claim that they owe to it their first steps toward the comfort and peace of mind that come with an assured income.

W. F. HILLPOT, DEPT. 129, FRENCHTOWN, NEW JERSEY

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Leghorns-Reds-Rocks-Wyandottes

"WELL BRED FROM WELL BREEDERS"

Extra quality chicks—the kind to show the greatest profits for Mr. Dollars-and-sense Poultryman. We have 100 acres here, and we know our birds. 4 breeds. Order early for wanted dates. Special prices for broiler chicks. All breeders B.W.D. tested. 100% delivery guaranteed. Circular free.

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breeding White Leghorns for size, vigor and heavy production of large White EGGS. 8,000 LAYERS are housed on our farm.

Our Chick Guarantee

100% satisfactory arrival on the exact date we promise shipment. Every chick sold by us is hatched from eggs laid by breeders on our own farm.

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Insure your future poultry profits by ordering NATIONAL SUPERBRED CHICKS NOW.

	25	50	100	500	1000
S.C. White, Brown and Buff Leghorns	\$3.50	\$6.75	\$13	\$62.00	\$120
Tancred and Hollywood W. Leghorns	3.75	7.25	14	67.00	130
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Black Minorcas and Anconas	4.25	7.75	15	72.00	140
White Wyandottes and Buff Orpingtons	4.75	9.00	17	82.00	160
White Minorcas and Blue Andalusians	5.50	10.25	20	95.00	190
Jersey Black Giants	7.00	13.00	25	120.00	230
Mixed or Odds and Ends	3.00	5.50	10	50.00	100

Send for our Free Catalog with prices on Chicks from our SPECIAL MATED FLOCKS. All chicks sent prepaid by either Parcel Post or Express. 100% live delivery guaranteed. Bank references furnished on request. Write us You will save money by ordering Superbred chicks NOW. **NATIONAL CHICK FARMS** Box 408 MIFFLINTOWN, PENNA.

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Chicks with an official heavy-laying ancestry

Most baby chicks are bought for the ultimate source of egg production. The sooner a pullet starts laying after she is mature the greater will be her egg yield and the cheaper will be the eggs she produces, providing she comes from a heavy-laying ancestry.

Kerr's chicks are bred to lay. They have an exceptional egg-laying inheritance based upon four generations of public egg-laying contest winnings. These winning records are as high as 294 eggs in White Leghorns, 280 in R. I. Reds and 277 eggs in Barred Rocks.

The type, constitutional vigor, livability and rate of growth of Kerr's chicks are strictly in keeping with their unusual inheritance for egg production. Both utility and special matings chicks furnished from flocks that have passed the blood test for Bacillary White Diarrhea.

Write for booklet with prices, giving illustrated account of the Kerr way of producing living, profitable chicks. Liberal discounts on orders up to February 1st.

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THEY LIVE because they are bred from healthy, free range breeders that have thrived and gained in vigor for generations. They LAY because they are from selected and tested high egg power stock. White, Brown and Buff Leghorns, Barred and White Rocks, R. I. Reds, Anconas, Black Minorcas, Buff Orpingtons, White Wyandottes, 12c and up. 100% live delivery guaranteed. Postpaid. Member International Chick Assn. Write today for FREE Chick Book.

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10 FREE CHICKS —ON orders booked before March 15th, we give 10 Chicks free with each 100 ordered.

When we say RELIABLE—we mean RELIABLE in every way. Breeding stock of highest quality of 19 years of careful development. Special attention paid to health of flocks and records kept.

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Write for details—get our illustrated catalog which tells all the story. Our prices reasonable. A book on Raising Chicks worth many dollars given free with each order of \$10.00 or more. Big discount for early orders.

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DAIRYMEN -

It is Time to Act!

There is an acute milk shortage throughout New York and New England.

It will not last long.

In the United States supplies flow freely into any market where there is room for them. Right now there is room for more milk in the New York and New England market. It will be filled soon. The only question is: Who will supply the milk?

Will the dairymen of New York and New England find means of increasing the milk supply to cover their market fully? Or will this market be filled with milk from easily accessible states nearby?

If the dairymen of New York and New England wait for Time to give them the answer, the answer will be undoubtedly in favor of milk from the Mid-West.

But there is one way in which the dairymen of New York and New England can take Time by the forelock and cover their own market with milk from their own herds. Nor need they buy more cows to do it.

That way is for them to begin at once to give their cows feed that will bring their

milk yield to the top, and keep it there. Larro will do that. It is deeply significant that Larro users in New York and New England today are shipping their full quota of milk to market. Their success points out the sure, quick way to relief from the present shortage.

Larro will bring the milk yield of dairy cows to the top, and hold it there, because it is properly composed and properly mixed; because it is not a "cheap" feed; because it is standardized and stays uniform, bag in and bag out; because it is tested in laboratory and on test farm before it is offered for sale.

Larro has proved and is proving, in practice, that it can produce more milk, more consistently for more net profit, than any other dairy feed in the world. Its results begin to show almost immediately and continue to grow more evident during the entire lactation period.

Larro stands out as the readiest and most effective means of meeting your emergency. It is the one feed that will enable you to cover your market fully, and to hold it through thick and thin. The time for argument has passed. It is time to act. Begin to feed Larro today.

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It is the Larro policy to make only rations of such quality as to yield the feeder the greatest possible profit. That is why we make only one feed for each purpose, as only one can be most profitable.

It Advanced the Cause of Agriculture

(Continued from Page 5)

fact that they are all men of strong faith—faith in the land, in themselves, in their neighbors, and in God; and I would remind you that the records show the last of these aspects of faith no less clearly than the others. They are the essential components of the outstanding citizen whose vocation is farming, and who is necessary to sustained national well-being.

In the interest of agricultural progress there will always remain the need for better farming, better agricultural business, better living—these three; and the greatest of these is better living in the family and in the community. I congratulate those who have been selected because their neighbors and their records testify that they are quietly leading the way in this kind of rural progress.

* * *

Representatives of Good Husbandry

YOU are to be congratulated on the success of the AGRICULTURIST's management of the inauguration of the Master Farmer movement in this neighborhood. Obviously, the work sheet assures selection of men whose contributions to public welfare match their success in the most intricate and exacting of callings. The representatives of good husbandry who were exhibited last evening were convincing confirmatory evidence of this.

Congratulations are also due you on your achievements as toastmaster and the brevity of your speakers.—HAROLD M. ANDERSON, *Editorial Department, New York Sun.*

* * *

First Honor to Farming

SO far as I know, this is the first time that real thought has developed into an activity which must be felt throughout the villages and homes of the State. I congratulate you, not only as the publisher of the American Agriculturist, but more particularly as a citizen who sees the value in using an educational vehicle for educational purposes.—FRANK A. REXFORD, *Director of Civics, New York City Board of Education.*

* * *

Proud of Master Farmers

IWANT to congratulate you and Ed on a very successful Master Farmer contest. I heard nothing but words of commendation for the whole idea and the way in which it was worked out. The banquet was fine. Governor Roosevelt gave a wonderfully fine talk. He is one of the most charming speakers I have ever heard. Moreover he inspires confidence in his knowledge of agriculture and his sympathy with all agricultural problems.

I was proud of the Master Farmers. To see them and hear them gave me a feeling of pride and confidence in New York State Agriculture. I hope that you will plan to carry on the work another year.—C. E. LADD, *Director of Extension, New York State College of Agriculture.*

* * *

Inspiration to Farm Boys

IN my opinion, nothing has happened in recent years that means more to the 3,000 young men who are preparing for farming in our agricultural schools than the recognition of these men who have lived and served so faithfully. We shall utilize through every means at our disposal, the results of this movement in guiding our young farmers in their emulation of those whom you have honored.—A. K. GETMAN, *Chief*



These strong, comfortable all-rubber overshoes come in all sizes with 4, 5 or 6 buckles.



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A favorite with farmers—this brown Goodrich boot with white sole. Sizes, boys' to men's. All lengths, knee to hip.

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Rub! Stretch! Twist! Testing machines in our factory give rubber boots and overshoes harder treatment in a few minutes than you would give in many months of steady wear.

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Goodrich

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Agricultural Education Bureau, Department of Education.

* * *

An Impressive Occasion

MAY I extend to you my most hearty congratulations on last night's dinner for the Master Farmers. It was one of the most interesting and impressive gatherings I have ever attended and I feel that in promoting this project and in carrying it thru, you have made a notable contribution to the farming industry.—C. H. B. CHAPIN, *Secretary, Empire State Gas and Electric Association.*

* * *

Standards Are Rising

IENJOYED myself exceedingly and I feel sure that you have established a movement that will ultimately have a vast influence in dignifying and elevating my profession.

I do not suppose we shall ever have nor do I want an hereditary social class, but I imagine that with the years we shall to a greater degree follow the custom of older civilizations in that we shall find methods of granting public

recognition for distinguished service.

As I look around among my friends and neighbors I am impressed that the standard of farming is constantly rising.—JARED VAN WAGENEN, JR.

* * *

Will Elevate Agriculture

IWANT to express again to you my appreciation of the splendid work your organization did in this matter. To my mind this movement will do more to elevate the cause of agriculture than any other single movement that has been started. It was most successful from beginning to end.—C. H. HALLIDAY, *Secretary, Sheffield Producers Cooperative Association.*

Some New Books

"Land Drainage and Reclamation" (\$4.00 per copy) is a new book written by Quincey Claude Ayres and Daniells Scoates, professors of engineering in Iowa State College and Texas Agricultural and Mechanical College respectively, and published by McGraw-Hill Book Company. It is intended not only as a text book but also for practical use of farmers who must cope with their own

drainage and reclamation problems. Surveying with steel tape, leveling, computing areas, drainage properties of soils, ditches, dams, legal rights of farmers on such subjects, clearing land, use of explosives, installation of tile drainage and its cost comprise briefly the topics under which this mass of detailed information has been compiled.

* * *

"Destructive and Useful Insects" by C. L. Metcalf, Professor of Entomology at the University of Illinois and W. P. Flint, Chief Entomologist of the Illinois State Natural History Survey, is a tome full of information concerning both helpful and injurious insects. There is enough fundamental information in it to make it valuable to students of entomology, yet it provides interesting reading which is not too technical for the average reader. Special attention is paid to insect pests of small grains, fruits, corn, legumes, cotton, tobacco, vegetable gardens, greenhouses, trees and shrubs and the household, besides those that injure or annoy both man and beast. The life development of the various types of insects is outlined together with means of control of each type. If it is too expensive for the individual farmers to buy, a copy should be on the reference shelf of each farm community library. McGraw-Hill Book Co., \$7.50.

This Letter Won Third Prize In Kitchen Contest

A. A. and Home Bureau Federation Co-operated to Focus Study upon the Kitchen

THE housewife of today with her kitchen gleaming with colorful enamel, a wonderful kitchen cabinet, water, hot or cold, at the turn of a faucet, half a dozen or more electrical appliances almost superhuman in their power to aid her, is a real homemaker with a clearer understanding of the importance of her job, a vital interest in affairs outside of her home and the time and ability to take part in these affairs. She is keeping pace with the spirit of her times.



Mrs. Ore Daniels

The big old-fashioned kitchen-living room of yesterday in which the worker walked many miles preparing meals, serving them and washing the dishes will soon be a thing of the past.

In many homes this change must be brought about gradually for not all of us have a fairy godmother who can with a single wave of her magic wand transform our kitchens into the workshops of our dreams. However, if we have formed a definite plan so that we know just what we are working for we will be more likely to spend our money wisely when it comes.

I have found through studying my own kitchen for the past few weeks that the woman who takes time to consider the arrangement of her kitchen will often discover that simply rearranging the equipment she already has will help a great deal.

My own kitchen presents a rather difficult problem for two reasons. First, it is somewhat larger than is required for a conveniently compact kitchen. Second the six doors and two low windows divide the wall spaces into such

height of three feet, is already painted a pale gray with enamel paint.

The walls and ceiling are covered with wall paper—blue, gray and light orange in a mottled effect. This spring I am planning to replace this with oilcloth wall covering in a blue and gray tile pattern with a tiny Dutch windmill scene adding a touch of orange and yellow.

Curtains will be made of cheesecloth or unbleached muslin dyed blue. I like my present color scheme so well that I should hesitate to change it.

On the south side of the room are two windows which, with a window in the door and a new one over the sink on the opposite side of the room, will supply plenty of light and provide for cross ventilation.

We have not installed electricity but when we do there will be one strong ceiling light near the breakfast table, oilstove and range with two additional side lights over sink and cabinet.

I have drawn the plan of my present kitchen exactly as it was before I began to plan any improvements.

The black cast-iron sink is well supplied with running water and equipped with a drain pipe which carries waste water some distance from the house. At one end is a small shelf which holds rinsing pan and supplies used for dishwashing.

In the second plan hot water will be installed, the black sink replaced by a white porcelain enameled sink with double drainboards and a faucet with swivel spout and china soap dish. A sink with built-in dishwasher might be installed if I should find it practical.

Just over the sink I would like a casement window and in the corner will be a cupboard for dishwashing supplies. Under the cupboard will be hooks for brushes, scissors and so forth and over the cupboard will be a simple wall clock with clear figures.

A small hook and a towel bar with two swinging arms will provide a place for hand and dish towels near the window where they can be aired and dried. Under the sink will be a garbage pail with foot lever to raise cover and also a fireproof trash basket.

At the farther end of the pantry under a window is the shelf where my baking and food preparation is now done. The built-in

cabinet in the kitchen will save a great many steps and also be much more convenient. It will probably be homemade to save expense and so that I can have more storage space than is provided in the readymade cabinets.

A broad working shelf will be a prominent feature of my cabinet. Roomy cupboards over the shelves will hold everyday dishes, spice jars, coffee, cereals and so forth. On hooks above the shelf will hang eggbeaters, strainers, spoons and other small utensils. Cupboards below the shelf will hold all basins, kettles, frying pans and other utensils in everyday use and will also contain drawers for spoons, forks and cutlery. There will be a removable, tin-lined flour bin with sifter, a container for sugar, space for a small first-aid kit for prompt treatment of minor cuts and bruises, space for account books, recipes and memorandum pad, block

for food chopper, bread board and metal lined drawer for bread.

The bottom and back will be made mouse-proof with wire screening. Two coats of paint and one of light gray enamel will finish the cabinet and make it sanitary and easily cleaned. A few decorations in blue or orange could be added to make a more attractive piece of furniture.

All working spaces in my kitchen will be about thirty-four inches high since I find this is the most convenient height.

The cupboards in the pantry will be convenient for towels, additional dishes and supplies not in daily use and will also contain an emergency shelf for meals for unexpected guests. A small closet will hold the clean supplies and a small box of tools—hammer, nails, screwdriver and so forth.

In the room marked laundry there will be a lavatory and coat closet so that the men can wash and leave their coats without coming into the kitchen. There will also be hooks for children's outdoor garments.

My range, which burns either coal or wood, is now giving satisfactory service. However, if I were to choose a new one I would select one with an enamel finish which is easier to keep clean. A warming closet is also a convenience which is lacking on my stove. My oilstove was purchased last summer and is very satisfactory. Both range and oilstove ovens have thermometers in the doors.

Just back of the range I would like a wood or coal box built into the wall so that it could be filled from outside, pulled into the kitchen when needed and then pushed back out of the way.

The drop-leaf breakfast table and chairs are painted light blue with orange trim. It might seem as though the table was too close to the stove but on cold winter mornings I have found this to be an advantage. The screened porch will probably be used for meals the greater part of the summer. The tea wagon made in a size that will easily go through doorways will be used to carry food and dishes from cabinet to breakfast table or into the dining room and to carry dirty dishes to the sink.

The serving table is a small old-fashioned piece of furniture which somewhat resembles the serving tables sold with breakfast sets so I shall paint it light blue trimmed with orange and arrange on it a bowl of flowers and a few pretty dishes. It has a drawer in which I shall keep doilies and table scarfs.

The small table will be well supplied with books and magazines and over it will be hung a small mirror. A rocker and footstool will complete the furnishings of the rest corner.

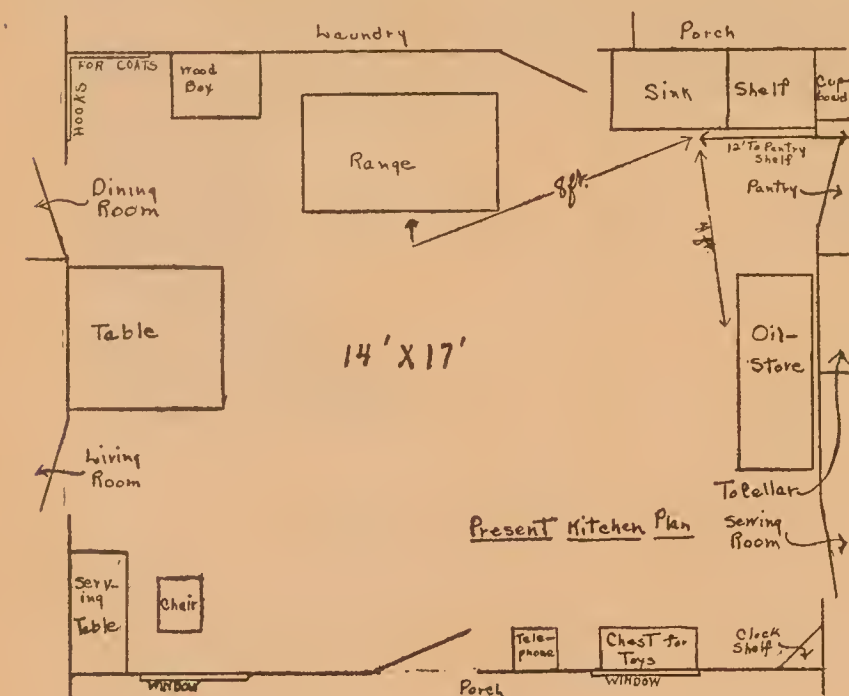
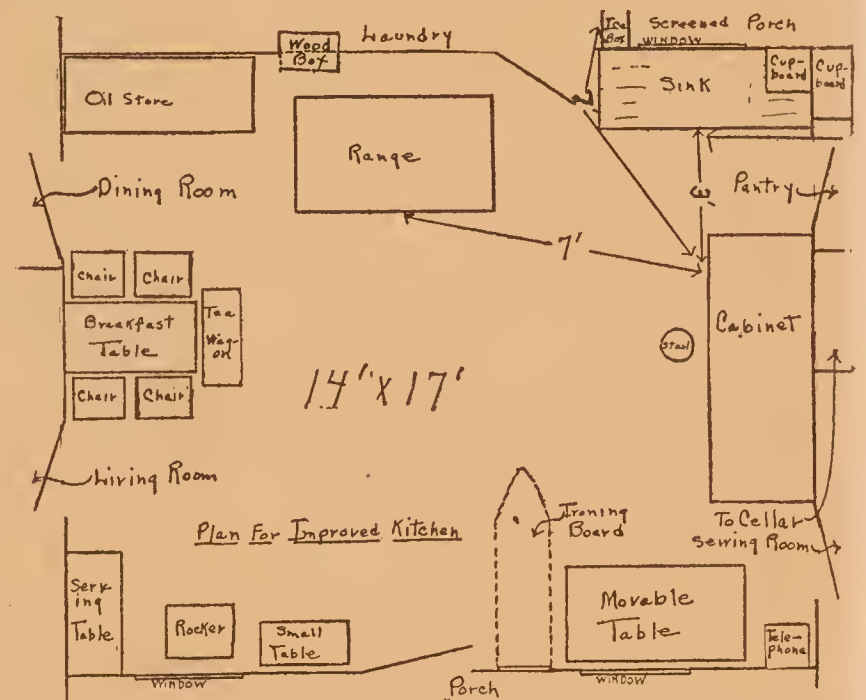
Opening out of the kitchen near the cabinet is a small room which I shall use for a combined sewing room and play room for my two small children. Here they will have a table to use and a chest in which to keep their toys so that they need not play in the kitchen.

It takes some time and a great deal of study and planning to analyze the details of the work to be done and to complete a plan which will enable the

homemaker to do this work with a minimum of time and effort but when she stops to think that probably seventy per cent of the day's work is done in the kitchen she feels that it is time well spent.

List of Small Equipment

Teakettle, coffee pot, teapot, broiler, roasting pan, 1 small frying pan, 1 large frying pan, deep frying kettle, 2 quart double boiler, 2 quart saucepan, small saucepan, 3 layer cake tins, 1 loaf cake pan, egg slicer, muffin pans, 4 bread pans, 4 pie tins, 1 large casserole, 1 small casserole, 6 custard cups, 3 mixing bowls, 2 tablespoons, 2 teaspoons, perforated spoon, wooden spoon, pancake turner, ordinary fork, carving fork, knife sharpener, bread knife, butcher's knife, vegetable knife, vegetable brush, scissors, can opener, ice pick, cork screw, grater, egg beater, colander, wire strainer, 2 measuring cups, rolling pin, bread board, flour sifter, food chopper, lemon squeezer, po-



small sections that it is impossible to group working shelves, cupboards and sink together without having a door or two between. Since the number of openings and the dimensions of the room can not be changed without disturbing the arrangement of other rooms and causing a great deal of expense I shall try to overcome these obstacles by grouping the working centers as compactly as possible and providing for a breakfast table and chairs and also a rest corner.

The floor, which is very rough and uneven, is at present covered with well-worn printed linoleum. In order to secure a floor covering which will not require frequent renewal and will also be attractive, resilient, waterproof and easily cleaned, I would like a new floor put in and then covered with inlaid linoleum in large squares of blue and gray, cemented over a layer of builder's felt. The woodwork, wainscoted to a

tato ricer and masher, dishpan, dish drainer, tray, 2 asbestos mats, cake box, containers for spices, sugar, cereals, etc., salt box, sink brush, steamer, cookie cutters, waffle iron, cookie pans, soapstone griddle, pastry brush, rubber gloves, electric percolator, electric toaster, pressure cooker, fireless cooker, bread mixer, cream whipper, scales, fat and syrup thermometer, coffee canister, tea canister, angel cake tin, sink shovel, soap shaker, dish mop, wall clock, garbage pail, trash basket, electric flat iron, stool, refrigerator dishes, first aid kit, salt and pepper shakers on stove, 1 large kettle and cover, 1 medium size kettle and cover, jelly molds, ring mold, 3 piece saucepan to use over 1 burner of oil stove, faucet dish washer, cake decorator, small hatchet, ice crusher, baking dish, stiff brush spatula, chopping bowl, chopping knife, quart measure, ice cream freezer, flour scoop, sugar scoop, funnel, wire cake cooler, vegetable cutter, apple corer, cream dipper, milk strainer, doughnut cutter, milk pans, skimmer, tea ball, stove brush.—MRS. ORE DANIELS, So. New Berlin, N. Y.

Cunning Quilted Pillow



THIS cunning little quilted pillow is quickly and easily made and would make an ideal gift for any friend. It is about 14 by 22 inches in size when finished and may be obtained in colors, green, maize, blue, lavender and coral. Stamped on fast color Venetian, the pillow (top and back) is 35 cents each. If you desire the wadding lining, the pillow is 70 cents each. The same pattern in same colors on silk rayon with wadding is \$1.40 each. Order from Embroidery Department, American Agriculturist, 461-4th Avenue, New York City.

Aunt Janet's Counsel Corner

The Country is Full of Lovely Things to Those with "Eyes to See"

ONE of the main objects of the Corner is to have a spot in the paper where one may come with her problems, to ask advice or to pass along some of her experiences which may prove helpful to other readers. Naturally, many write to Aunt Janet about very personal matters with the request that they not be printed. Such requests are always respected, but in cases where letters are printed no names are used. However, names must be signed to the original letter by the writer. Often your problems are those of other people, and it helps to know how you have met yours. The following tells how one country mother has had her life enriched by her own mother's training and how she is doing the same for her own little folks.

Aunt Janet.

* * *

"Get the children interested in birds and flowers and animals just as soon as you can. Remember that their happiness rests in their ability to find pleasure in their surroundings and country people always have at least that much

to be happy about. My mother took us for walks and taught us the names of the flowers and birds and helped us to get familiar with the different bird calls. She always called our attention to anything beautiful or odd such as a sunset or clouds or a queer shaped tree. We built bird houses and fed the birds and always planned to make a bird bath. We bought some books by Burroughs, Sharp and others, as well as studying what bird and flower books

Chic for Youthful Figure



2654

The season's best style points appear in DRESS PATTERN 2654. The Vionnet neck line, pointed yoke effect in skirt front and rippling skirt bottom distinguish this design as strictly of this season. Dotted rayon velvet, crepe satin, canton-faille, sheer twiced or velveteens are adapted to this styling. The pattern cuts in sizes 16, 18 years, 36, 38, 40 and 42 inches bust and takes but 3 1/4 yards of 40-inch material with 1/2 yard of 36-inch contrasting for the 36 inch size. PRICE 13c.

she had. One of my great ambitions (I seem to have a good many of them) is to own a set of bird and flower pictures like the ones in our high school library. I want my little girls to love nature as much as I do. I guess they are going to. The oldest (2 1/2 years) is always bringing in flowers, clover, daisies, etc., for me to put in a glass of water, or telling me she sees a bird. I always try to take time to go and look at the bird or fix the flowers and admire them. I think that's the easiest way to keep your children from being shy about telling you things or asking about things they have a right to know. It doesn't make a child lose his respect for you to be his pal."—Betty.

Tested Recipes

Cabbage with Cheese:—Boil a small cabbage, drain and chill. A half hour before serving chop not too fine and put a layer in bottom of buttered baking dish. Make a white sauce by cooking together one teaspoonful flour, one teaspoonful butter, one cupful milk and a seasoning of salt and pepper. Pour a little of this sauce over the cabbage

and sprinkle with grated cheese. Repeat alternating layers of cabbage, and cheese-sprinkled sauce; over the top put a layer of fine bread crumbs sprinkled with cheese. Bake fifteen minutes in hot oven and serve.

L. M. T., New York.

If you prefer a thicker sauce use the proportions of one tablespoon each of flour and butter to a cup of milk. However it must be remembered that the baking process thickens the sauce considerably.

* * *

Tongue with Mushrooms:—Boil one beef tongue for two hours, trim and skin. In a sauce pan put two tablespoonfuls salt pork chopped fine, one large chopped onion, and one tablespoonful butter. Fry until onion is brown. Add two cupfuls of the stock in which tongue was cooked, one can mushrooms, one tablespoonful Worcestershire sauce, one bay leaf powdered, one clove and three sliced green olives. Stir one tablespoonful flour smooth in cold water, add to the sauce and cook three minutes. Pour sauce over the tongue and garnish with bits of the golden centre of lettuce heads.

L. M. T., New York.

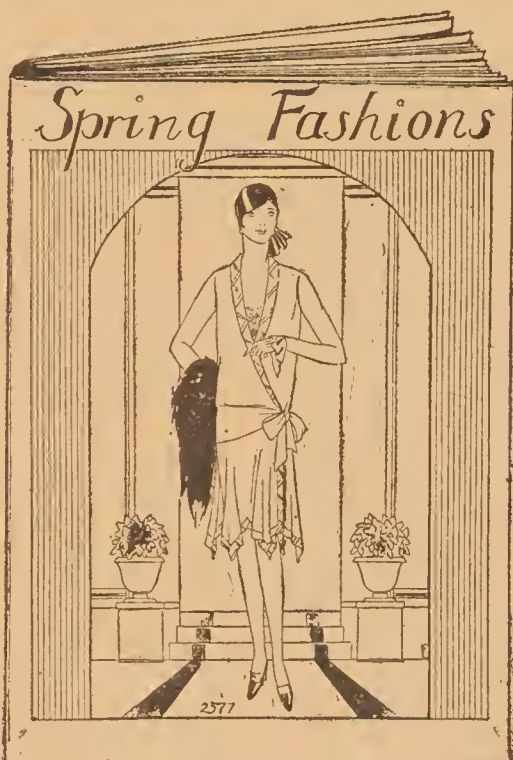
Tongue is always a delightful dainty among meats and is especially good for lunches or for supper. The sauce adds a bit of elegance. The mushrooms may be omitted if they are hard to get.

* * *

Stuffing for Fish:—Melt eight tablespoonfuls of butter, add one cupful dry cracker crumbs, one tablespoonful chopped pickle, one teaspoonful chopped parsley, one-half teaspoonful salt, one-fourth teaspoonful onion juice, and one-half cupful sweet milk. Put over fire and stir until well heated. Fill fish with this and bake, basting frequently with butter and water.

L. M. T., New York.

Since fish seems to ask for acid flavor this stuffing may be made acid by substituting tomato juice instead of the sweet milk.



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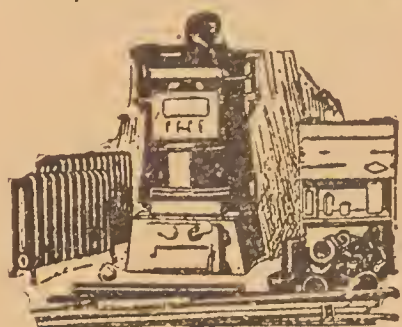
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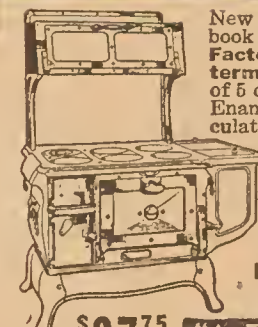
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WANTED—FOR CASH: \$1 to \$15 paid for old used Civil War envelopes showing pictures of cannon, soldiers, emblems, etc., for my collection. Also others bearing stamps used before 1830. Send samples or description for price. JOHN W. GLAZE, Westfield, Mass.

Smartly Seasonable



2656

DRESS PATTERN 2656 with sharply dipping surplice closing and kilted plaited flounce is very sophisticated in its styling. Sheer woolen, printed sheer velvet, crepe satin, wool jersey or crepes are particularly suited for this design. The pattern cuts in sizes 16, 18 years, 36, 38, 40 and 42 inches bust. For the 36-inch size it requires 2 1/2 yards of 54-inch material with 2 1/4 yards of binding. PRICE 13c.

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The Little Shepherd of Kingdom Come-By John Fox, Jr.

THEN came the toasts: to the gracious hostess from Major Buford; to Miss Lucy from General Dean; from valiant Richard Hunt to blushing Margaret, and then the ladies were gone, and the talk was politics—the election of Lincoln, slavery, disunion.

"If Lincoln is elected, no power but God's can avert war," said Richard Hunt, gravely.

Dan's eyes flashed. "Will you take me?"

The lieutenant lifted his glass. "Gladly, my boy."

"Kentucky's convictions are with the Union; her kinship and sympathies with the South," said a deep-voiced lawyer. "She must remain neutral."

"Straddling the fence," said the Major, sarcastically.

"No; to avert the war, if possible, or to act the peacemaker when the tragedy is over."

"Well, I can see Kentuckians keeping out of a fight," laughed the General, and he looked around. Three out of five of the men present had been in the Mexican war. The General had been wounded at Cerro Gordo, and the Major had brought his dead home in leaden coffins.

"The fanatics of Boston, the hot-heads of South Carolina—they are making the mischief."

"And New England began with slavery," said the lawyer again.

"And naturally with that conscience that is a national calamity, was the first to give it up," said Richard Hunt, "when the market price of slaves fell to sixpence a pound in the open Boston markets." There was an incredulous murmur.

"Oh, yes," said Hunt, easily, "I can show you advertisements in Boston papers of slaves for sale at sixpence a pound."

Perhaps it never occurred to a soul present that the word "slave" was never heard in that region except in some such way. With Southerners, the negroes were "our servants" or "our people"—never slaves. Two lads at that table were growing white—Chad and Harry—and Chad's lips opened first.

"I don't think slavery has much to do with the question, really," he said, "not even with Mr. Lincoln." The silent surprise that followed the boy's embarrassed statement ended in a gasp of astonishment when Harry leaned across the table and said, hotly:

"Slavery has *everything* to do with the question."

The Major looked bewildered; the General frowned, and the keen-eyed lawyer spoke again:

"The struggle was written in the Constitution. The farmers evaded it. Logic leads one way as well as another and no man can logically blame another for the way he goes."

"No more politics now, gentlemen," said the General quickly. "We will join the ladies. Harry," he added, with some sternness, "lead the way!"

As the three boys rose, Chad lifted his glass. His face was pale and his lips trembled.

"May I propose a toast, General Dean?"

"Why, certainly," said the General.

"I want to drink to one man but for whom I might be in a log cabin now, and might have died there for all I know—my friend and, thank God! my kinsman—Major Buford."

It was irregular and hardly in good taste, but the boy had waited till the ladies were gone, and it touched the Major that he should want to make such a public acknowledgment that there should be no false colors in the flag he meant henceforth to bear.

The startled guests drank blindly to the confused Major, though they knew not why, but as the lads disappeared the lawyer asked:

"Who is that boy, Major?"

Outside, the same question had been asked among the ladies and the same story told. The three girls remembered him vaguely, they said, and when Chad reappeared, in the eyes of the poetess at least, the halo of romance floated above his head.

She was waiting for Chad when he came out on the porch, and she shook her curls and flashed her eyes in a way that almost alarmed him. Old Mammy dropped him a curtsey, for she had had her orders, and, behind her Snowball, now a tall, fine-looking

mammoth thoughts she couldn't give them utterance—why, wake up, Mr. Buford, wake up!" Chad came to with a start.

"Do you know you aren't very polite. Mr. Buford?" Mr. Buford! That did sound funny.

"But I know what the matter is," she went on. "I saw you look"—she nodded her head backward. "Can you keep a secret?" Chad nodded; he had not yet opened his lips.

"That's going to be a match back there. He's only a few years older. The French say that a woman should be half a man's age plus seven years. That would make her only a few years too young, and she can wait." Chad was scarlet under the girl's mis-

The Story Thus Far

CHAD leaves "Lonesome" with his dog "Jack." His foster parents care both dead from the plague and plans have been laid to bind Chad out to a hard fisted neighbor. After the funeral, Chad collects a rifle, some powder, and shot and a haversack and with "Jack" by his side, starts out for unknown parts. He meets the sons of Joel Turner from over the mountain who take him home. Chad's cleverness at school gains the admiration of Caleb Hazel, the schoolmaster. They become close friends. Hazel tells Chad of the "Bluegrass Country" beyond the hills. Logging operations take Chad to a distant city where he gets lost and starts home on foot. He is picked up by Major Calvin Buford. It appears that Chad is also a Buford and is believed to be a kinsman of his new found friend, who takes him to his home in Lexington in the heart of the "Bluegrass." Chad accepts the Major's offer of a home and an education. Chad enters into the social life and becomes very popular at school. He falls in love with Margaret Dean, daughter of General Dean, neighbor of the Bufords. Meanwhile feeling grows bitter between North and South and war clouds gather. Chad and the Major are guests at the Dean's where a large dinner is in progress.

coal-black youth, grinned a welcome. The three girls were walking under the trees, with their arms mysteriously twined about one another's waists, and the poetess walked down toward them with the three lads, Richard Hunt following. Chad could not know how it happened, but, a moment later, Dan was walking away with Nellie Hunt one way; Harry with Elizabeth Morgan the other; the Lieutenant had Margaret alone, and Miss Overstreet was leading him away, raving meanwhile about the beauty of field and sky. As they went toward the gate he could not help flashing one look toward the pair under the fir tree. An amused smile was playing under the Lieutenant's beautiful mustache, his eyes were dancing with mischief, and Margaret was blushing with anything else than displeasure.

"Oho!" he said, as Chad and his companion passed on. "Sits the wind in that corner? Bless me, if looks could kill, I'd have a happy death here at your feet, Mistress Margaret. See the young man! It's the second time he has almost slain me."

Chad could scarcely hear Miss Jennie's happy chatter, scarcely saw the shaking curls, the eyes all but in a frenzy of rolling. His eyes were in the back of his head, and his backward-listening ears heard only Margaret's laugh behind him.

"Oh, I do love the autumn"—it was at the foot of those steps, thought Chad, that he first saw Margaret springing to the back of her pony and dashing off under the fir trees—"and it's coming. There's one scarlet leaf already"—Chad could see the rock fence where he had sat that spring day—"it's curious and mournful that you can see in any season a sign of the next to come." And there was the creek where he found Dan fishing, and there the road led to the ford where Margaret had spurned his offer of a slimy fish—ugh! "I do love the autumn. It makes me feel like the young woman who told Emerson that she had such

chivous torture, but a cry from the house saved him. Dan was calling them back.

"Mr. Hunt has to go back early to drill the Rifles. Can you keep another secret?" Again Chad nodded gravely. "Well, he is going to drive *me* back. I'll tell him what a dangerous rival he has." Chad was dumb; there was much yet for him to learn before he could parry with a tongue like hers.

"He's very good-looking," said Miss Jennie, when she joined the girls, "but oh, so stupid."

Margaret turned quickly and unsuspectingly. "Stupid! Why, he's the first man in his class."

"Oh," said Miss Jennie, with a demure smile, "perhaps I couldn't draw him out," and Margaret flushed to have caught the deftly tossed bait so readily.

A moment later the Lieutenant was gathering up the reins, with Miss Jennie by his side. He gave a bow to Margaret, and Miss Jennie nodded to Chad.

"Come see me when you come to town, Mr. Buford," she called, as though to an old friend, and still Chad was dumb, though he lifted his hat gravely.

At no time was Chad alone with Margaret, and he was not sorry—her manner so puzzled him. The three lads and three girls walked together through Mrs. Dean's garden with its grass walks and flower beds and vegetable patches surrounded with rose bushes. At the lower edge they could see the barn with sheep in the yard about it, and there were the very stiles where Harry and Margaret had sat in state when Dan and Chad were charging in the tournament. The thing might never have happened for any sign from Harry or Dan or Margaret, and Chad began to wonder if his past or his present were a dream.

How fine this courtesy was Chad could not realize. Neither could he know that the favor Margaret had shown him when he was little more

than outcast he must now, as an equal, win for himself. Miss Jennie had called him "Mr. Buford." He wondered what Margaret would call him when he came to say good-by. She called him nothing. She only smiled at him.

"You must come to see us soon again," she said, graciously, and so said all the Deans.

The Major was quiet going home, and Miss Lucy drowsed. All evening the Major was quiet.

"If a fight does come," he said, when they were going to bed, "I reckon I'm not too old to take a hand."

"And I reckon I'm not too young," said Chad.

XVIII

THE SPIRIT OF '76 AND THE SHADOW OF '61

One night, in the following April, there was a great dance in Lexington. Next day the news of Sumter came. Chad pleaded to be let off from the dance, but the Major would not hear of it. It was a fancy-dress ball, and the Major had a pet purpose of his own that he wanted gratified, and Chad had promised to aid him. That fancy was that Chad should go in regimentals, as the stern, old soldier on the wall, of whom the Major swore the boy was the "spit and image." The Major himself helped Chad dress in wig, peruke, stock, breeches, boots, spurs, cocked hat, sword, and all. And then he led the boy down into the parlor, where Miss Lucy was waiting for them, and stood him up on one side of the portrait. To please the old fellow, Chad laughingly struck the attitude of the pictured soldier, and the Major cried:

"What'd I tell you, Lucy!" Then he advanced and made a low bow.

"General Buford," he said, "General Washington's compliments, and will General Buford plant the flag on that hill where the left wing of the British is entrenched?"

"Hush, Cal," said Lucy, laughing.

"General Buford's compliments to General Washington. General Buford will plant that flag on *any* hill that *any* enemy holds against it."

The lad's face paled as the words, by some curious impulse, sprang to his lips, but the unsuspecting Major saw no lurking significance in his manner, nor in what he said, and then there was a rumble of carriage wheels at the door.

The winter had sped swiftly. Chad had done his work in college only fairly well, for Margaret had been a disturbing factor. The girl was an impenetrable mystery to him, for the past between them was not only wiped clean—it seemed quite gone. Once only had he dared to open his lips about the old days, and the girl's flushed silence made a like mistake forever impossible. He came and went at the Deans' as he pleased. Always they were kind, courteous, hospitable—no more, no less, unvaryingly. During the Christmas holidays he and Margaret had had a foolish quarrel, and it was then that Chad took his little fling at his little world—a fling that was foolish, but harmful, chiefly in that it took his time and his mind and his energy from his work. He not only neglected his studies, but he fell in with the wild young bucks of the town, learned to play cards, took more wine than was good for him sometimes, was on the verge of several duels, and night after night raced home in his buggy against the coming dawn. Though Miss Lucy looked worried, the indulgent old Major made no protest. Indeed he was rather pleased. Chad was sowing his wild oats—it was in the blood, and the

(Continued on Page 26)



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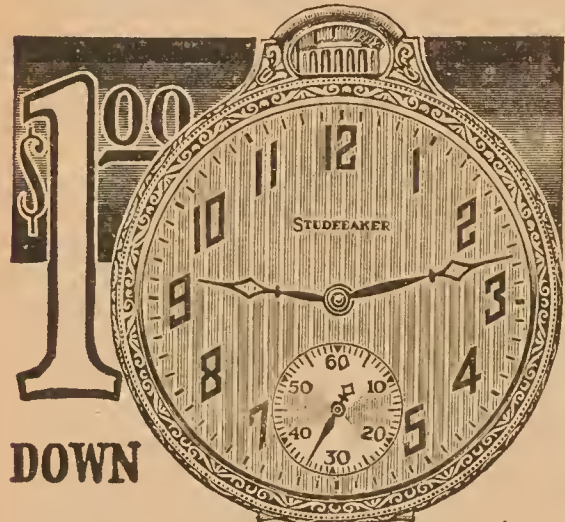
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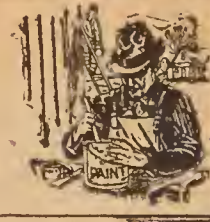
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Probably the best insulation for either vertical or horizontal above-ground pipes is the moulded cellular pipe insulation now sold in lengths by many firms. If this is put on and fastened according to directions and the joints properly covered, it is very effective in keeping in heat or keeping out cold.

Home-Made Insulation

Usually, however, a pipe can be insulated quite effectively by first wrapping it tightly with one or two layers of heavy tarred paper or roll roofing, wired on to hold it in place. Then put a tight wooden box around it considerably larger than the pipe, packing the space in between with sawdust or chopped hay. The watertight covering around the pipe is to keep the water which condenses on the cold pipe from wetting the sawdust and destroying its insulating value. It is absolutely necessary that the space between pipe and box be filled with some material which will prevent the enclosed air from circulating. Even gravel would be preferable to no filling at all.

Protecting At Floors and Walls

One of the greatest dangers to pipes freezing is where they come through a concrete or other masonry floor or wall. Often a pipe clear inside a reasonably warm stable will freeze where it comes through the concrete floor, since the floor may carry the freezing temperature two or three feet when in contact with a foundation wall that is several degrees below zero. In the first place, the floor should never be directly in contact with the foundation wall, but should be separated by at least a half-inch joint filled with asphalt, creosoted wood, pitch-coated insulation or other non-conducting material. Second, the pipe should never be set directly into the concrete floor, but the opening in the floor should be considerably larger than the pipe and the space filled with hot asphalt, stiff roofing cement, or a strip of pitch-coated insulation, bent around the pipe and forced down around it. The same general treatment should be used where a pipe comes through a wall which may carry the frost from an outside wall—I. W. D.

Hard Starting Often Due To Old Plugs

MANY motorists do not realize that the condition of the spark plugs and the width of the gaps between the points have a great deal to do with the ease of starting the car. During the summer's driving the gap usually expands through wear and service to .030 or .040 inch or even more, and it requires an enormous amount of current to make the spark jump so wide a gap. If the owner will see that his spark gaps are adjusted to the correct distance, which is between .020 and .025 inch, his car will start very much more easily and also will reduce very greatly the strain on the storage battery.

Other things also affect the starting, of course, such as using a higher test

fuel, a lighter bodied oil, a primer to shoot the higher test fuel into the manifolds instead of waiting for the battery to turn the engine over fast enough to suck it in, and so on. The primer alone will save the battery from turning the engine perhaps a dozen times each time the engine is started and this saves the battery a lot. Also pushing out the clutch before pressing the starter saves the transmission gears in their stiff grease, and this again saves the battery a great deal.—I. W. D.

Gas Engine Heats Water for Washing Milk Cans

WATER for washing milking machines and other dairy utensils can be heated cheaply and easily by means of a new water heater attachment for gas engines. This attachment which holds between three and four gallons of water, and fits practically any engine, is designed to utilize the heat and waste gases from the exhaust.

A device of this kind is particularly helpful on farms where water heating facilities are limited. Frequent use of hot water helps to keep milking machines, pails and cans free from visible dirt and bacteria, aiding materially in the production of clean, high-quality milk.

The Portland Cement Association of 33 West Grand Avenue, Chicago, Ill., recently put out a very attractive booklet, "Concrete Improvements Around the Home." This gives photographs, working drawings and complete directions for building side walks, driveways, steps, pump platforms, benches and many other improvements. A copy of this booklet can be had on request by sending a letter to the Portland Cement Association.

The Little Shepherd of Kingdom Come

(Continued from Page 24)

mood would pass. It did pass, naturally enough, on the very day that the breach between him and Margaret was partly healed; and the heart of Caleb Hazel, whom Chad, for months, had not dared to face, was made glad when the boy came back to him remorseful and repentant—the old Chad once more.

They were late in getting to the dance. Every window in the old Hunt home was brilliant with light. Chinese lanterns swung in the big yard. The scent of early flowers smote the fresh night air. Music and the murmur of nimble feet and happy laughter swept out the wide-open doors past which white figures flitted swiftly. Scarcely anybody knew Chad in his regimentals, and the Major, with the delight of a boy, led him around, gravely presenting him as General Buford here and there. Indeed, the lad made a noble figure with his superb height and bearing, and he wore sword and spur as though born to them. Margaret was dancing with Richard Hunt when she saw his eyes searching for her through the room, and she gave him a radiant smile that almost stunned him. She had been haughty and distant when he went to her to plead forgiveness: she had been too hard, and Margaret, too, was repentant.

(To be Continued Next Week)



On Buying Live Stock

POSSIBLY due to the fact that live stock cannot be standardized as merchandise can, there is a considerable amount of misunderstanding which develops between buyers and sellers. We make the following suggestions in an attempt to lessen this.

1. Where it is at all possible to make a personal visit before buying, we feel that it is a very wise step.

2. Carefully inspect the stock shipped you by express before accepting it. If the animals have suffered injury during shipment, be sure that the agent is notified and that he makes the proper report, otherwise the express company will not consider themselves liable for the injury.

3. In case the animals were purchased on a guarantee of satisfaction, they should be returned at an early date if they prove unsatisfactory, remembering that the purchaser usually pays the return charges unless a different agreement has been made.

Poultry Thief Rewards Discontinued

THE rewards which for the past two years have been paid by Mr. Morgenthau for information leading to the conviction of chicken thieves will be discontinued on January 1, 1929.

Rewards will be paid, subject to the usual conditions and rules on all cases, where the thief was actually under arrest prior to January 1 even though the trial and conviction do not come until later.

We believe that the sum totaling over \$2,000 which has been paid on rewards has had a decided effect on lessening chicken stealing. We will continue to cooperate in this good work by furnishing a chicken marker to subscribers at cost and by calling cases of thefts to the attention of the state troopers and local law enforcing authorities.

4. Damages cannot usually be collected where animals are sold due to "freshen" or to "farrow" unless misrepresentation can be shown. There are a number of reasons why an animal bred to "freshen" may fail to do so.

5. An owner advertising animals as "pure bred" should be expected to furnish proper registration papers and transfers.

6. Baby chicks are commonly sold "Live Delivery Guaranteed." The postman is usually witness of chicks dead on arrival. Due to the many baby chick troubles that may cause death, companies cannot reasonably be held for chicks that die after arrival.

7. It pays to determine the reliability of the man you are purchasing from before you buy rather than after. AMERICAN AGRICULTURIST advertisers are guaranteed.

Wants \$5 Fee for Marketing Crops

THE Produce Packer reports that a company styling itself as the Independent Contracting Company has been circulating farmers in Carolina and

Virginia and offering to contract to market their crops of beans, potatoes, etc., for a fee of \$5.00.

The Independent Contracting Company claims to guarantee a minimum price which is to say the least, very favorable to producers. In the first place, it develops that there is no such address as 187 Warren Street in New York City. This is enough to arouse suspicion. At any rate, any company that guarantees a price on crops next fall is headed for disaster. Sound reasoning would indicate that they are more interested in getting the \$5.00 deposit than they are in marketing the crops of the growers.

Concern Fails in Attempt to Collect for Returned Books

MANY complaints have been received against the Standard Education Society, Chicago, Ill., a book publishing concern. Misrepresentation in the sale of encyclopedia sets by agents of the concern are the usual complaints. When the purchasers found that the books had been sold under misrepresentation many returned the books and refused to pay for them.

The return of the books to the company has been followed by requests for payment and threats of suit. The first of these suits was recently brought in Kansas City before Justice of Peace Court of A. P. Fonda against Miss Mildred Goruch, a teacher. Verdict was given in favor of Miss Goruch.

The Standard Education Society was the subject of a cease and desist order by the Federal Trade Commission in 1926. The Commission charged unfair sales methods and tactics in connection with its offer of the standard Reference Work FREE in conjunction with a loose leaf service for which the purchaser had to pay \$49 a year.

We Cannot Help You Evade Legal Contracts

AMERICAN AGRICULTURIST Service Bureau is anxious to be of service to subscribers in all possible cases. However, we do not feel that our subscribers can legitimately ask our aid in evading a contract after it has once been signed.

The fact that one party secures a bad bargain does not constitute a good reason for breaking a contract. These contracts are legally enforceable unless fraud can be shown. The fact that you may not have understood the contract is not a good defence if you read the contract or if you had the opportunity to read it.

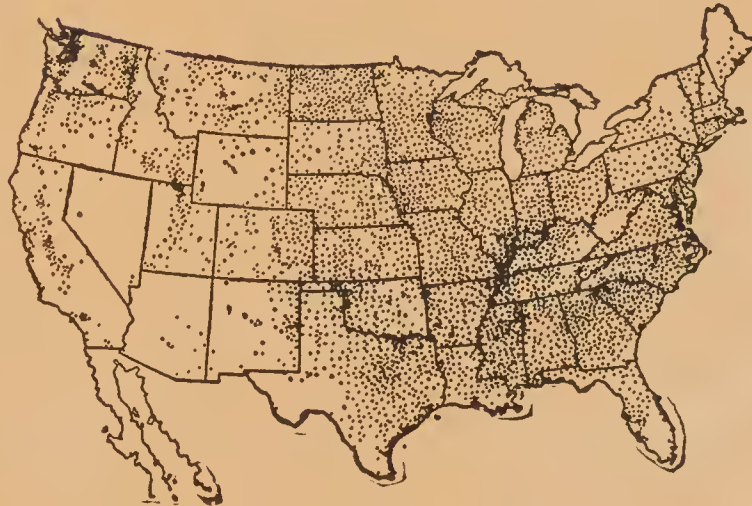
We are saying this in spite of our own wishes in the matter. We know that in many cases the signature to the contracts is secured through misrepresentation. We wish there was some way of stopping this but the only way we know is to repeat the warning so often given: Do not sign any paper until you thoroughly read and understand it and then do not sign it unless you are certain that you need what you are contracting to accept and that you will be able to pay for it when the obligation becomes due.

The swindling power of tipster sheets lies in the fact that they are able to build confidence in the minds of prospective victims, who do not know of the purpose behind the tipsters' claims of ability to forecast price trends in securities.—BETTER BUSINESS BUREAU.

Only 4 percent of the traffic on typical New York State roads originates on farms within the county, a recent traffic survey of 29 roads shows.

Like Diversifying Your Investments

The Billion and a Half Dollars Invested in Federal Land Bank Bonds is Loaned to 400,000 Farmers



Each Dot—A National Farm Loan Association through which Long-Term Farm Loans are made by the Federal Land Banks.

The twelve Cooperative Federal Land Banks jointly guarantee all bonds issued by them. The Banks have capital, legal reserve and undivided profits in excess of \$80,000,000.

Federal Land Banks are located at

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Louisville, Ky.
New Orleans, La.
Omaha, Nebr.
Spokane, Wash.
Springfield, Mass.
St. Louis, Mo.
St. Paul, Minn.
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The Bonds Fulfill Every Requirement

Security of principal
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Desirable denominations
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Tax exemption

Over one hundred million dollars of the United States Government Insurance Fund are invested in these bonds. Seasoned by 12 years' test. Interest paid the day it is due.

Send for Federal Land Bank Circular No. 16, "Let Your Money Work for You," supplied free. Write to The Federal Land Bank nearest you.



Post Your Farm And Keep Trespassers Off

We have had some new signs made up of extra heavy material because severe storms will tear and otherwise make useless a lighter constructed material. We unreservedly advise farmers to post their land and the notices we have prepared comply in all respects with the laws of New York, New Jersey and Pennsylvania. The price to subscribers is 95 cents a dozen, the same rate applying to larger quantities. Cash must accompany order.

American Agriculturist
461 Fourth Avenue. New York

Model Silos

For those who have to count every penny, as well as for those who can afford the best, there's one outstanding silo—the Unadilla.

Strong—well built, time-saving, silage-saving and money-saving, the Unadilla represents the best outlay you can make for farm buildings. Our catalog describes line fully. Discount for cash settlement. Time if wanted.

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UNADILLA SILOS

READER'S ORDER FOR CLASSIFIED ADVERTISING

Rates Only 7 Cents A Word Per Insertion

American Agriculturist, 461 Fourth Ave., New York City.

Gentlemen: Kindly classify and insert my advertisement of words to appear times in your paper. Enclosed find remittance of \$..... to pay for advertisement, which reads as follows:

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NAME

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Bank Reference

For only 7 cents a word you can place your story of your wants or what you have to sell in nearly 150,000 homes.



The Sign of Protection

Double Mixed Triple Tested

*A new buying guide to fertilizers
as important as guaranteed analysis*

Look for this tag



HERE is a new buying guide to fertilizer, a new standard for judging value, that means as much as guaranteed analysis.

You know that "guaranteed analysis," on every fertilizer bag, guarantees the amount of plant food. It does not guarantee the *quality* of the fertilizer.

Now on every bag of Swift's Red Steer Fertilizer you will find a Certificate of Quality. It tells you that Red Steer is made of **BEST MATERIALS, DOUBLE MIXED, TRIPLE TESTED.**

That means best materials, rigidly tested for quality; even, uniform mixing; excellent mechanical condition.

A New Standard of Value

These things are vitally important, as important in judging fertilizer as guaranteed analysis.

That is why Swift & Company, co-operating with your State Experiment Station to give you the analysis best suited for your soil and crop, goes a step further in making Red Steer right. That is part of the well-known Swift policy—to make each Swift product the best of its kind.

To give you plant foods from the most productive sources, to mix them right, requires great care, extensive equipment, a staff of experts.

A New Assurance of Quality

The Swift Certificate of Quality certifies that Red Steer Fertilizers are made from **BEST MATERIALS**—plant food from the most productive sources. That they have gone

through two complete mixings—**DOUBLE MIXED**—to make sure of easy drilling and that each plant will get its share of plant food.

It also certifies that Swift's Red Steer Fertilizers undergo at least three rigid tests in fully equipped laboratories. **TRIPLE TESTED!** To assure the right *kind* of plant food, in the right *form* and correct amount.

Look for the Tag:

"Best Materials, Double Mixed, Triple Tested"

A *plus* value in fertilizers! A *plus* value over and above the guaranteed analysis.

You'll find the Certificate of Quality tag, illustrated on this page, on every bag of Red Steer Fertilizer. It says **BEST MATERIALS, DOUBLE MIXED, TRIPLE TESTED.**

See Your A. S. A.

Ask the A. S. A. (Authorized Swift Agent) for Red Steer. And look for the certification tag on every bag. It's your assurance of quality in fertilizers.

Swift & Company
Fertilizer Works
Cleveland, O.
Baltimore, Md.



Control Crop Prices

Did you ever stop to think that you can help control the price you get for all the crops you grow?

Premium prices, you know, are paid for the higher grades. These grades are based on quality. You can get increased yields of better quality crops by using the right kind of fertilizer. And you can save money by buying Swift's Red Steer high analysis fertilizers. Ask your A.S.A. about Swift's Red Steer 7-11-7, 3-12-15 and 4-16-10.

Drop in and talk this over with your A.S.A. He can help you make more profit with Swift's Red Steer Fertilizers.



Look for his sign.

Swift's Red Steer Fertilizers

"IT PAYS TO USE THEM"

29.7

READING ROOM - N.Y.
COLLEGE OF AGRICULTURE
ITHACA, N.Y.
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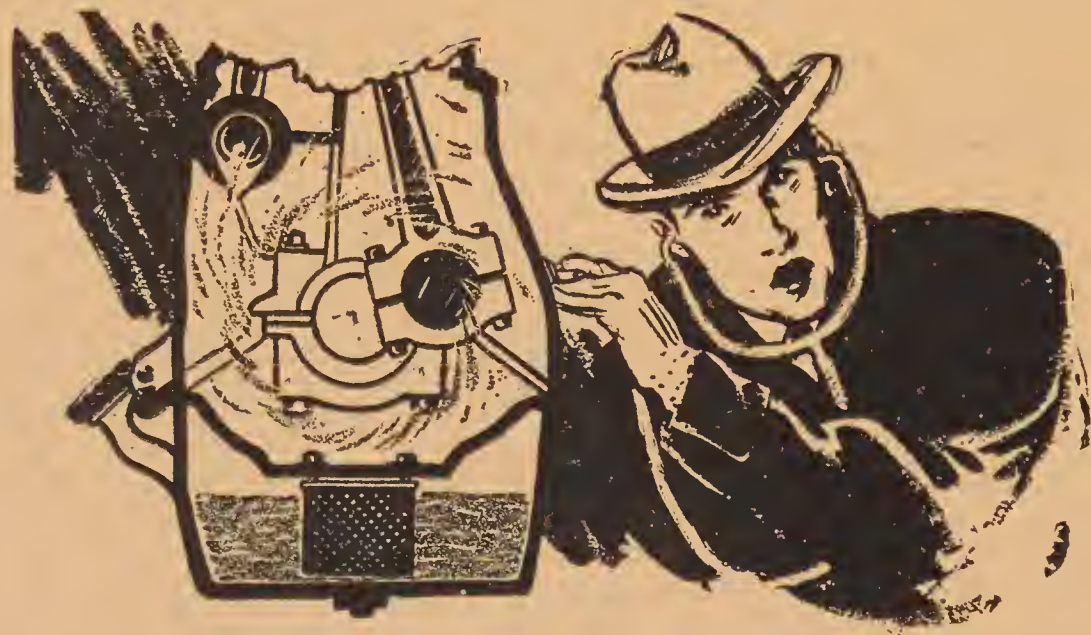


The First Crop of the New Year

Winter Oil facts for farmers

(No. 10)

If you could listen to the bearings in your automobile engine on zero days



Make this chart your guide

The winter recommendations specified on this chart should be followed from freezing (32°F.) to 0°F. Below 0°F. use Gargoyle Mobiloil Arctic (except Ford Model T use "E").

If your car is not listed here, see at your dealer's, the complete Mobiloil Chart, which recommends the correct grades for all cars, trucks, tractors, etc.

NAMES OF PASSENGER CARS	1929		1928		1927		1926	
	Engine		Engine		Engine		Engine	
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
Auburn, 6-66.....	BB	Arc.	BB	Arc.	BB	Arc.	A	A
" 8-cyl.....	A	Arc.	A	Arc.	A	Arc.	A	A
" other models	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Buick.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Cadillac.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Chandler Special Six	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Chevrolet.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Chrysler, 4-cyl.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
" Imperial.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
De Soto.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Dodge Brothers.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Durant.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Ersine.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Essex.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Ford, Model A.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" Model T.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Franklin.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Gardner, 8-cyl.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
" other models	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Graham-Paige.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Hudson.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Hupmobile.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
La Salle.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Marmon, 8-cyl.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Moon.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Nash, Adv. & Sp. 6.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Oakland.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Packard.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Pearless, 72, 90, 91	BB	A	BB	A	BB	A	BB	A
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Plymouth.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Pontiac.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Reo.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Stearns Knight, 6-80	BB	A	BB	A	BB	A	BB	A
" other models	BB	A	BB	A	BB	A	BB	A
Studebaker.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Vellie, 8-cyl.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
" 6-cyl.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.



Mobiloil

Look for the red
Gargoyle trade-mark
on the Mobiloil container

The World's Quality Oil

Mobiloil

VACUUM OIL COMPANY

—you would hear how a too-thin oil allows finely adjusted bearing surfaces to grind together.

This costly wear generally comes when you use one of the so-called "winter oils" featured at this time of the year. Such oils do only half the winter lubricating job—they give you quick starting on cold mornings. But when the engine warms up to the usual driving heat, your too-thin oil gets still thinner. Result: before long the wear on bearings and cylinder walls increases rapidly.

Rich oil saves costly wear

Gargoyle Mobiloil Arctic is a winter grade of Mobiloil that does both ends of the winter lubricating job. Mobiloil Arctic has the extreme fluidity that insures a responding spurt of oil to the remotest bearing as soon as you touch your starter. But Mobiloil Arctic also has that rich "oiliness" which enables it to cling to all friction surfaces and pad them against metal-to-metal contact with each other.

Buy Mobiloil this way

For a small supply: 10-gallon steel drums with faucet, 5-gallon cans in easy-tipping racks, and 1-gallon and 1-quart cans.

55-gallon or 30-gallon drums with handy faucet for a large supply. You get a substantial discount with this purchase from the Mobiloil dealer.

Is your car named in the Mobiloil Chart shown on this page? If not, see the complete list of Mobiloil Winter Recommendations for your car, tractor or truck at any Mobiloil dealer's. You are always sure with

The QUESTION BOX



Keeping Auto Rims from Rusting

"I have a 1924 touring car on which I have a lot of trouble keeping my tire flaps (breaker strips) in good order due to the excessive rust, which gets both thick and hard, and about three or four months is as long as the flaps will last. Have sand papered it off, but this is hard work and I have an idea that the loose sand is hard on the flaps and tubes, which also give trouble due to the poor flaps. Can you offer any suggestions how I can keep my rims from rusting and causing this trouble? Do you think hard grease would be a good thing to use?"—T.K.

IT IS very important that the rims be kept as free from rust as possible. Sandpapering them does little good, as most of the rust is still left to show up again as soon as any moisture gets under the tires. Painting over the rust does little good, as the rust will increase under the paint and cause it to peel. Nor can hard grease be used, since grease will quickly ruin the inner tubes.

About the only way this problem can really be remedied after the rims have started to rust is to take the car to a garage or tire shop some spell of bad weather and lay it up for a few days, remove the wheels and tires and buff off the rims thoroughly on a wire buffing wheel, being careful to get in under the rims. Then give the rims all a coat of red lead and linseed oil or of a good asphalt or graphite paint, and hang them up in a warm room to dry. Then put on one or two coats of graphite paint, and I believe your troubles from rusting will be over. I have had pretty good results from buffing, then applying two coats of white lead and oil, but it is not so good as the other method, and the casing has a tendency to stick to the white lead paint.—I. W. D.

Glycerine Not Injurious to Rubber

Will glycerine as an anti freeze solution injure rubber hose connections.

ACCORDING to the Glycerine Producers' Association, radiator glycerine does not injure rubber hose connections. In fact it is often beneficial. We have all noticed how such connections swell up and eventually crack around the metal clamps which hold them in place. If not too far gone, hose in this condition when soaked in a solution of radiator glycerine will resume its normal shape and will gradually become pliable as when new. Bursting tests made on such damaged hose connections showed that after soaking for about thirty days in a radiator glycerine solution at a temperature of 135 degrees Fahrenheit, such hose was actually stronger than before the treatment.

The Glycerine Producers' Association also recommends mixing radiator glycerine with a little lampblack as an excellent dressing for spare tires. This mixture keeps the tires shining black and new looking, keeps the rubber pliable, and prevents dry rot.—I. W. D.

Pruning Pear Trees

What system should be used in pruning pears?

TESTS made at the New York State Agricultural Experiment Station indicate that best yields are obtained from low headed trees that receive but little pruning. Little pruning seems to produce rather more symmetrical tops as well as larger bearing areas. Heavy pruning appears to stimulate a greater wood growth which results in rather bushy growth or sometimes rangy and unwieldy branches and relatively smaller bearing areas.

Will It Pay to Heat the Hen House?

A Cold Snap Cuts Production Unless an Even Temperature is Maintained

HERE is my conclusion, my confession, if you prefer, based on ten years of experience. Since it is mine, I ask no one to accept it. I am willing simply to let the facts speak for themselves. This conclusion consists, on my part, in the abandonment of the so-called cold poultry house, especially the open front type, for either a tight, well ventilated house, or a tight, well ventilated house with heat. I am abandoning the old style house because it is impractical, unworkable, and a serious menace at certain specific times to egg production, and the actual health and vitality of the flock



L. H. Hiscock

in question. In other words I am sick and tired of trying to square myself for freezing a lot of innocent hens, and putting them up against conditions which are deplorable, and should never be excused by any honest poultryman. Just one other thing: remember these observations are based on the climatic conditions in central New York.

It has long been argued by adherents of the cold house or open front house (I use open front in a broad sense as typifying coldness) that we must have plenty of fresh air to carry off the moisture given off by the hens. It has still further been their plea that if you closed a hen house tightly, especially using window glass, sunlight was lost to the birds with a consequent drain on their vitality by keeping out the ultra-violet ray. And finally, it has been argued that you could not heat a hen house without making the birds un-

By L. H. HISCOCK

usually sensitive and ultimately fit candidates for various serious and contagious diseases.

These are not all the arguments in favor of the open style house, but they embrace some of the fundamental principles which caused its creation. And in all fairness, let it be said here that the open front house has played a part in the development of the poultry industry as great as any other single factor. But, if this section and other similar sections, handicapped by lack of sun, sud-

A Question of 'Returns

AT first thought it seems the height of foolishness to even consider artificial heat for the poultry flock. A few years ago the idea of using electric lights seemed just as visionary. If hens will pay a better profit in warm houses, there is little doubt but that progressive poultrymen will adopt the idea. At least, do not fail to read Mr. Hiscock's article. If you disagree with him, write him in care of this office and we will forward your letter to him.

den atmospheric and temperature changes, especially prolonged periods of dampness and severe cold, is to maintain its own in competition with other sections where weather approaches more nearly the ideal from a poultry standpoint, the open front house has outlived its usefulness. One need only cite the serious fluctuation of egg production during the cold winter months to prove that something is wrong somewhere in housing conditions. The dollars we lose in a slump go to more fortunate poultrymen while we blame the weather.

Let us look for a minute at some of the argu-

ments for the open front house. First comes moisture. After nine years I cannot see any merit in the idea of using muslin screens to carry off dampness. If atmospheric conditions are right, your house works well, but in the nine years I have used this type of house, I have yet to find the first one hundred per cent twelve months. On the contrary, I have seen two specific kinds of dampness that have always done damage and which the open front house is absolutely powerless to prevent. First of these is the raw damp, wet weather liable to come any time and last anywhere from one to four or five days, or longer. With the air saturated on the outside and your birds breathing out moisture in the houses itself, I have seen periods of such stifling stagnation that birds fairly panted in an effort to adjust their own physiological make-up to conditions which were deplorable and pathetically unremedial. The second condition in this situation is dependent on the first. From a complete saturation of moisture, the wind takes a turn and the bottom drops out of the thermometer with a corresponding freezing of combs and a terrific loss in egg production. As a matter of fact, there are just two ways of drying out such a saturation in this type of house and these very remedies are dependent on the weather: first by freezing out the dampness and second by sunshine.

And this brings us to the importance of sun as a factor in winter egg production. I think of all the childish notions that attach to the poultry industry the stress on sunlight, in certain sections of central New York is the worst. Of

(Continued on Page 20)

The Story of Nitrogen

The New Nitrogenous Fertilizers -- Are They Safe?

By A. W. BLAIR

Soil Chemist, N. J. Agricultural Experiment Station

EDITORS' NOTE—Here is another one of Dr. Blair's very interesting articles on the story of nitrogen. Another article by Professor Blair will follow in an early issue. We feel that those who read each of these stories will have the latest, most complete and most authoritative information on this important subject of fertilizers.

THE appearance of a number of new nitrogenous fertilizer materials on the market in recent years is revolutionizing the fertilizer industry. In the early days of the industry when most of the nitrogen was obtained from nitrate of soda, sulfate of ammonia, and by-product and waste organic materials, the great bulk of the fertilizer business was done on the basis of 10 to 14 pounds of actual plant food substances to the hundred pounds of fertilizer.

Occasionally a 2-8-10 or a 4-8-10 might make its appearance, but the low grades were the rule. By this system it was necessary to handle a very large amount of fertilizer to get a small amount of plant food. Furthermore, some of the organic materials supplied nitrogen in a very slowly available form, and the growing plant was stunted and checked in growth at a critical period. Here was another source of loss. True, materials that are slowly available are not so easily lost through immediate leaching, but substances not soluble enough to leach out, are likewise not soluble enough to help crops that need a quick start. The system was expensive all along the line. Much rubbish, little gold. No danger of burning the crop and like

wise no danger of making a 400 bushel crop of potatoes or a hundred bushel crop of corn. The new nitrogenous materials are essentially pure chemicals. In some cases they are much more concentrated than the forms to which we are accustomed. For example, urea carries 46 per cent nitrogen. It is soluble in the soil solution and hence quickly available; it is organic in form and leaves no harmful residue. It has been used under widely varying conditions with good results.

Ammonium nitrate contains about 35 per cent nitrogen. It is soluble in the soil solution and

supplies both nitrate nitrogen and ammonia nitrogen. On standing it easily takes up moisture and this is not in its favor. Otherwise it is an excellent nitrogen carrying material.

Ammonium sulfate-nitrate is, as the name implies, a mixture of ammonium sulfate and ammonium nitrate. It contains 26 per cent nitrogen all of which is readily available. For most crops it would perhaps be preferable to the sulfate alone, since it is less likely to make the soil acid.

Ammonium phosphate may be had in three or four different forms. One contains about 12 per cent nitrogen and 61 per cent phosphoric acid. Another form is put out under a special trade name to contain 16.5 per cent nitrogen and 20 per cent phosphoric acid and 10.7 per cent nitrogen and 48 per cent phosphoric acid. These are all soluble and therefore quickly available and are usually found in excellent mechanical condition.

Calcium cyanamid contains about 22 per cent nitrogen in readily available form, and leaves no harmful residue. Indeed the lime which it contains will prove beneficial on most Eastern farms. It is a fine dry powder and therefore is an excellent conditioner for mixed fertilizers. It is also a satisfactory material for top-dressing meadows.

Calcium nitrate as now made contains practically the same percentage of nitrogen as nitrate of soda (15.5%) and the nitrogen is equally available. On account of its tendency to take up water when exposed to the air, its



This drill will handle a complete fertilizer or a single ingredient for side dressing crops. It is a two-row machine.

(Continued on Page 11)

Editorial Page of the American Agriculturist

AMERICAN AGRICULTURIST

Founded 1842

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Correspondence for editorial, advertising or subscription departments may be addressed to either

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Help for New York Farmers

SEVEN years ago, when Henry Morgenthau, Jr., and the editorial staff assumed the management of AMERICAN AGRICULTURIST, we agreed upon an editorial policy which, if carried out, would bring some real farm relief. This policy included:

- I. Reduction and eventually complete elimination of the direct State tax on real estate. This was the tax which every farm property owner had to pay.
- II. More State financial aid for rural schools.
- III. Adjustment and relief of the farmers' taxes.
- IV. Better dirt roads.

From that time until this, there has been hardly an issue of AMERICAN AGRICULTURIST that has not hammered one or all of the above problems. In addition to the constant discussions in the paper, we have held innumerable interviews and conferences with representatives of the administration at Albany and with all other leaders and officials who in any way could be of help in solving these farm problems.

At first progress was discouragingly slow. Not much attention could be secured, even from farmers themselves. But slowly and surely public opinion has been built up in this State based on a realization of the great need of agriculture. Other organizations and leaders became interested and began to think and work with us on these problems, and gradually some progress has been made. For example, in 1923 the direct state tax was two mills. In 1924 it was reduced to a mill and a half, and was kept there during 1925. In 1926, the tax was reduced to one mill, where it remained until 1928, when it was reduced to one-half mill.

Then we led the way for years, in spite of uninformed opposition and ignorant propaganda, for more State aid to relieve the rural schools. Others joined with us and in 1925 the so-called Nine Million Dollar Rural School Law was passed, making available that amount of State money to help every poor rural school district in the State to reduce its taxes.

But still were left the problems of better dirt roads, fairer assessments of farm property, and some general, wholesale plan to reduce the crushing burden of the farmers' taxes.

Now we begin to see light in solving even these troubles. It is not good policy to count chickens before they are hatched, but in Franklin D. Roosevelt, we have a Governor who is sympa-

thetic with farmers and who knows from his own experience and observations that if the agriculture of the State is to endure, some of these problems, particularly the one of taxation must be remedied. In his inaugural address and in his first message to the legislature, the Governor has shown clearly not only that he understands the farm situation, but that he knows what should be done to help. In fact, many of the subjects he mentioned are the very ones that we have been emphasizing for several years.

Governor Roosevelt recognized this when he appointed a group of twenty-one representatives of agriculture as a commission to study this whole farm situation with particular emphasis on the tax problem, and asked our publisher to act as chairman of this commission. The legislative leaders and many of the members come from rural districts and know from first hand knowledge what the problems of the farm are and what should be done, so the legislature is also anxious to do all that it can in cooperation with the Governor to help the New York State farmer.

Of course, farmers should not expect too much. What the State can do to help is, after all, somewhat limited. The most that farmers want, and have a right to expect, is a square deal to agriculture, and it now begins to look as if some of the things we have worked for are going to come true.

To Prevent the "Flu"

WE have just returned from a country neighborhood where influenza is starting to get in its deadly work. This disease is sweeping over the country and attacking thousands of persons. Such epidemics are always worse in the country because it is so much harder to get medical attendance.

Influenza is contagious, and once started, it seems determined to sweep over the country and even become worldwide in its ravages. The first thing to think about in an epidemic of this kind is how to prevent catching it. Of course, the main thing is to keep up your general resistance. Do not get over-tired. Be careful of over-eating, especially of concentrated foods. If at all possible, eat plenty of fruits and vegetables. They are hard to get in the country, and expensive, but they are cheaper than doctor bills. Cabbage is always available on the farm, and apples, oranges and grape fruit are the best kind of medicine. As a preventative also, there is nothing better than cod liver oil. Give it regularly to the children, and take it yourself.

If you are unfortunate enough to get the "flu," go to bed immediately, no matter how hard the work presses. This will not only protect yourself but will protect others. Secondly, call a doctor. The real influenza is too serious to handle by home doctoring. And lastly, take time to get well. The disease is liable to be followed by complications, especially if you get out before you are really well.

What Fertilizers Are You Buying?

THIS is the time of year when most farmers are making plans for the coming season. In these plans we hope you will not forget to give careful thought to your commercial fertilizer needs. There are few, if any, eastern farms where a judicious use of commercial fertilizers will not pay, but it is a distinct waste of money to buy plant food on a hit-or-miss policy. The wrong fertilizers on wrong crops or land are just as wasteful as feeding high priced grain to worthless cows.

New knowledge of fertilizers and their use is coming along fast, and to get the best use of the money you must keep up with this knowledge. Do you know what to buy for your different needs, and why? Professor Blair, in a series of articles now running in AMERICAN AGRICULTURIST, is covering the whole fertilizer situation with particular reference to recent developments. It may save you money to read these articles.

If you want some special information about

your own problems, do not hesitate to write us a letter, or discuss the matter with your County Agricultural Agent, or write any of the reputable fertilizer manufacturers advertising in AMERICAN AGRICULTURIST.

Time for the Winter Harvest

NOT all of the dairyman's harvesting work is confined to summer. Modern production of fluid milk requires a plentiful supply of ice. Some time, artificial refrigeration will be in use on every dairy farm, but until then the hard and disagreeable job of getting in the ice is a necessity.

This is a strange winter and there is no telling what the weather will be in the next few weeks. So we suggest not "to make hay while the sun shines", but to harvest the ice as soon as the first cold spell makes it thick enough.

When You Buy Baby Chicks

IT is probably a conservative statement that more than 50 million chicks will be hatched and started in life on the farms of New York and New Jersey alone this winter and spring. This great number of chicks gives you some conception of the tremendous growth made in the poultry business in recent years. Many poultrymen are making a real success of the business.

One old veteran poultryman stated the other day in our office that he sold over \$30 worth of eggs every day and employed only one man to do the work. He himself is unable to work, but supplied the judgment and the management.

The first big requisite for success of course is to get started right with the right kind of chicks. Of the 50 million chicks hatched for the coming season in these two states probably not more than half of the pullets will pay a profit on their investment.

Therefore, it certainly behooves every poultryman to be sure that he gets the right kind of stock whether he hatches the eggs himself or buys the young chicks from the hatcheries.

How can he be sure? There is no absolutely safe method, but if he hatches the chicks himself, he must be certain that the eggs come from well bred, productive stock. If he buys the chicks, he must make certain that his purchase is made from a well known hatchery which stays in business year after year because it has an honest business reputation to protect.

The columns of AMERICAN AGRICULTURIST carry the advertisements of reputable and honest hatcheries. We guarantee the reliability of all of our advertisers, and you can therefore be certain of a fair deal if you buy your chicks from our advertisers.

Eastman's Chestnut

AN Irishman was newly employed at a lumber office. The proprietors of the company were young men and decided to have some fun with the new Irish hand. Patrick was duly left in charge of the office, with instructions to take all orders which might come in during their absence. Going to a near-by drug store they proceeded to call up the lumber company's office and the following conversation ensued:

"Hello! Is this the East Side Lumber Company?"

"Yes, sir, and what would ye be havin'?"

"Take an order, will you?"

"Sure. That's what I'm here for."

"Please send us up a thousand knotholes."

"What's that?"

"One thousand knotholes."

"Well, now, an' ain't that a bloomin' shame. I'm sorry, but we are just out of them."

"How's that?"

"Just sold them all to the new brewery."

"To the brewery? What do they want with them?"

"By golly, an' they use them for bungholes in barrels!"

News from the Publisher's Farm

Governor ROOSEVELT has announced the appointment of an Agricultural Advisory Commission and has done me the honor of making me Chairman of the same. I am quite hopeful that during the next two years we will be able to do something along constructive lines for the agricultural interests of the State. There is no doubt in anybody's mind that the



present method of levying taxes places an unnecessarily heavy burden on the rural counties. It is also quite obvious that there are real savings to be made to tax payers through the study of county and town government. I wish to take this opportunity to inform our readers that I hope they will write me their suggestions for improvement of agricultural conditions in the State and I promise you that I will do my best to see that they are carried out.

Governor Roosevelt summed up his attitude towards the rural people of this State when he said in his inaugural address, "I want the agricultural problems studied without regard to partisan politics and it is my hope that through appointing an agricultural commission—the Legislature from their recommendations will be able to act favorably and constructively on this most important subject."

"The ultimate goal is that the farmer and his family shall be put on the same level of earning capacity as his fellow American who lives in the city."

* * *

THE squash market advanced between Christmas and New Years to the point where they were paying \$4 a barrel for good Hubbard Squash on the New York market. Some of our

squash began to show signs of decay and I thought it was risky to hold them any longer. Therefore when a commission man offered me \$60 a ton on my farm, I thought it was a good price and I sold them. Our venture in squash this year has proven to be very profitable and we will grow more next year. I wish to caution my fellow farmers that in buying their squash seed that they should be very careful as I found to my surprise that we had four different varieties of Squash growing from seed which we supposed to be the same strain and variety. We found that the New York market wants a smooth dark green Hubbard Squash of medium size. Large size squash are not wanted as the average family in New York City cannot use them.

* * *

FISHKILL TOPSY COLANTHA INKA is the first cow that we have placed on test this winter.

Her sire was DUTCHLAND COLANTHA SIR INKA and her dam was KING SEGIS DEKOL KORNDYKE TOPSY, a 33 lb. four year old. This same cow is the dam of K.K.S.V. Topsy, a 40 lb. three year old. With this good breeding on both the sire's and dam's side, there is little wonder that Fishkill Topsy Colantha Inka is proving to be one of the best cows in our herd. As a three year old she made a Class C record of 14,999 lbs. of milk and 584.4 lbs. butter in 365 days. Now as a six year old she has just completed a record of 545.8 pounds of milk and 29.918 pounds of butter in seven days. We are fortunate in having two daughters of this good cow in our herd and we will watch their development with special interest.

Henry Morgenthau Jr.

He Shook Hands with Lincoln

An Experience at the Inauguration in 1865

THERE are few men now living who can boast that they have talked with Abraham Lincoln and shaken him by the hand, but there is one man in A.A. territory, Mr. Cyrus Fox of Reading, Pennsylvania, who has this distinction. Mr. Fox is an old-time reader of AMERICAN AGRICULTURIST, who, during his long and useful life, has filled many positions of importance and responsibility in the state of Pennsylvania. He is a former secretary of the Pennsylvania Horticultural Society, and for twenty-seven years was secretary of the Berks County Agricultural and Horticultural Society. For twelve years Mr. Fox acted as trustee of the Pennsylvania State College of Agriculture. For nine years he was entomologist of the Pennsylvania Department of Agriculture and was Pennsylvania State pomologist for twenty-five years. At the time of Lincoln's first campaign, Mr. Fox was only thirteen years old, yet he had sufficient interest in politics to organize a juvenile campaign club, which was given the name of the "Young America Wide Awake Club." Mr. Fox says:

"We had no funds wherewith to buy caps and capes for our parade, but we had a transparency made on the front of which was the name of the club. On one side were the names, 'Lincoln and Hamlin'; on another side the words, 'For Governor, Andrew G. Curtin.' On the fourth side was the inscription: 'The Boy Now Lives Who Will be President in 1900.' This was looking far ahead, but William McKinley, who was President in 1900, was living then."

The Young America Wide Awake Club which was organized by Mr. Fox marched in all the Republican parades in Reading in 1860. The club marched at the end of the parade but

were subjected to so many taunts, not to mention clubs and stones which were thrown at them in certain quarters of the city, that they were finally placed in the middle of the procession so they could be protected.

"On the night before election," said Mr. Fox, "I was assigned the irksome task of having Republican ballots placed under the doors of all residences in the city. I organized a corps of assistants, mostly boys well grown up, upon whom I could rely. The tickets were put in envelopes which were labeled 'Union Republican Ticket.' The word 'union' was used because many Democrats were in favor of perpetuating the Union of States and it was believed that they would vote for Lincoln. They were known as War Democrats.

"While I was in the law office of John S. Richards, I wrote several letters for him to President Lincoln, which were invariably honored with replies. One or two of these letters were preserved, but were eventually lost. I wish I had them today. They would be regarded by collectors of Lincoln's letters as of almost priceless value."

The following account of Mr. Fox's visits with Mr. Lincoln was given by him as a part of a talk when he was eighty-one years of age.

"I was not yet 18 years of age when I was in the city of Washington, principally to see the second

inauguration of Lincoln as President. I had not gone into the army, although for months I had looked forward to being enrolled as a drummer boy, as were some of my companions.

"For weeks I had been practicing on a drum and knew all the calls—the tattoo, the advance, etc.

"But my health was poor. The ravages of typhoid fever had had their effect and I was graduated from high school on June 30, 1864, when my weight was but 89 pounds.

Washington Then a Muddy City

"On the 4th of March, I was all set for the inauguration. The morning was damp and cold for it had rained during the night, and up to noon there were occasional downpours.

"The usual inaugural parade took place through the unpleasant wetness and mud. Washington at that time and during a greater part of the war, was the muddiest city in the country. Artillery wagons and supply trucks had cut up the streets. Pennsylvania avenue, leading from the White House to the Capitol, was a veritable sea, or channel of mud. Marshals on horseback, marching clubs and details of soldiers constituted the parade, with bands of music, and under the circumstances, it was a creditable affair.

"A reviewing stand had been erected in front of the Capitol and at the eastern portico, or Senate wing, there was a platform from which Lincoln spoke.

"It was directly after 1 o'clock in the afternoon when he made his appearance before the immense crowd that had gathered.

An Omen of Peace

"The rain had ceased, but the sky was beclouded. Just as Lincoln was finishing his brief inaugural address, a ray of sunlight appeared through a rift in the clouds, and brightened the top of Lincoln's head.

"At the same time a white pigeon flew across the sky and lodged in a corner of the portico above where Lincoln stood.

"Many who saw this incident termed the bird a Dove of Peace, and predicted that the war would soon end.

"I had a good position in the audience to enable me to see all that took place. I had stationed myself there in good time, while it was still raining.

"The first of my personal talks with Lincoln was at the reception at the White House in the evening of March 4, the inauguration.

"Upon reaching the White House doors I fell in line with the throng on the way to greet the President.

"Lincoln was at the head of the stairway on the second floor. Beside him was his wife, Mary Todd Lincoln. Back of him were members of his cabinet.

"As I approached the President, I extended my right hand, which he grasped.

"I then said to him: 'I am from Berks county, Pennsylvania, where your ancestors lived.'"

"'Berks county Pennsylvania,' he replied, repeating my words. 'Yes, I know that my ancestors lived there,' he continued. 'I often have heard of Berks county, but never visited it.'

"The next morning, Sunday, March 5, I was again at the White House. I had lost a glove the night before, on the outside near the entrance.

"Boy-like, I went there, thinking I might find it. Whatsoever small articles had been dropped there were irretrievably lost, for they had been dragged along and trampled in the mud.

"Walking leisurely along I saw suddenly, as I glanced around a tall man, wearing a high silk hat, as he emerged from the White House. I at once recognized him as the President.

"I stopped for a moment, as he came walking towards me.

"He hailed me, and I waited for him to approach.

"'I believe you are the young man,' he commenced, 'who was

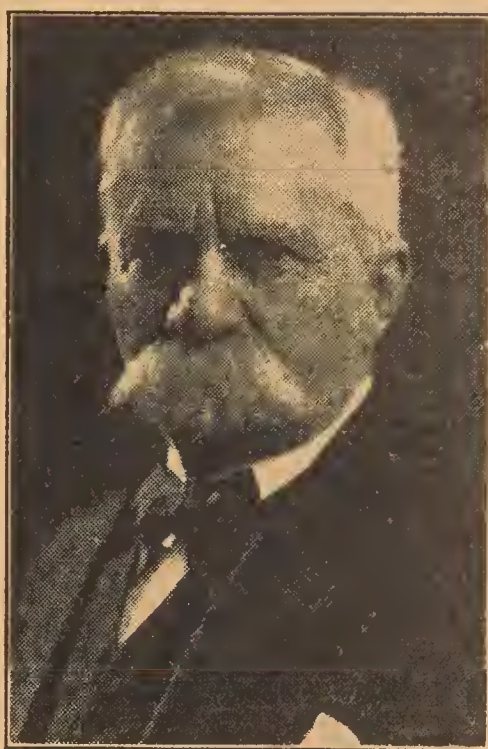
at the reception last night, and said that he was from Berks county, Pennsylvania.'

"That is true, Mr. President,' I said.

"I have heard that my ancestors lived in Berks county,' he said, 'and that some went from there to Virginia, and eventually landed in the Southwest country.'

"I then informed him of what I knew about his

(Continued on Page 26)



Mr. Cyrus Fox of Reading, Pa., who attended the second inaugural of President Lincoln and talked with him.

Feed those hungry TREES

They'll pay you back!

APPLE trees need nitrogen—plenty of it. Feed them Chilean Nitrate of Soda and you will make a larger crop than you ever made before. Better apples. Better shipping quality, too. The little bit you pay for this nitrogen fertilizer is returned to you many times over in increased profits from your orchard.

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In Eastern apple districts 39 demonstrations were conducted by County Agents with 938 trees. 469 trees were fertilized with Chilean Nitrate; 469 trees were not. Here are the results.

Yield from 469 trees (fertilized)	2938½ bu.
Yield from 469 trees (not fertilized)	1765¼ bu.
Gain, due to Chilean Nitrate	1173¼ bu.


Everywhere that fruit crops are grown, Chilean Nitrate is showing profitable increases in yield. Are your trees hungry for nitrogen? Feed them Chilean Nitrate and make some real money.

FREE—a Book on Apple Fertilization

Send for our 16-page illustrated book "How to Fertilize Fruit Trees". It is free. Ask for Book No. 12 or tear out this ad and mail it with your name and address written on the margin.

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EDUCATIONAL BUREAU

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WE will pay \$100 for one bushel of oats grown from any variety of Forrest Seed Oats, provided it wins first prize at the New York State Fair, Syracuse, in 1929. Below we mention two superior, tested oats seeds.

FORREST'S NEW ITHACAN—for twelve successive years one of the best yielders of all varieties and strains tested at Cornell. Kernels white, short and plump; straw stiff and plentiful. Recommended by Cornell to oats growers in New York State and adjacent territory.

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FORREST SEED CO., INC.,

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Forrest Seed Annual
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A.A.'s Western New York Farm and Home Talk

Clearing an Old Orchard

DECEMBER, 1928,
was a most unusual

By M. C. BURRITT

well worth keeping
clearly in our minds,

one—almost no snow and temperatures above freezing the greater part of the month. Those who were so inclined were able to work out doors practically all the month. So



M. C. Burritt

more pruning and cutting of old trees has been done than is usually the case at this time of the year. Considerable plowing was also done during the month, even in the last week. This does not happen once in ten years. The first week in January, however, brought real winter with snow and moderate temperatures.

We have been cutting down some of the very old high Baldwin trees previously mentioned. It is an expensive job. I find, on figuring up, that it has taken nearly nine hours per tree to cut down, trim out, and burn the brush, saw and split the limbs into four to ten foot lengths suitable for handling, and haul the wood to the woodpile ready for the buzz saw. At 40 cents per hour this costs \$3.60 per tree; at 50 cents \$4.50. Forty trees per acre would thus cost from \$124 to \$180 to clear and one would still have the roots and stumps in the ground. Against this cost he could credit two to three cords of wood per tree, worth about three dollars per cord at the farm. But there is only a limited market here for fire wood and one could hardly sell an acre of old trees this way.

Trimming the Old Tree

Pruning the middle-aged trees is not as expensive as one would think. The trees—Baldwins and Kings, about 50 years old—that I have pruned so far this season have taken about an hour and twenty minutes per tree. We have cut out all dead or dying branches, cut from six to ten feet off the tops and thinned out the ends of the branches thoroughly. It requires more time—nearly two hours per tree—to trim out the brush, burn it and haul off the wood. Thus the thorough pruning of these old trees costs from \$1.50 to \$2 per tree.

Old Trees Yield Heavily

At a recent fruit conference Professor G. P. Scoville made a good point

when he pointed out that the age of the tree is not as important as the variety, the height, general growth and condition of the tree. His Niagara County records show that the old trees (30 to 70 years) far out-yield the young trees (5 to 29 years). The old orchards, averaging 33 trees per acre, yielded 172 bushels per acre, while the young orchards, averaging 40 trees per acre, yielded only 66 bushels per acre from 1918-1926. Baldwins and Greenings 30 years and older averaged 5.33 bushels per tree, while the same varieties under 30 years averaged only 1.87 bushel and 1.75 bushel respectively. Old Spy trees yielded 4.82 bushels, 6½ times as much as young Spy trees (.72 bushel per tree). Poor varieties which the market does not want, very high poorly pruned trees in a neglected, run down condition or located on poor soil, are the factors which make an old orchard worthless rather than just age.

Cabbage Market Steady

The cabbage market and price has been fairly well maintained in spite of relatively heavy shipments. During the first part of December, offerings were so heavy that it was hard to sell F. O. B. even though the price was around \$35.00. Gradually the price was crowded down by heavy shipments, largely on consignment, to below \$30.00 per ton. After the 20th, shipments fell off and by the last days of the month the price was back to \$38.00 and \$40.00 again. On the 4th of January we sold a car at \$40.00. Shipments are again heavy, most holders realizing that it is time northern cabbage was moving, especially at such good prices. Southern cabbage from Texas, Florida, Georgia, the Carolinas and even eastern Virginia is now coming on the market from 10 to 20 cars daily. Our cabbage seems to be keeping pretty well.

The children missed the snow and skating during the holidays. The week was so warm and dry that it was hard to think it was really Christmas. On New Year's day, however, we had a good wet snow and the children spent the morning rolling snow balls and making a huge snow totem-pole. Christmas holidays without snow in the north are far from satisfying.—M. C. Burritt, January 6, 1929.

A barrel buried horizontally in the side of a bank may be used to store cabbage and root crops.



COP—Hey, wotsa matter?

HOUSEHOLDER—M' wife's house cleaning. She threw out an old pair o' my pants and I was in 'em!—JUDGE.

S · C · I · E · N · C · E

*the new profit maker
in feeding*



Astronomy is the oldest science—animal nutrition one of the newest

SCIENCE has mapped the heavens, charted the seas, explored the mysteries of the human blood. Its discoveries have been applied to everything about you. The clothes you wear, the paint on your house, the watch in your pocket—all have been bettered in some way by science.

There are two kinds of science. One is creative science. It invents ways to do a given thing better. The other kind is the science of efficiency. It takes the invention of the creative scientist and makes it available to everybody—puts theory into practice.

Both kinds have been applied to the production of feeds. As a result, feeding has become the science of animal nutrition. Feed is no longer “fodder”; it has taken on the language of science.

Proteins, fats, carbohydrates, vitamins and minerals—a few years ago these words would have been so much Greek to the average feeder. Now everybody knows them and uses them when discussing feeds. For they are powerful in profit potentialities.

To keep pace with advanced thought in feeding, experimental farms and laboratories must be maintained by manufacturers who wish to assure customers the maximum in profits.

Out of these laboratories have come many of the most revolutionary practices in present day feeding. For instance, it was The Park & Pollard Company who pioneered dry mash feeding—years ago. The use of Iodol Fish Meal as a dairy feed ingredient is also one of the achievements of this company's experimental staff.

And the value of the colleges and experimental stations in placing feeding on a scientific basis cannot be overestimated. The progressive feed manufacturer realizes their value and cooperates with them to the greatest possible extent. He also maintains a bureau where all the information they supply is collated, sifted and assim-

ilated. This meeting of minds safeguards the consumer.

The manufacturer's laboratory also acts as a protection as well as a creative force. For example: A new formula that looks good on paper may not work out when put to the test. A new ingredient that is resultful in certain formulas may actually do harm when added to others. The only sure way to know is to try. And it is far better for the feed manufacturer to do the testing on his experimental farm and in his own laboratories than for the user to be forced to experiment with the feeds in actual practice.

Men with vision and enthusiasm, authorities on animal nutrition, conduct the experimental work of The Park & Pollard Company. Their work is all part of an organized program that means the ultimate in profits to the consumer. The Park & Pollard idea is to aid the user to plumb the profit possibilities of feeding to the utmost. Park & Pollard feeds, with all the service and science behind them, are an expression of that belief. They help to make dairymen and poultrymen prosperous. By doing so, they make the firm of Park & Pollard prosperous.

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Intermediate Chick Feed &	Stock Feed & Go-Tu-It Pig
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Chick Starter—DAIRY RA-	Feed & P & P Horse Feed &
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Test It Yourself for YIELD-QUALITY PROFITS

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With the A.A. Crop and Vegetable Grower

Growing Early Bunch Onions

I am asking advice concerning the setting of small onions in the fall for green onions next spring. Do you think it would be profitable and when is the time to set them? Will you please give me the culture on this crop.—E.M., New York

EARLY fall, around the first of September, is the time to plant onion sets for spring bunching. The usual variety used for the purpose in the North is the Perennial Trec or Egyptian. This is the one that produces small bulbs on the top of the plant. They are more hardy than the Multipliers or Potato onions and are much earlier than onions from ordinary white or yellow sets planted in the spring. The latter type will not stand the winter.

I would suggest that you also try the White Welsh onions. Seed of these is sown in the spring. They make sufficient development to give bunch onions the following spring and are perennials. They are very hardy, fine appearing and productive. If you do not succeed in getting the seed, let me hear from you and I may be able to help you further.

Good for Roadside Stand Trade

There is not a great deal to be said about the culture of bunch onions. They want well enriched soil of good physical character. The rows may be planted as close together as you find it convenient to cultivate them, say, 15 to 18 inches. Bunch onions grown from ordinary sets are, of course, only good for one year. The Egyptian and Multiplier need to be taken up occasionally and divided or replanted.

The culture of bunch onions is practiced largely by market gardeners and roadside people for local sale. They usually pay pretty well if they are early and attractive in appearance. Preparation for market is rather laborious as the outer skin is usually removed before bunching.—PAUL WORK.

ture many seeds especially if the fertilizer is highly soluble or high concentrated. Experiments show that with many cultivated crops best results are secured by putting the fertilizer in the row but instead of having it above or in contact with the seed to have it at each side of the seed and slightly below it.

Growing Alfalfa on Clay Soil

Will you kindly tell me if my field of six acres of flat clay loam will grow alfalfa and if it would do to sow this month (September) without a nurse crop? If so, will you tell me the amount and the kind to sow if there is more than one kind? If sown this month will it make hay next year? Is there anything to do before sowing? It is oat stubble that I did not seed last spring.

IT is stated that almost any soil will grow alfalfa if certain fundamentals are taken care of, although it is certainly true that some soils will grow it much easier and better than others.

We would not recommend planting at this late date. The best results are secured either by seeding with one bushel of oats or barley usually in the spring or by seeding alone a little later in the season but probably not later than July 1 for your section of the state. From the experiences our readers have given us, we believe that the best results are secured by seeding a nurse crop. The things you need to watch particularly when a crop is seeded are: first, be sure the field is well drained either naturally or by tile drainage; second, be sure that sufficient lime is added to make the proper soil reaction; third, secure a hardy variety of seed and we believe either Ontario Varigated or Grimm has given the best results in New York State. It is best to be sure of the source of your seed when buying it. Fourth—Inoculate the seed.

It might be well to get the advice of the County Farm Bureau Agent as to whether the soil you have is suitable for alfalfa as the personal examination which he will be able to make will tell many things which we cannot tell from your letter.

Color of Soil and Fertility

We have always believed that a black soil is a fertile soil. Is this necessarily true and is there any connection between the color and the value of commercial fertilizer?

DARK colored soils are usually fertile but not always. Dark color indicates a good supply of vegetable matter in the soil and this is one important factor in a fertile soil. This decaying vegetable matter is what gives the black color to muck soils. There is no connection between color and value of commercial fertilizers. Some of the most concentrated forms now on the market are practically without color.

Applying Fertilizer

In general is it best to apply commercial fertilizer in the row or to apply it broadcast?

THE answer to the problem of getting the best results from fertilizer depends on several things, such as the crop to be grown, the amount of fertilizer added and the fertility and condition of the soil.

Any crop of course will develop a root system that will go all through the top layer of the soil so it might be argued that the fertilizer should be broadcast so as to distribute it evenly. However, one of the benefits of fertilizer is to give the crops a good start and to do this the fertilizer needs to be near the seed.

Direct contact of fertilizer will in-

When to Seed Alfalfa

"How late is it advisable to sow alfalfa in New York State?"

THERE are two general methods of seeding alfalfa. Some sow alfalfa with a light seeding of oats or barley in the spring. Others sow late in the summer without a nurse crop. With this latter plan sowing should not be delayed later than early August.

Don't blame the seed beans if there is root rot in the soil.

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Building a Storage House for Apples

I would like some information on building a cellar or storage for apples. I live along Keuka Lake, east side. The farm I work slopes to the west. I have ideal location for a storage house. I would like to know how large I would have to build it to store 2000 bushels of apples in bushel crates. The most of this orchard is on a side hill. It is 18 years old. We have picked 1500 bushels of apples this year. There is plenty of sand and gravel and timber on the farm. About what would it cost. We have sold our apples this year at 75 cents a crate. The party furnishes the crates and draws the apples. They are tree run. Is this a good price?—E. W. E., New York.

THE storage of 2000 bushels of apples in crates would require a building of about 6,400 cu. ft. or 18x36x10. As your orchard is young, however, and is now producing 1500 bushels, I believe that you could well figure on a 4000 bushel storage if you intend to store the entire crop from the orchard in years to come. A house 26x40x10 or other dimensions having approximately a capacity of 10,000 cu. ft. would accommodate that amount of fruit.

As you have sand, gravel, and timber on the farm, undoubtedly your best course would be to construct a concrete house and insulate it well. All things considered, probably ground cord is the most economical insulating material. The cost of erecting a common storage will vary from 50 cents to \$1.50 per bushel of capacity.

Provide Ample Ventilation

In the construction of the storage, provision should be made to have air intakes discharge beneath a false floor and the combined area of these intakes should be roughly 1½ to 2% of the floor space. An outlet flue of good height should have an area of 60 to 65% of the combined inlet area. Such an arrangement will allow a quick change of air to cool the apples on cold nights in the early fall.

Under separate cover we are mailing a bulletin in which you will find the general principles of construction and management of common storage houses.

It is impossible to answer your question as to the fairness of the prices you obtained for your apples without an exact knowledge of variety, quality and condition of fruit. The estimated farm price of apples in New York State for September was \$1.20 per bushel according to the U. S. Department of Agriculture.—PROF. JOSEPH OSKAMP.

Some Fruit Varieties Unsuitable to New Jersey

IN announcing a list of apple and peach varieties that are now economically unsuitable to New Jersey conditions, Prof. M. A. Blake advises both commercial and amateur horticulturists to make no further plantings of certain varieties.

Eastern nurserymen are still selling the nine peach and six apple varieties that are named. They include the Alexander, Captain Ede, Champion, Kal-amazoo, Lemon Cling, Triumph, St. John, Phillip's Cling, and Salwey.

Apples which Professor Blake says should not be planted here include the Liveland Raspberry, Duchess, Early Harvest, Nero, Northwestern Greening, and Red Astrachan.

Several reasons, at least one of which may be applied to all the fruits named, were mentioned as making these varieties valueless in New Jersey. Some of them, it is pointed out, are being supplanted by superior varieties with the result that their commercial demand in the market is lessening. Others are too small in fruit size, lacking in good quality, fail to store well, or are "shy" bearers.



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PURE IRON NOT STEEL

More About Macedonia

Farm Homes There are Grouped in Villages

EDITORS' NOTES—
Mr. Allen's first letter from Macedonia appeared in the

By H. B. ALLEN,
Director of Education, Near
East Relief

issue of January twelfth. If you did not read it then we are sure you will wish to after you have enjoyed the one which follows.

ON MY last trip to Macedonia I had an opportunity to visit some of the smaller villages and to enter several of the peasant homes. In Greece, as in most of the other European countries, the peasants live together in villages. The village home is, therefore, the farm home. People in this part of the world can not understand our manner of living in "isolated" farm homes scattered about over the country-side, and they consider such an economic structure as very provincial and backward. It must be admitted that the village system does offer certain advantages; also several very real disadvantages from the standpoint of efficient farming.

A Visit to a Farm Home

In the village of Vezniko it was necessary for me to see the mayor. We found our man at the coffee house and as we wished to talk over certain matters of business he took us to his home. We walked down several narrow streets bordered by high stone walls, turned in at a wide gate-way, and found ourselves in a good-sized court or yard. Here the farm implements were stored and tobacco was drying in racks standing against the buildings and surrounding walls.

Crossing the yard to the dwelling we ascended an open stairway which brought us to the first floor and into a large balcony or hall, extending the full length of the house and entirely open along the exposed side. Subsequent visits to other homes brought out the fact that the real purpose of this semi-enclosed balcony is to provide a suitable place in which to dry and store tobacco. Even in the better class of homes where the tobacco is dried in the attic or in some special building this characteristic balcony is still found.

One Room to a Family

Opening off from this spacious hallway are the living rooms of the house. Several families frequently live under a single roof and each family occupies one room. In the room we entered there was one bed, a table, two or three small chairs, and a narrow seat around the wall. This wall-seat is frequently used as a bed. There was a small fire-place in the room, but no fire. Very little attempt is made to heat these homes even though the winters are quite cold, and the fire-places are used chiefly for cooking purposes. Wood is scarce and a few sticks are made to go a long way. Some of the homes have no fire-place and the meals are cooked in a basin over a small portable stove called a "mongol". The farm animals stabled on the ground floor provide the pipe-less furnace of the house and are really the chief source of heat in winter.

A Question of Etiquette

Before we left the mayor's house he and his wife insisted on serving us with a "sweet". I had been served with "sweets" before but on this occasion I discovered a new brand. A tray was brought in bearing spoons filled with white candied sugar (so it looked and tasted), and glasses of water. We were each served to a spoon filled with the sweet and, this finished, offered a glass of water. A variation of this custom is to serve spiced cherries to

the guest. Only in this case the tray bears empty spoons, a jar of the cherries, and glasses of water.

On the first occasion, if one has not been previously posted, as was my initial experience, it is more difficult than you imagine to decide what it is proper to do; especially since it is customary for the guest to serve himself first. Having completed our business and enjoyed the sweet we made our departure; but not before the mayor had shown us his attic filled with 3,000 okes (approximately 9,000 lbs.) of fine quality tobacco.

Celebrating a National Holiday

On one occasion, October the 26th, I had the good fortune to observe the peasants in holiday attire commemorating the anniversary of Saint Demetrius, the patron saint of Greece. For centuries this day has been observed by the Greeks as one of the most important events in the church calendar. In 1912, however, the 26th of October received an added significance for on that date the Greek army drove the Turks out of Salonika and recovered Macedonia. Since then the day has been celebrated as one of the important national holidays of the country.

Many of the older inhabitants of Macedonian towns present a distinctly oriental appearance. This may be due perhaps to long contact with Turkish people or in many cases from generations of living in Asia Minor. The men wear baggy trousers the seat of which reaches half way to the ground and the legs fitting tightly at the ankles. The shoes are really "toe slippers" which can be easily slipped off on entering the home. Around the waist the men wear a wide sash generally black but some times colored and always yards in length. They usually have on a black shirt buttoned up to the neck, and a tight fitting jacket which reaches only to the waist. A small hat, somewhat similar to the old Turkish fez, completes the outfit.

The Greek Woman's Dress

The women wear dark full flowing dresses relieved, in the case of young women, with bright colored aprons. Over their heads they fasten black scarfs or small shawls. Maidens who are candidates for marriage wear necklaces of gold discs which seem to be extremely thin and somewhat larger in diameter than a silver dollar. I noticed in some cases that the whole bosom was covered with these gold discs and was told that these were young women who were recently married. I should not neglect to mention that a large proportion of the business men and young people wear the regulation European garb and dress mighty well; in fact the modern Greek is a wonderful dresser—he buys fine clothes when he can't afford food.

The other day when these people were free from their usual cares and duties I noticed that the women were gathered in little groups on the sunny side of the buildings. Here they could be seen, squatting on the ground, apparently gossiping among themselves, and having a pleasant time. The men were all at the coffee houses drinking Turkish coffee and talking politics. The coffee house is a social problem of this country very much as the corner saloon used to be one of the social problems of America.

Farming is one of the most complicated businesses there is. Hard work is necessary but alert, active minds are equally important.

The Story of Nitrogen

(Continued from Page 3)

mechanical condition is not so good as that of nitrate of soda, but efforts are being made to overcome this unfavorable condition.

With these and other concentrated materials, it is now possible to manufacture complete fertilizers carrying 30 to more than 75 pounds of plant food to the hundred pounds of material.

Safe When Rightly Handled

But the question will arise: are the new fertilizers safe to use, and are they as good as the old ones?

It must be admitted in the outset that it will be necessary to use more care in the distribution of the concentrated fertilizers than was required with the old low grade goods. A few pounds of a 2-8-2 spilled in the row would probably do no harm, but the same amount of 15-30-15 would kill any vegetation growing at that particular spot. The all-important problem is that of getting the fertilizer thoroughly mixed with the soil. When this requirement is met, as large applications as are needed may be safely used. Fortunately the farmer of today knows much more about the use of fertilizers than did the farmer of 25 years ago. He knows more of their composition and properties and has a keener appreciation of their value. He can be trusted to handle them with care and judgment. He no longer buys a fertilizer just because it is black or because it has a stronger odor than another brand, but he buys on the guaranteed analysis—the amount of plant food that it contains. Furthermore, the idea of being able to get the amount of actual plant food that he requires, in one-third or one-fourth of the number of tons that he formerly handled, appeals to him strongly.

The manufacturers of distributing machinery are already coming to the aid of the farmer and are putting out drills that will easily handle the smallest amount of concentrated fertilizer that will be required.

The question of the mechanical condition of the new materials has already received a great deal of attention, and manufacturers are rapidly making improvements. Without doubt such difficulties as do exist will eventually be overcome.

Quality is Good

As to the quality of most of these new materials, there is no question. They have been extensively used in many parts of Europe, and experiments have now been successfully carried on over widely separated sections of the United States.

The question has been raised as to what may be the effect of leaving out of the fertilizers made from these new materials, certain elements which are found in small amounts, in some of the old materials, as for example iodine in nitrate of soda, and boron in potash salts.

In answer to this question it may be said that so far, we know very little about the influence of these elements on plant growth, or their possible effect on the food or feeding value of the mature plant. Much patient research must be carried on before any definite statement can be made. Their absence from the new materials may furnish good grounds for academic discussion, but certainly does not give sufficient basis to justify one in refusing to use them.

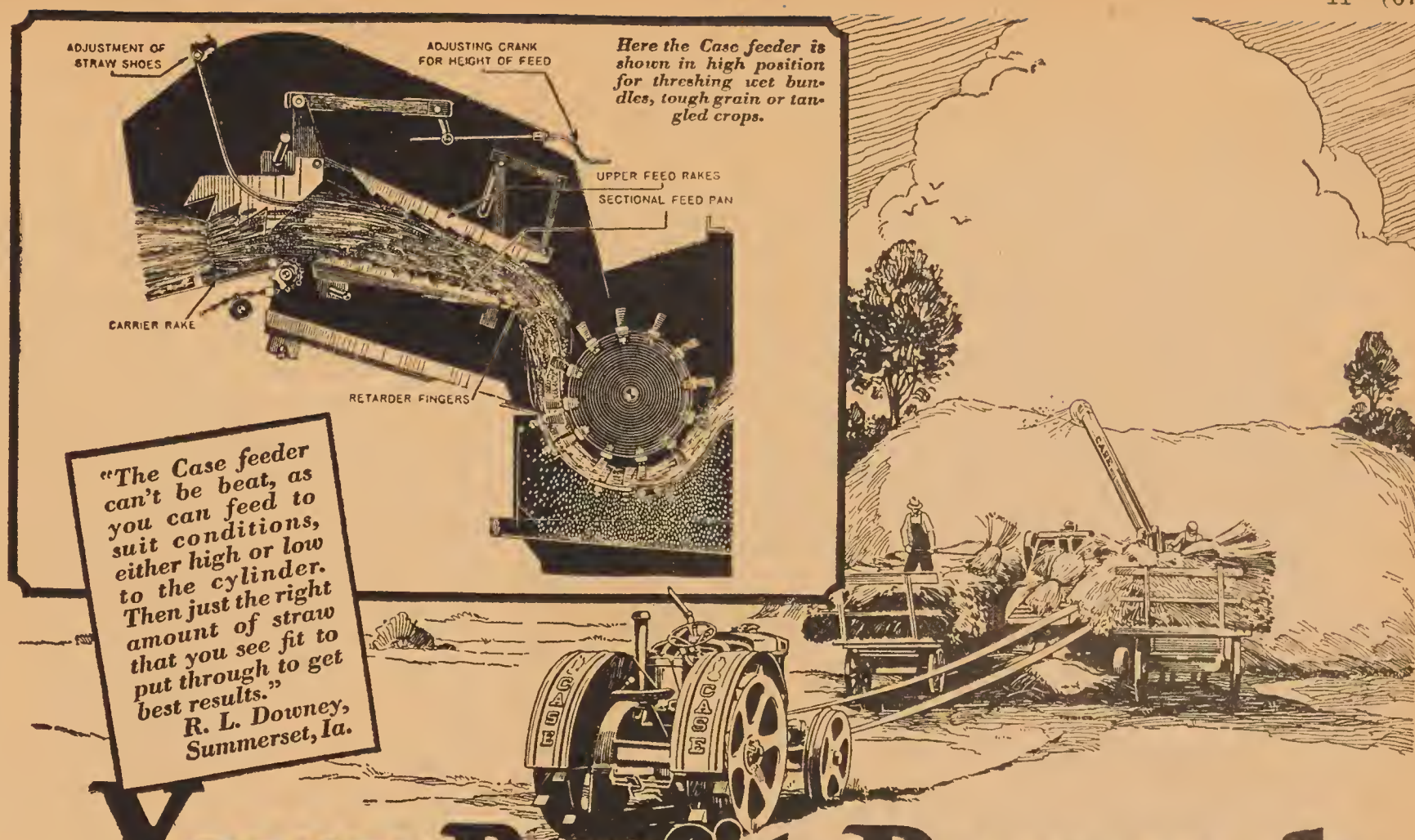
And how will the new materials affect prices?

Competition in the production of atmospheric nitrogen compounds has become very keen. Nitrogen is cheaper today than it was at the beginning of the war, and if competition continues, there is a fair chance that it may be even cheaper. This will undoubtedly mean that the amount used in agriculture will be greatly increased within the next few years. Certainly there are millions of acres of farm land that could be made more productive by the use of larger amounts of nitrogen.

Under farming conditions that have prevailed for the last 25 or 30 years, much land has been badly managed and has had its store of nitrogen and

organic matter seriously depleted; under such treatment it has returned to its owners only a bare existence. In many cases the owners have given up the struggle and sought employment in the industries.

In this connection it may be pointed out that Germany uses about 4 times as much nitrogen per million of population as the United States, and nearly 10 times as many pounds of fertilizer per acre of cropped land, while Holland uses 15 times as many pounds of fertilizer per acre of cropped land. On the other hand it must be admitted that the use of additional nitrogen to all of the land that would give a fair response to such treatment would at once result in disastrous over-production. If the curve of nitrogen consumption is to continue upward, as it should and as it has in recent years, there must be maintained a fair balance between the supply, and



Your Profit Depends on 4 Operations

THE profit to be made from threshing your crops or those of your neighbors depends largely upon how well your thresher performs these four operations: (1) feeding; (2) threshing; (3) separating; (4) cleaning.

Let us discuss the first one here, for feeding is the key job that largely affects the other three.

You want a thresher with a feeder that can be set to feed high or low on the cylinder as conditions may require. High, when the bundles are damp, or the grain is tough or tangled. Low, for dry, easily threshed grain. Only a Case thresher can give you this important and exclusive feature. This adjustment can be easily made while the thresher is running.

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the demand for agricultural products.

Undoubtedly this adjustment could best be maintained by reducing the cost of production of farm products. To do this, however will require that much of the more exhausted lands be allowed to revert to forest, or be allotted for pasture and meadow. When this adjustment is properly made then the amount of fertilizer and especially of nitrogen that may be profitably used per acre of crop land, may be materially increased. Furthermore the fertilization of pasture lands is now a virgin field. With cheaper nitrogen and the ever increasing demand for meat the nitrogen industry should find room for large expansion in this field.

THE following four new books have been added to the series of practical handbooks included in the Farm and Garden Library issued by the Orange

Judd Publishing Company, New York. There are few books intended for the beginner that go so directly to the point and stick to it. Each book contains 128 pages, well illustrated, and owing to their compactness the writers naturally have to be direct.

BUSH FRUIT PRODUCTION by R. A. Van Meter. Covers raspberries, red, black and purple, blackberries and dewberries; currants, gooseberries and that newcomer among cultivated fruits the blueberry, which promises so much for the day, fast approaching when its eccentricities are so well known that they become plain cultural requirements. Propagation growth and care as a garden or field crop, harvesting, marketing, etc.

ROADSIDE MARKETING by G. S. Watts. A complete advisor for everyday use on the marketing of farm and garden products direct to the consumer.

Sheep are good weed killers.

500 Horseless

All Using McCORMICK-DEERING Power

TWO MONTHS AGO we printed the world's first list of horseless farmers. We had just 200 names. Then things began to happen. Letters came flocking in from other horseless farmers all over the United States. Today we have 500, and they keep on coming.

So now we are honoring these first 500 men—trail-makers and leaders in the new age of power farming—by publishing their names in the farm press of the land.

Run your eyes over the long list on the opposite page. Picture the year-around operation and the routine on these half-thousand farms, bearing in mind that *animal power plays no part in it*. These men are successfully handling all their farm work by mechanical means alone. *They are using McCormick-Deering tractor power.*

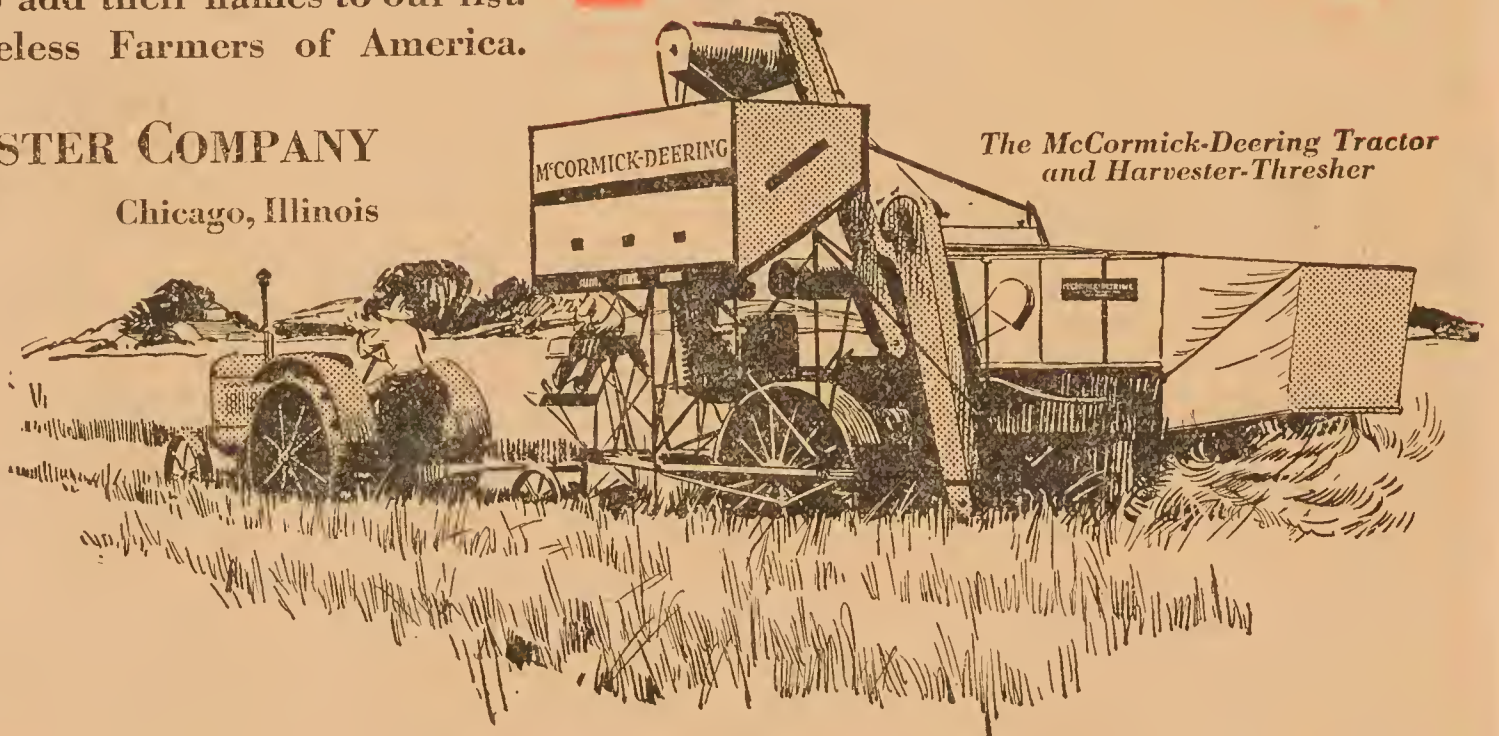
The power farming experience of these men during recent years has prompted them to cut loose completely from methods that have prevailed for generations. They are taking *full* advantage of the capacity, the economy, and the wide range of usefulness in mechanical power. They ride by automobile, haul by motor truck, use a small engine on the light jobs, and the tractor does their field and heavy belt work.

These 500 horseless farmers offer a wealth of evidence of what can be done with tractor power. The list as a whole is a *convincing demonstration* that whatever the type of farm, whatever its size, whatever the section or crop, the high-grade tractor provides the power to carry on every operation in every season.

We want to make as complete a list of McCormick-Deering horseless farmers as possible and we hope the readers of these pages will help us to build it. Thousands of farmers whose main dependence is on tractor power still use some horses at odd jobs for a few days a year. This year many of them will sell their last horses and make full use of McCormick-Deering power, and Farmall power with its perfect adaptability for all power work, *including row-crop handling*. As fast as they do we want to add their names to our list. It is an honor to belong to the Horseless Farmers of America.

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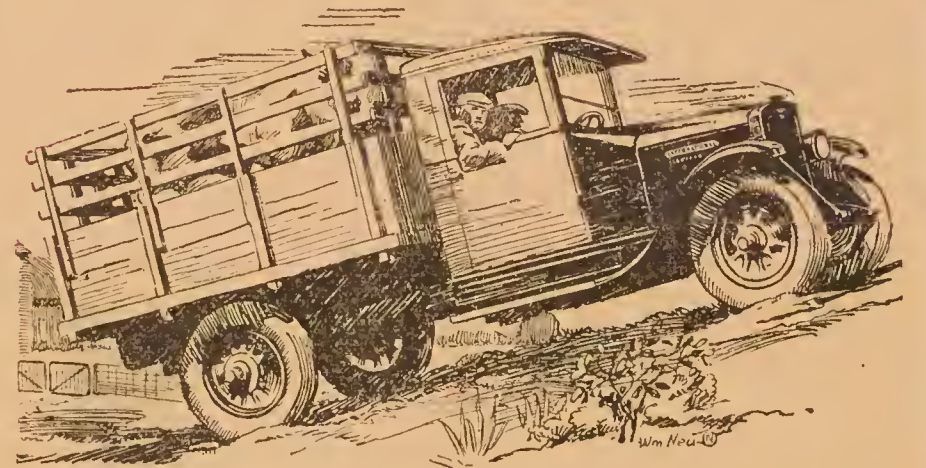
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The McCormick-Deering Tractor and Harvester-Thresher



Cultivating 4 Rows with the Farmall



The New International Six-Speed Special Truck

The three *McCormick-Deering Tractors*—10-20, 15-30, and the Farmall—*International Trucks*, *McCormick-Deering Engines*, and the many other lines of *International Harvester Power Farming Equipment* enable men to farm with greater ease and with more profit. Sold and serviced by *McCormick-Deering dealers everywhere.*

McCORMICK-

Farmers - 500

Leaders in the new age of Mechanical Power

Name	Address	Acres	Type of Farming	Name	Address	Acres	Type of Farming	Name	Address	Acres	Type of Farming	Name	Address	Acres	Type of Farming
Anton Asby	Molt, Mont.	640	Wheat	Ekvall and Gless	Richmond, Tex.	900	Rice	Richard Lee	Hope, N. D.	640	Wheat, Oats, etc.	Ralph Schaff	Ryegate, Mont.	500	General
Henry Abner	El Campo, Tex.	100	Cotton, Row Crops	J. I. Elbin	Cameron, W. Va.	162	Oats, Hay	J. A. Leisner	Ben View, Tex.	160	Dry	G. Schanzenback	Akaska, S. D.	195	Wheat, Corn
E. J. Adams	Crescent, Okla.	80	Wheat, Hay, Corn	L. L. Ellis	Stafford, Tex.	270	Cotton, Potatoes	H. Leppa	Phoenix, Ariz.	20	Citrus Fruits	E. P. Scherlin	Edna, Tex.	105	Cotton, Corn
Adams Realty Co.	Three Forks, Mont.	6000	Wheat	Earl Erbe	Java, S. D.	250	Wheat, Cot'n, etc.	N. E. Lester	Verbest, Ariz.	260	Cotton, Corn	John D. Schlep	Akaska, S. D.	1250	Wheat, Flax, etc.
Allen & Callahan	Rensselaer, Ind.	300	Corn, Onions, etc.	H. B. Everett	Dundee, Tex.	250	Cotton, Wheat, etc.	Fred Lewer	Raymondville, Tex.	300	Cotton, Feed	Harvey Schliep	Forbes, N. D.	325	Wheat, Flax, etc.
C. F. Anson	Hargill, Tex.	240	General					John Lind	Batesland, S. D.	2280	Grain	S. J. Schliep	Forbes, N. D.	255	Wheat, Barley
Arthur Anderson	Danevang, Tex.	80	Cotton, Corn					H. E. Long	Port Lavaca, Tex.	400	Cotton	J. E. Schlottmann	Rdbstown, Tex.	900	Melons, Cotton
Hans T. Anderson	Lyford, Tex.	308	Cotton	Champ Farris	Port Lavaca, Tex.	200	Cotton	Albert Loomis	Broadview, Mont.	1700	Wheat	Enoch Schmidt	Copeland, Kans.	500	Wheat, Kaffir
A. J. Anderson	Lyford, Tex.	308	Cotton	Dewey Fitch	Ord, Nebr.	150	Crops, Live Stock	Roy Lowe	Hobart, Okla.	160	Cotton, Corn	J. J. Schmidt	Pawnee Rock, Kans.	240	Wheat
Tony Anderson	Jamestown, Kans.	450	Wheat	Page, N. D.	Carlisle, Ark.	120	Rice	T. H. Lurker	Louise, Tex.	125	Row Crop	E. T. Schmidtman	Withrow, Wash.	1200	Wheat
V. M. Anderson	El Campo, Tex.	75	Cotton	W. H. Flanagan	Westport, S. D.	360	General	Asa Luthringer	Ganado, Tex.	150	Rice	Joseph Schneider	McFarland, Calif.	600	Cotton
Viggo Anderson	El Campo, Tex.	80	Cotton	Marvin Fleming	Stratford, Tex.	600	Wheat, Maize, etc.				Fred L. Schofstall	Sublette, Kans.	800	Wheat, Corn	
Visbeck Anderson	Danevang, Tex.	100	Row	J. A. Fletcher	Bradshaw, Tex.	165	Cotton, Corn, etc.				Frank Scholtz	Karnes City, Tex.	240	Cotton, Corn, Cane	
M. D. Armstrong	Broadview, Mont.	900	Wheat	Ellis Flick	Pawnee Rock, Kas.	1280	Wheat, Corn				Nic Schuman	Rapelje, Mont.	800	Wheat, Hay, etc.	
Fred Arndt	Roscoe, S. D.	160	Wht, Barley, Corn	C. H. Fonda	Aberdeen, S. D.	640	Grain, Corn, Hay				E. B. Schur	Vernon, Tex.	800	Cotton, Wheat	
S. C. Arnold	Broadview, Mont.	1440	Wheat	Seymour, Tex.	290	Cotton				R. Schuricht	Spalding, Nebr.	320	Corn, Wheat		
Henry Askey	Decatur, Tex.	800	Grain, Corn	Robt. B. Fonville	Port Lavaca, Tex.	1700	Cotton				Joe Schuster	Box Elder, Mont.	480	Wheat, Rye, Oats	
Richard Austin	Metropolis, Ill.	94	General Orchard	J. P. Fowler	Onley Springs, Colo.	680	Corn, Beans				Fred Schwartz	Thorndale, Tex.	90	Cotton	
E. R. Avery	Three Forks, Mont.	1830	Wheat	Taylor Fox	Pawnee Rock, Kans.	350	Wheat				Walter Scoon	Modesto, Calif.	916	Grain	
Geo. Axvig	Havre, Mont.	1920	Wheat	Forrest Frick	Bakersfield, Calif.	450	Cotton				Carl Scott	Ford, Kans.	380	Wheat	
				J. H. Fulmer	Nazareth, Pa.	625	General				Clark J. Scott	Hallowell, Kans.	160	Oats, Wheat	
											M. T. Scroggin	Cozad, Nebr.	640	Corn, Wheat	
G. M. Bacon Co.	Putney, Ga.	700	Pecans								Seagley Bros.	Topeka, Ind.	215	General	
Koy Bain	Newkirk, Okla.	160	Corn, Wheat	Reggie Garrett	Amherst, S. D.	640	Dairying, etc.				H. B. Shaffer	Hobart, Okla.	160	Cotton, Feed	
J. A. Banfield	El Campo, Tex.	280	Cotton, Rice	Oscar Gartner	Hooker, Okla.	480	Wheat, Wheat				John E. Shafer	Pierce, Colo.	1280	Wheat	
John Bard	El Campo, Tex.	125	Cotton, Cotton, Cane	Frank Gibson	Oakdale, Calif.	40	Orchard				C. D. Shane	Winfield, Kans.	500	Wheat, Oats	
Luther Bard	El Campo, Tex.	100	Cotton	I. W. Gibson	Kimball, Nebr.	1400	Wheat				John Shannon	Crandall, S. D.	620	Grain, Corn, Hay	
Ross Barnard	Otis, Colo.	680	Dry, Wheat, Corn	W. J. Gibson	Wilcox, Ark.	265	Cotton, Corn, Hay				George Sharp	Three Forks, Mont.	1200	Wheat only	
Elmer Barnes	Craigmont, Idaho	350	Wheat	J. C. Gideous	Karnes City, Tex.	600	General				J. K. Shaughnessy	Pomfret Ctr., Conn.	400	Corn, etc.	
J. Barnes	Waterville, Wash.	4800	Cotton, Corn	W. J. Giese	Power, Mont.	640	Grain				Oscar Shult	El Campo, Tex.	240	Cotton, Corn	
Max Baroch	Three Rivers, Tex.	120	Cotton, Corn	D. E. Gilbert	Kildare, Okla.	480	Wheat, Oats				Sam Shult	El Campo, Tex.	130	Cotton	
Valarian Bartin	Ross Fork, Mont.	1000	Wheat	Wm. Goetting	Bowdle, S. D.	700	Wheat, Flax				Chas. Shultz	El Campo, Tex.	650	Rice	
Geo. Bauer	El Campo, Tex.	200	Cotton, Corn	Arthur Goff	Port Lavaca, Tex.	250	Cotton				Floyd Skiles	Kimball, Nebr.	320	Wheat, Potatoes	
Becker Bros.	Hackettstown, N. J.	450	Grain, Corn	Nephi, Utah	500	Wheat				Elmer Slagerman	Bathgate, N. D.	240	Wheat, Flax, etc.		
Austin Belcher	Moore, Mont.	1500	Small Grain	J. T. Grant	Arco, Miss.	80	Corn, Cotton				Frank Slama	Milton, N. D.	420	Grain	
Rex Bell	Forman, N. D.	300	Wheat, Flax, etc.	R. L. Grant	Kanorado, Kans.	450	Wheat, Corn, etc.				J. C. Sliger	Karnes City, Tex.	90	Cotton, Corn, etc.	
Howard Benton	Norcut, Kans.	600	Wheat, Corn	Abbott, Tex.	225	Oats, Corn, Cotton				Howard Smedley	E. Lansing, Mich.	100	Wheat, Oats, Hay		
John Berg	Akaska, S. D.	500	Wheat, Flax, etc.	E. R. Greenhill	Arriba, Colo.	800	Wheat, Barley				Gilbert Smelzer	Trail City, S. D.	600	Wheat, Corn, etc.	
Berghoff & Benson	Lawton, N. D.	480	Wheat	Chas. Griffin	Long Mott, Tex.	400	Cotton				Binger, Okla.	280	Cotton, Corn		
John Bergman	Power, Mont.	640	Wheat	Gumm Bros.	Long Mott, Tex.	500	Cotton				F. A. Smith	Tower City, N. D.	1000	Grain	
Bergstrom & Bergstrom	El Campo, Tex.	225	Cotton	Ole Gunderson	Power, Mont.	800	Wheat				H. R. Smith	Luling, Tex.	500	Cotton	
L. Bergstrom	El Campo, Tex.	100	Cotton	Ludwig Gundhammer	Roscoe, S. D.	220	General				Max Smith	Kimball, Nebr.	1210	Wheat	
W. L. Bergstrom	Lyford, Tex.	160	Cotton, Corn, Cane								W. D. Smith	Lakota, N. D.	640	Grain, etc.	
Leland T. Betry	Bronson, Kans.	60	Row Crop	Sig Hagen	Lawton, N. D.	400	Wht, Barley, Oats				John Sneaker	Lebo, Tex.	160	Wheat, Oats	
Bissell & Robinson	Flower, Mont.	3100	Wheat, Oats	Earl Halcro	Power, Mont.	850	Wheat				Chas. Snodgrass	Three Forks, Mont.	440	Wheat	
C. J. Bjorklund	Bowman, N. D.	1200	Wheat, etc.	Thomas Halcro, Jr.	Power, Mont.	500	Wheat, Oats				B. H. Socolofsky	Plaza, N. D.	300	Wheat, Flax	
E. T. Bodengun	Hahn, Tex.	175	Rice	Andrew Haller	Woodrow, Colo.	1600	Wht, Corn, Beans				Ole Solen	Port Lavaca, Tex.	240	Cotton	
E. T. Boone	Modesto, Calif.	20	Peaches	J. C. Halsell	El Campo, Tex.	150	Cotton, Corn, etc.				J. H. Sorenson	Elm Creek, Nebr.	550	Grain, Corn, Hay	
Noah Boone	Coffee Creek, Mont.	520	Wheat	O. B. Hammon	Fletcher, Okla.	400	General				Chester Spencer	Ganado, Tex.	300	Rice	
Booth Bros.	LaPlant, S. D.	1250	Grain	A. W. Hanna	Idalia, Colo.	800	Wheat, Corn				E. H. Sprague	Waterloo, Nebr.	400	General	
Samuel Bosanko	Leola, S. D.	500	Small Grain	Harold Hansen	El Campo, Tex.	80	Dry Cotton				Zed Sprout	Copeland, Kans.	960	Wheat	
Frank Boyd	Fowler, Kans.	320	Wheat, Barley, etc.	Henry Hansen	Avoca, Tex.	140	Cotton, Corn				Clyde Stage	Clearfield, Pa.	100	Grain & Potatoes	
R. H. Bracken	Nephi, Utah	200	Dry	John Hansen	Barnard, S. D.	240	Corn, Small Grain				Henry W. Staiger	Coudersport, Pa.	150	Potatoes, Hay	
Brady Bros.	Southampton, N. Y.	48	Potatoes, Wheat	Alfred Hanson	Rosholt, S. D.	160	Wheat, Corn				Albert A. Stark	Glendive, Mont.	640	Wheat, Flax	
M. Braun	Mellette, S. D.	480	Wheat, Clover	Haakum Hanson	Gettysburg, S. D.	45	Flax				E. L. Stauffer	Elgin, Okla.	500	Grain, Row Crop	
M. S. Brecheisa	Welda, Kans.	900	Corn, Wheat, Oats	J. C. Hanson	Murdock, Minn.	240	Oats, Corn, etc.				Fred Stephen	El Campo, Tex.	160	Cotton, Corn, Cane	
Frank Broadbent	Leola, S. D.	300	Wheat, Barley	John W. Harkins	St. Francis, Kans.	800	Wheat				Charley Stevenson	Port Lavaca, Tex.	240	Cot'n & Little Corn	
Paul Bryant	Parshall, N. D.	1600	Grain	Chas. Harland	Frankfort, Kans.	400	Corn, Grain, Hay				C. W. Stevens	Catarina, Tex.	400	General	
W. E. Bryan	Firstview, Colo.	640	Grain	Harry Harris	Riverside, Calif.	70	Oranges, Lemons				Howard Stewart	Mansfield, S. D.	320	Diversified	
Ray Bryant	Moore, Mont.	800	Wheat, Barley	W. J. Harris	Sylvester, Tex.	400	Cotton, Maize				Alvin Stimput	Kingsdown, Kans.	372	Wheat	
Col. Dale Bumstead	Phoenix, Ariz.	1190	Fruit, Alfalfa	Edwin Hasckew	Wilmore, Ark.	100	Cotton, Corn				E. C. Stockton	Port Lavaca, Tex.	200	Cotton, Corn	
Jim Burdett	Richmond, Tex.	419	Rice	Cloyd Hastings	Atwood, Kans.	640	Wheat, Corn, etc.				August Stoeker	Hosmer, S. D.	425	Wht, Barley, Flax	
N. Burkholz	Warden, Wash.	1600	Wheat	H. T. Hayman	Formoso, Kans.	220	Wheat				H. W. Stoutenburg	Hysham, Mont.	1800	Wheat, Row Crop	
John Burstrom	El Campo, Tex.	160	Rice	Chas. Heacox	Clyde Park, Mont.	640	Wheat				Miles, Tex.	200	Cotton, Feed		
J. A. Butler	Nunn, Colo.	240	Row Crop	Fred Heath	Coldwater, Kans.	800	Wheat, Flax, Corn				C. F. Stumpff	Lewistown, Pa.	100	General	
				Clyde Heft	Greenwood, Wis.	280	Corn, Oats, Hay				Ed. Svee	Wheat Basin, Mont.	700	Wheat	
Wm. Campbell	Denton, Mont.	320	Wheat, Barley	Fred Heibel	Broadview, Mont.	1280	Wht, Oats, Barley				C. Swanson & Sons	El Campo, Tex.	800	Rice, Cotton	
Oscar Carpenter	Stephens, Minn.	420	Wheat, Barley, etc.	K. T. Heiselman	Miles, Tex.	150	Cotton, Corn				A. M. G. Swenson	Lueders, Tex.	200	Cotton, Corn, etc.	
D. J. Carrison	Bolingbroke, Ga.	300	Wheat, Soy Beans	Charles Helwig	Sublette, Kans.	800	Mostly Wheat				C. A. Swenson	Kenedy, Tex.	200	Row Crop	
L. M. Carter	Port Lavaca, Tex.	300	Cotton	Earl Henderson	Broadview, Mont.	2000	Wheat								
Louis Carter	Port Lavaca, Tex.	300	Cotton	Robert Henderson	Charlo, Mont.	800	Wheat, Barley								
A. L. Casper	Edna, Tex.	126	Corn, Cotton	Geo. W. Henning	Westhope, N. D.	1200	Grain								
Cassell Bros.	Long Mott, Tex.	455	Cotton	Howard Henry	Shiromanstown, Pa.	30	Sweet Corn								
R. M. Chamberlain	Coffee Creek, Mont.	430	Wheat	I. C. Hess	Larned, Kans.	1000	Wheat								
Ralph Chamberlain	Mobridge, S. D.	1300	Small Grain	Harold Heuson	Mansfield, Wash.	1280	Wheat								
H. E. Chappell	Plains, Kans.	1120	Wheat	Julius Heyer	El Campo, Tex.	180	Cotton, Rice								
R. O. Chappell	Montezuma, Kan.	640	Wheat	Grady Hicky	Lawton, N. D.	720	Wheat								
D. U. Cheney	Spring Hill, Kans.	41	Sheep, Poultry	J. W. Hicks	Ryegate, Mont.	1500	Wheat								
C. H. Christensen	Levan, Utah	240	Wheat	Claude Hill	Douglas, Wash.	1280	Wheat								
Martin Christenson	Richmond, Tex.	450	Rice	Ted Hinderer	Phoenix, Ariz.	20	Orange Grove								
Churban Bros.	Richmond, Tex.	500	Rice	Geo. Hinton	Lasara, Tex.	120	Cotton, Truck								
B. T. Clark	Hahn, Tex.	170	Rice	A. Hocksprung	Julesburg, Colo.	2100	Wheat								
G. N. Cobb	Richmond, Tex.	300	Rice	H. H. Hodges	Lincoln, Ala.	160	Cotton, Corn, Hay								
N. E. Coker	Port Lavaca, Tex.	233	Four Row	M. Hollingsworth	Miles, Tex.	100	Cotton, Cane, etc.								
Clarence Cole	Spearsville, Kans.	1100	Wheat	Rudolph Holtz	Dresden, N. D.	480	Wht, Oats, Barley								
F. S. Cole	Omro, Wis.	80	Corn, Grain, Hay	E. Houdmann	George West, Tex.	240	Cotton, Corn, etc.								
Thos. Cole	Jetmore, Kans.	850	Wheat, Cattle	A. Houts	Hargill, Tex.	160	Row Crop								
Grover Coleman	Lewistown, Mont.	1040	Wheat	F. H. Howard	Barnard, S. D.	160	Diversified								
Percy Coney	Ridgeview, S. D.	540	Small Grain	E. Hubbard	Norwich, Conn.	300	Orchard								
Frank Conley	Harlowton, Mont.	800	Wheat	J. H. Hubert	Hosmer, S. D.	230	Wheat, Flax, etc.								
Whit Conrad	Fowler, Kans.	480	Wheat, etc.	E. & W. Huber	Marion, Ill.	80	Fruit								
Fred Cook	Seneca, S. D.	400	Wheat, Rye, Flax	Chas. Hughes	Kimball, Nebr.	3000	General								
Sam Cook	Mabank, Tex.	142	Row Crop												
Fred Cosman	Jetmore, Kans.	2080	Wheat, Forage	Jackson Brothers	Richmond, Tex.	700	Rice								
Dock Cosper	Edna, Tex.	55	Cotton, Corn	Bob Jackson	Carrollton, Mo.	100	Wheat								
Claud D. Cotton	Miles, Tex.	200	Cotton, Maize, etc.	Charles Jeske	Warden, Wash.	1000	General Grain								
Warren Courtney	Guelph, N. D.	400	Oats, Barley, Cot'n	Ed Jeske	Warden, Wash.	1000	Wheat								
C. M. Cox	Waco, Tex.	500	Corn, Oats	Edwin Jobe	Covina, Calif.	100	Oranges								
J. B. Cox	Jefferson, Iowa	240	Corn, Oats	Albin Johnson	Christine, N. D.	160	Wheat, Rye, Corn								
C. Rex Carpet Co.	Grantsburg, Wis.	3000	Wheat, Barley	Bert Johnson	Spearsville, Kans.	720	Wheat								
Harvey Crow	Oakdale, Calif.	1600	General	O. S. Johnson	Lyford, Tex.	150	Cotton, Corn, Cane								
Dillard Croton	La Cygne, Kans.	160	General	Orion E. Jones	Lyford, Tex.	90	Cotton								
G. B. Crutchfield	Mer Rouge, La.	120	Row Crop	R. S. Jones	Acton, Mont.	1100	Wheat, Corn, Hay								
				A. Jydstrup	Crowell, Ala.	380	Cotton, Corn, Hay								
Blakey Dane	Burdette, Kans.	550	Wheat	Elmer Kainer	El Campo, Tex.	100	Cotton								

Reviewing the Latest Eastern Markets

Milk Prices

The following are the January prices for milk in the basic zone of 201-210 miles from New York City.

Dairymen's League prices are based on milk testing 3.5%. Sheffield on the basis of 3%.

Class	Dairymen's League	Sheffield Producers
1 Fluid Milk....	3.42	3.17
2 Fluid Cream		2.30
2A Fluid Cream	2.46	
2B Cond. Milk..		
Soft Cheese....	2.71	
3 Evap. Cond. Milk Powder		2.30
Hard Cheese	3.00	
4 Butter and American cheese. Based on New York City Market quotations on butter and American cheese.		

The Class 1 League price for January 1928 was \$3.37 for 3.5% milk and Sheffield's \$3.27 for 3%.

The above prices in each class are not the final prices the farmer receives. The final price received from the dealer is the result of the weighted average.

December Prices Announced

The Dairymen's League announces the following pool prices for December for 3.5% milk.

Gross	\$3.10
Expenses .....	.06
Net Pool	3.04
Certificates of Indebtedness.....	.10
Net Cash Price to Farmers.....	\$2.94

Dec. 1927, Net CASH Price, 3.5% milk.....	\$2.89
Dec. 1927, Net POOL Price, 3.5% milk.....	\$2.99
Dec. 1926, Net CASH Price, 3.5% milk.....	\$2.70
Dec. 1926, Net POOL Price, 3.5% Milk.....	\$2.80
Dec. 1925, Net CASH Price, 3.5% milk.....	\$2.43
Dec. 1925, Net POOL Price, 3.5% milk.....	\$2.33

The Sheffield Producers announce the cash price to producers for 3% milk in the 201-210 mile zone, as \$2.95 per hundred, (\$3.13 for 3.5% milk).

Dec. 1927 price to producer, 3% milk, 3.00; 3.5%, 3.20	
Dec. 1926 price to producer, 3% milk, 2.75; 3.5%, 2.94	
Dec. 1925 price to producer, 3% milk, 2.67; 3.5%, 2.87	

Butter Gains Then Slips Again

CREAMERY	Jan. 9	Jan. 2	Jan. 11, 1928
SALTED			
Higher than extra....	48 3/4-49 1/2	49 -49 1/2	49 1/2-50
Extra (92sc).....	48 1/4-48 1/2	48 1/2 -	49 -
84-91 score.....	44 1/2-48	44 -48	41 -48 1/2
Lower Grades.....	43 -44	43 -43 1/2	40 -40 1/2

Shortly after our report of last week was written, the butter market developed a half cent advance and a generally better tone, in spite of the heavy receipts coming into New York after having been diverted from Chicago. On Monday, the 7th, prices continued to hold but the demand was rather disturbing, there being very little buying on the part of outsiders, and the regular trade only took its usual complement. On the 8th, pressure to sell developed and in the face of a small response on the part of the buying trade, the market retreated a half cent per pound. Even with that reduction the demand was still sluggish. There seems to be no question that consumption is falling off. At the same time fresh goods are in slightly freer supply, with the result that there is some surplus stock sufficiently in evidence here and there to make the selling interests apprehensive.

As we see it, the tone is actually weak, due to the sluggish trading mentioned above, and these disturbing accumulations here and there. Naturally in face of the more limited demand, buyers are operating with extreme caution, confining their activities to immediate trade needs. This is limiting the volume of business and gives the buyers a still better advantage. As it appears to the writer, it would not

be surprising to see a slightly farther retreat.

According to the Producers' Price Current, the withdrawals from cold storage from Dec. 28 to Jan. 4 in the four largest cities were a shade over a million pounds less than a year ago.

Cheese Market Holds Steady

STATE FLATS	Jan. 9	Jan. 2	Jan. 11, 1928
Fresh Fancy	27 1/2-29	25 1/2-27	
Fresh Average.....			
Held Fancy	25 1/2-27	27 1/2-29	29 -29 1/2
Held Average			

The cheese market is playing the same tune that we have reported for several weeks past. Cured cheese is enjoying a good demand which holds the prices on that commodity steady. Stock is moving rather freer from cold storage. From December 21st to January 3rd, cold storage holdings were reduced slightly over 600,000 pounds. Whereas during the same period a year ago stocks were reduced approximately 383,000 pounds.

The make of fresh cheese is light. Some recent makes of New York State flats have been offered at 25 1/2c to 26c, although where any pet brand is considered, the price quickly goes up to 27c.

On the whole, considering reserves, trading needs, and the make, the cheese market is in a good condition. The fluid market is taking a great deal of the milk that formerly went into the manufactured products and this is holding the make in a desirable limit.

Full Supplies Cut Egg Prices

NEARBY WHITE	Jan. 9	Jan. 2	Jan. 11, 1928
Hen's Sel. Extras....	45-46	46-47	57-58
Hen's Av'ge Extras....	42-44	44-45	55-56
Extra Firsts.....	30-41	30-42	53-54
Firsts	26-39	28-40	51-52
Undergrades	25-	26-27	49
Pullets	35-36	35-38	45-47
Pewees	30-33	30-33	39-
NEARBY BROWNS			
Hennery	46-	47-48	57-58
Gathered	27-45	28-46	56

On January 9th, the receipts of fresh eggs were so heavy that the market was unable to maintain the prices we quoted last week, with the exception of a few extras. The critical buyers are getting slightly better selections for the prices quoted. The change was somewhat unexpected in some quarters for the market has been holding comparatively steady since last week's report. On the 8th it looked as though some selections would enjoy a slight advance, but the trade is in no condition at this time to handle heavy supplies. Browns have been running in a rather heavier, and it is only rare that we hear of sales at 46c, stocks not moving very freely at that figure.

This situation may change with the advent of heavier weather on the tenth, especially if it were to turn colder. The weather element is quite strong in the egg market and with the rapidly changing conditions it is extremely hazardous to make any statement as to the trend. In most of the producing sections we have been having unusually milder weather and hens have been functioning under full pressure. The snow and rain that we are now having will undoubtedly serve to check the lay to some extent, and at the same time bolster up the demand.

Live Fowls Meeting Excellent Demand

FOWLS	Jan. 9	Jan. 2	Jan. 11, 1928
Colored	40	35-	34-36
Leghorn	35	35-	31-33
CHICKENS			
Colored	32-40	35-37	27-35
Leghorn	32-34	32-35	22-26
BROILERS			
Colored	33-40	42-50	35-40
Leghorn	33-36		28-31
CAPONS	42-45	45-50	40-45
TURKEYS		25-30	30-45
DUCKS, Nearby	30-32	31-32	29-33
GESE	25-30	25-28	28-31

There has been an abnormally heavy demand for good live fowls and this has served to absorb the free supplies of those lines. Under ordinary conditions the excess supplies would apparently be more than sufficient for the trade, even to the point of cutting down somewhat on the price. But buyers are out in full force and bidding for goods. The market on broilers is

slow, but the supplies are limited and the market remains nominal. Chickens are working out satisfactorily, but they may slip later, for cars that are due from the West later in the week are said to contain a large proportion of chickens. On the whole, the live poultry market is good.

Ducks are selling well, although it looks as though heavier shipments of Long Islands will create a slightly easier condition.

Meats and Live Stock

Live veals are still ranging as high as \$19.50, but the price is extreme for primes, \$19 being more common. The market is slow when we get into the lower grades, and prices range anywhere from \$12 to \$18.50. Some culls have been sold as low as \$10. Calves (excluding home milk feds) are steady. Some choice selling at \$13.50, others ranging down as low as \$16.50 for culls.

The steer market is irregular. A few choice are bringing \$14.35, but

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trade is very limited at that figure, \$14 being more like a firm top of the market.

Bulls are steady. A few good ones are bringing \$9.75 with mediums anywhere from \$8.50 to \$9.50, and commons \$7.25 to \$8.25.

The market for dairy cows is fairly steady. A few are bringing \$8.75, which is \$1 over bulls. Common to medium stock from \$6.75 to \$8. While low cuts sell from \$6.75 to \$4. Reactors are still from \$5 to \$8.

The lamb market is booming right along, meeting an active demand with choice stock ranging \$15.75 and ordinary goods \$15. Anything that would be classed as medium ranges from \$12.50 to \$13.50. Culls and commons range from \$10 to \$12.

Hogs weighing from 170 to 220 pounds are bringing the best money, ranging from \$9.75 to \$10. The best of those weigh from 140 to 160 pounds and bring from \$9.55 to \$9.80, while light weights ranging from 85 to 130 pounds are quoted at \$9.25 to \$9.50.

Rabbits continue quiet with prices ranging from 25c to 30c per pound.

Potatoes Gain Another Peg

STATE	Jan. 9	Jan. 2	Jan. 11, 1928
150 lb. sack....	1.75-1.90	1.75-1.85	
Bulk, 180 lbs.	2.00-2.25	2.00-2.15	
MAINE			
150 lb. sack....	2.00-2.15	2.00-2.10	3.00-3.25
Bulk, 180 lbs.	2.35-2.50	2.35-2.50	3.50-3.85
PENNA.			
150 lb. sack			
No. 1			
Bulk, 180 lbs.	2.00-2.25	2.00-2.15	
LONG ISLAND			
150 lb. sack			
No. 1	2.35-2.75	2.25-2.50	3.50-3.75
Bulk, 180 lbs.	2.85-3.15	2.85-3.10	4.00-4.50

The potato market has advanced another shade and once more we urge caution on the part of shippers to keep consignments within a reasonable limit. The heavier weather that struck the metropolitan district on the tenth was expected to help trade to some extent. Practically all lines are improved in one way or another.

Notes on the Fruit and Vegetable Trade

Cabbage has not been enjoying as much demand of late, the call being rather light. Bulk goods are keeping a wide range, in some instances \$50 is being paid, although the range runs considerably under this, depending on the quality and character of the stock.

Carrots hold steady, although trade is nothing to get excited about. Washed goods are bringing from \$1.75 to \$2.25 a basket. Rough sells from 50c to 75c lower. Carrots in sacks are

bringing from \$2.50 to \$3 per hundred.

The squash market is, as we expected, higher. Hubbards bring from \$3.50 to \$4 a barrel. Pumpkins have been scarce. It is almost impossible to obtain them, except on special order. During the holidays we tried to get some fresh pumpkins in one of New York's suburbs and we were told that there were "none on the market."

The apple market is moving along fairly. Offers of the barrel and basket goods under top notch have been moving rather slowly. There seems to be very few fancy Baldwins offered. The top best on such is \$6 per barrel. Greenings are selling anywhere from \$2.75 to \$7.50. Kings range about \$5.50, with McIntosh as high as \$12, although some of the very poor stock bring \$4.50. Most of the McIntosh are bringing from \$10 to \$11. York Imperials are bringing from \$3.50 to \$5, while Spies range from \$3 to \$8.

Pea Beans Higher

Pea beans have made an advance. Supplies are rather limited of late and figures have strengthened proportionately. Common to fair goods now bring from \$9.75 to \$10. Anything that is best bring \$10.25. Marrows still appear the same. Average size range from \$9.75 to \$10.50. The best jumbos range as high as \$12.50.

Red Kidneys still keep the same range of \$8 to \$8.75.

Feeds and Grains

FUTURES	Jan. 9	Jan. 2	Jan. 11, 1928
(At Chicago)			
Wheat (Mar.)	1.16 1/2	1.16 1/4	
Corn (Mar.) .....	.88 1/4	.87 3/4	1.28 3/4
Oats (Mar.) .....	.49 1/8	.47 1/2	.87 3/4
CASH GRAINS			
(At New York)			
Wheat, No. 2 Red	1.54 3/4	1.54 1/2	1.53 1/4
Corn, No. 2 Yel..	1.09 1/8	1.04 1/2	1.06 1/4
Oats, No. 2.....	.60	.59	.66
FEEDS	Jan. 5	Dec. 29, 1928	Jan. 7, 1928
(At Buffalo)			
Grade Oats	37.50	37.50	36.50
Spring Bran	34.50	34.50	35.00
Hard Bran	37.00	37.00	37.00
Standard Mids	34.50	34.50	34.50
Soft W. Mids	43.00	43.00	43.00
Flour Mids	39.00	39.00	39.50
Red Dog	42.00	42.00	41.00
Wh. Hominy	39.00	39.00	41.50
Yel. Hominy	38.50	38.50	38.00
Corn Meal	38.50	38.50	37.50
Gluten Feed			40.50
Gluten Meal			50.00
36% C. S. Meal	46.50	46.50	44.50
41% C. S. Meal	51.00	51.00	49.00
43% C. S. Meal	53.00	53.00	52.00
34% O. P. Linseed Meal	58.50	58.50	48.00

The above quotations are those of the local Buffalo market and are F. O. B. They are reported in the weekly letter of the N. Y. State Department of Agriculture and Markets.

To Take World Census of Agriculture

PLANS are under way whereby the International Institute of Agriculture will take a world's census of agriculture in 1930. Mr. Leon Estabrook, formerly of the U. S. Department of Agriculture and now director of the census for the Institute, is at present in this country on his way to South America where he will finish his survey of world agriculture preliminary to making the census. This census is expected to cover more than 99 per cent of the world's agriculture.

New York State Holstein Makes Fine Record

BUTTER GIRL PONTIAC BEAUTY 1015633 owned by Harry Yates, Orchard Park, N. Y. has closed a 365-day test and according to H. W. Norton, Jr., Superintendent of Advanced Registry, of the Holstein-Friesian Association of America, Delavan, Wis., is credited with 30,251.5 pounds of milk containing 1,003.81 pounds of butterfat equivalent to 1,254.76 pounds of butter computed on the 80 per cent basis. She is the 129th Holstein-Friesian cow to produce in excess of 1,000 pounds of fat, and the 89th Holstein to produce over 30,000 pounds of milk in a year.

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Farm News from New York and Pennsylvania

Annual Report Shows Jefferson County Grange in Strong Position--County Notes

WITH the lengthening of the days we naturally expected a spell of colder weather, but instead we are still getting the same kind—warm, then



W. I. Roe

cold for a day or two, and then warm again. Not very good for meadows or getting around the farm to do odd jobs or cut wood, but very good for the "flu" germs which fortunately have turned out to be only the old fashioned gripple. Most of our neighbors as well as ourselves have fallen victim, and while it has not been very deadly, it certainly takes the strength and ambition.

With thirty-three granges in Jefferson county and 7370 members County Deputy George Merrill, of South Rutland Grange, in his annual report calls attention to the relative strength of the grange movement here as compared with most other counties in New York State. He especially stresses the advancements of the past ten years. The deputies during this time have been Elon O. Andrus; Edson J. Walrath (now member of the State Grange Executive Committee); LeRoy W. Burton (who gave so liberally of his limited strength that he has passed on to his reward above); and George Merrill.

Belleville to Have Short Course

The Agricultural Department of the Belleville Union Academy has completed plans for a two weeks short course in cooperation with the Jefferson County Farm Bureau. This course will start on January 14th and continue through five days of each week. The subjects to be offered are: Poultry management and feeding; Gas engine school; Farm shop; A study of farm prices and economics; Milk testing; Farm Accounting; and Marketing of milk, beans, and other products of southern Jefferson and northern Oswego counties. The arrangements are in charge of E. G. Schaad, principal of the Academy.

Barn Meetings in St. Lawrence County

The Farm Bureau in St. Lawrence County held a number of barn meetings in December with Dr. H. J. Metzger as speaker. Dr. Metzger goes into a barn and comments on the individuals, pointing out how hard it is to tell all about a cow by merely looking at her, emphasizing that any cow purchased should be given a thorough physical handling in addition to looking her over; this is usually followed by a talk on garget and infectious abortion, two of the most costly diseases known to dairy men. These meetings were held on the farms of: W. N. Clark, Potsdam; C. A. Evans, Black Lake; W. R. Perrin, Gouverneur; H. C. McNeil, Morristown; W. A. Laidlaw, Hammond; Alonzo Chase, Racquette River; John Dawson, Helena; Elvin Boulds, Nicholville; B. J. Hammill, North Lawrence; O. Freeman, Edwards.

The St. Lawrence County farmers' picnic will be held on August 8th, next summer, according to plans of the committee having it in charge. Harry Mason Knox is chairman of the committee; Lee Martin, secretary, and Albert Fisher, treasurer. Selection of a place was left for a future meeting after the members have had time to investigate.

St. Lawrence County Farm Bureau finished their membership drive with 631 members, but expected that other renewals would bring the total to 900. M. H. Streeter of Gouverneur was reelected president, with H. K. Stearns of Potsdam vice-president and A. W. Hull of Potsdam for secretary. Leon H. Claus, who has won a high place in St. Lawrence County as County Agricultural Agent will carry on the work in 1929, as will Miss Mabel Milhan for the Home Bureau.

Three Dairy Improvement associations are now operating in the northern county with very interesting and profitable re-

sults. L. S. Porteous of Lisbon has won high honors for three months in succession, with a purebred Holstein-Friesian that has produced over 2000 pounds of milk in each month.

A few weeks ago A. F. Spooner of Richville shipped 37 head of his purebred Ayrshires to Elmer R. Pearson at Ainsley, Nebraska. Mr. Spooner has a fine lot of cattle according to all reports, and those who went west should make a good showing for Northern New York.

The directors of the Lewis County fair have changed the dates for their 1929 fair to August 20-23 inclusive. The changes were made in order to hold the fair before schools open. The Canton Fair Association report that they cleared \$1000 on the 1928 fair. Fred J. Wheeler will be president again next year with Lloyd G. Blankman as secretary and treasurer.

Milk Delivered to Consumers in New Fibre Bottles

FIFTY thousand New York City consumers will no longer receive their daily pint or quart of milk in a glass bottle. The Sheffield Farms Company is experimenting in the use of a container made of paraffined spruce fibre. This container is round at the bottom and wedge-shaped at the top.

For the present at least it is not ex-

pected that this new container will lower costs. If it meets the approval of the consumer, it is possible that it will become the standard bottle for delivering milk. In this event it is possible that the old milk wagon will become obsolete. The company which manufactures the container is also making a booth which can be attached to the side of a motorcycle. This will carry 360 quarts of milk, which is 60 quarts more than the average number of bottles carried by a milk wagon. This saving in weight is made possible by the reduction in the weight of the container.

The day before this new method of delivery was started, a luncheon was held at the Hotel Biltmore, at which Dairymen, Health Experts, and Welfare Workers drank milk from the new cone-shaped container and toasted it as a successor to the glass bottle. Mr. R. R. Reilly, President of the Sealed Container Corporation, stated that as a result of the air-tight seal and the nature of the container, the milk can be kept in these containers for a longer period than in the old glass bottles. Dr. Louis I. Harris, former City Commissioner of Health, told the guests at the luncheon that the container is a safe method of retailing

milk and that he hoped the milk companies would reduce the cost of the product to the public so that the container would be within reach of those who are now using loose milk.

Madison Square Poultry Show, Jan. 16-20

THE annual Madison Square Garden Poultry Show is being held this year from January 16 to 20. This show has always been recognized as a fancier's show. In recent years a number of interesting educational features have been added. Boys and girls judging teams representing 4-H clubs will compete and free lectures will be given each day of the show. This department is in charge of Charles D. Cleveland of Eatontown, N. J. Among those who will speak at these lectures are: Dr. M. A. Jull, Washington, D. C.; F. H. Nodine, Amherst, Conn.; G. O. Hall, Ithaca, N. Y.; Professor William Kirkpatrick, Storrs, Conn.; Mrs. L. E. Dawley, Mexico, N. Y.; Professor Fred Elford, Canada, president of the World's Poultry Congress; Professor Willard Thompson of the New Jersey State Agricultural College; Professor James Rice of Cornell and Dr. Kaupp of North Carolina State Agricultural College.

New York County Notes

Rensselaer County—The water conditions throughout the rural districts of Rensselaer and nearby counties have become very serious, according to reports of country residents. The farmers in many parts of these towns have been drawing water from creeks and various small lakes and ponds for their livestock, due to the fact that their wells have gone practically dry because of the lack of rain. The farmers have been complaining in many parts of the county for some time regarding the water situation and it appears now to be the most serious in a number of years.—Mrs. F. F.

Wyoming County—We have had beautiful weather. The Granges, Farm Bureau, League Meetings are all holding yearly installations with banquets. The death of O. Fletcher Royce, of North Java, an old A. A. subscriber for years, and also known as the Pony Express driver of the Tonawanda Valley for years, has been reported. He was also a pure bred Guernsey cattle owner and supplied North Java with bottled milk. There are many cases of the flu in the county. The T. B. health Christmas seal sale went over big in the county. All farm produce is very cheap. Farmers in the North Java branch of the League are dissatisfied.—Mrs. W. J. Y.

Columbia County—There are three inches of ice in Harlemville and skating is the order of the day. There are several ill in Harlemville. The grip is prevalent in Elizaville and flu and scarlet fever in Ghent. About 200 cases of grip in Chatham have been reported, while whooping cough, chicken pox and colds prevail among school children. Health Officer Dr. F. C. Maxon has the grip. The new Greenport school house opened with a party, entertainment and refreshments. The new concrete bridge over Kinderhook Creek is completed and the steel bridge is almost finished also. A shortage of water in wells and streams was reported in Ancram Lead Mines. A Farm Bureau Board Meeting was held in Hudson. Ben Davis and Baldwin apples are being shipped to Antwerp and Hamburg, together with Keiffer pears. Ducks are 26c, geese 27c, fowls 30c. The prices are given at the door. Late pork 15c a pound.—Mrs. C. V. H.

Saratoga County—The new year came with a storm of snow followed by rain and then colder weather, making an icy crust on the snow. Many farmers who had been cutting their wood and logs during the fine weather, are drawing it home on sleighs. All are preparing for filling of ice houses to cool milk next summer. The snow fence has been put in place and thanks to the town tractor and snow plough we do not have to be snowed in for very long periods and autos run all winter. Many farmers draw ice on trucks. Gansevoort grange holds its installation of officers on January 19.—Mrs. L. W. P.

Sullivan County—Guernsey F. Cross of Callicoon, was chosen as Secretary to Gov. F. D. Roosevelt. Mr. Cross is a Sullivan man and has always been interested in politics. Three horses were

burned to death on the farm of R. Cohen at Kenoza Lake. The hay wagons and other farm implements were also destroyed. On January 6th the thermometer registered 60 degrees. We are having regular spring weather with no snow or ice. Sullivan county is talking about having a gas tax, but car owners prefer not as there is a tax now for most everything.—P. E.

Farmingdale to Have Short Poultry Course

MONDAY, February 4th, to Thursday, April 4th, mark the dates of the third unit of the Poultry Short Course at the State Institute, at Farmingdale. In the past, the Institute has offered one short course each year. In order to make the work in the Course

as seasonable as possible, three complete units, Fall, Winter, and Spring, are offered instead of one. The three eight week unit courses constitute a complete six months' course. A person may enroll for any one of the unit courses without taking the others.

A catalog giving complete information is available on request.

So long as we have adequate production our main interest is not in reducing numerically the movement from farms to cities. Rather, our problem is to keep on the farm those men and women who know rural life, who love it, and who can contribute substantially to its development.—WM. JARDINE, Secretary of Agriculture.

Pennsylvania Farm Notes

UNTIL January first, we have had a fine fall for all kinds of work, with good roads for hauling of all kinds. Many farmers took advantage of this weather to haul out manure on sod for corn or to plow low fields of sod or corn stalks for the spring crops. Streams are low and some wells are dry due to continued dry weather. An inch of snow fell last night and rain is falling today which may help the water situation.

Wheat has suffered some from the effects of dry, freezing weather. A good crop of solid corn has been stored, and stover is mostly stored. Some cows have been on pasture until recently along with dry feed which is plenty on most farms. Fat hogs for the year's pork have been killed or marketed, mostly, though some are being fed for better prices.

Many farm sales have been held this fall of live stock and implements, as some farmers need to meet notes. Several farms have been sold to settle estates. Tenants are buying farms and not persons who have money to invest.

The annual meeting of the Agricultural Extension Association meets in the court house in Lewisburg for Union county this week.

There are a number of farms which are not rented for this year. There is a good demand for milk, milk cows and poultry at fair prices. "Flu" has many victims in this section of the state, but it is in a milder form than ten years ago.

Prices: Wheat \$1.35, corn, new, \$.80, oats \$.40, potatoes \$.35, and dull sale at that, apples \$1 to \$1.50 a bushel.—J. N. GLOVER.

Pennsylvania County Notes

Cumberland County—We are having quite a length of dry weather with cold, frosty nights and pleasant through the day. Water is much needed in some places. The wheat fields are not looking as well as they did in the fall. There has

been much sickness throughout this county, the flu being the chief illness. Schools and other gatherings are being closed. There is quite a lot of plowing done, and much manure hauled. There is no snow and no signs of any. Many are making preparations to attend the Farm Show at Harrisburg either as exhibitors or visitors. It is very much larger every year and is especially so this year.—J. B. K.

Tioga County—There never was a nicer fall for farm work and taking care of crops than the fall of 1928. Hens have laid well and have not had to be confined inside until this last week when we had two or three inches of snow and close to zero weather. Stock of all kinds look well. Potatoes are 50 cents per bushel, apples \$1.00 per bushel for hand picked, eggs 45 cents a dozen, mixed hen feed \$2.45, wheat \$1.35 for 100 pounds. Turkeys brought around 55 cents per pound at Christmas time. Roads in the country have been nice all the fall and early winter.—Mrs. W. C. G.

Pennsylvania Farm Products Show, Jan. 22-25

PENNSYLVANIA will have its annual State Farm Products Show at Harrisburg from January 22 to 25. There will be 25 annual conventions of farm organizations, 15 banquets and 150 speakers on various topics of interest to agriculture. One of the new features of the program this year is the demonstration on electrification for farm homes. Among the organizations which will have their meetings are the Guernsey and Jersey Cattle Breeders, Holstein breeders, Pennsylvania Beekeepers' Association, Pennsylvania Farm Bureau Federation, the Pennsylvania State Horticultural Association, Vegetable Growers' Association and the Pennsylvania Potato Growers Association.

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DAIRYMAN



Dairymen and Breeders Have Annual Sessions At Elmira

ON January 3 and 4 at Elmira, New York, annual meetings were held of the New York State Holstein-Friesian Association, the New York State Breeders' Association and the New York State Dairymen's Association. Each of the three organizations had separate business sessions, but they combined for other meetings, including a banquet at the Elmira County Club Thursday evening. The speakers at the banquet Thursday evening were: W. D. James of Atchison, Wisconsin, Dr. J. F. DeVine, Prof. "Bob" Adams, Harvey Farrington, and Mayor Heller.

According to Mr. James, the principal speaker of the evening, there are two major problems in the dairy industry and they are the same two problems which stand out in any other industry, namely, cost of producing and cost of marketing. The outcome will result in the survival of the fittest. He suggested that a cost-finding system must be introduced into the industry just as it exists in other industries and offered the use of the herd test, spoken of by Mr. Farrington in a previous speech, as a possible solution. He also labelled as a mistake the sending of proven sires to the block simply because they have become unruly.

Mr. James emphasized the importance of milk marketing by producing a pint of milk, a bottle of "soda pop" and a bottle of mineral water. He pointed out that the manufacturer of the "pop" received more for his product containing 99 per cent water than the producer does for a like quantity of wholesome milk. In Mr. James' opinion, this is a result of the dairymen's failure to market his product properly.

Dr. DeVine gave a very interesting talk concerning his personal experiences on a trip through the South. Prof. J. P. Willman of Cornell University, who is in charge of New York's 4-H calf clubs, introduced four boys. The boys were: George A. Turner, who won first prize on a Guernsey heifer at the Chemung County fair; William Mosher, who won first prize at the Chemung County fair on a Holstein calf; Wayne L. Brown, who was chosen an all-American calf club member at the National Dairy Show, and Russell Hill, who was chosen national champion in calf club work at the National Dairy Show.

Mr. Harvey Farrington spoke of the herd test and stated that if every Holstein owner would use it there would be higher quality cattle in New York State herds.

Prof. "Bob" Adams entertained those present by reciting a number of selections from his well known book, "Rude Rural Rhymes". This feature proved so popular that he was recalled time after time.

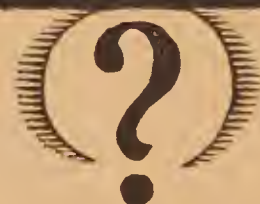
There was a number of other speakers during the two-day session. Dr. J. F. DeVine of Goshen, New York, gave a brief review of present-day breeding problems in domestic animals. Fred Parker, former member of the State Fair Commission of Batavia, New York, gave reasons why livestock breeders should exhibit at fairs. Mrs. Herbert Wadsworth of Avon, New York, prominent breeder of thoroughbred horses, told how fox hunting horses are bred and sold. Mark J. Smith of Burdett, New York, a well known sheep breeder and contributing editor of American Agriculturist, gave a summary of the sheep breeding industry.

Prof. F. B. Morrison, head of the Department of Animal Husbandry at the State College of Agriculture at Ithaca, spoke on the animal industry of New York State and its future. He stressed the importance of dairying and stated that it would likely remain

(Continued on Opposite Page)

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—Collins & Bates, Adams, N. Y.

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on ankle, hock, stifle or knee, should be treated promptly with Absorbine. Does not blister or remove the hair. At druggists, or \$2.50 postpaid. Describe your case for special instructions. Horse book 3-B free.

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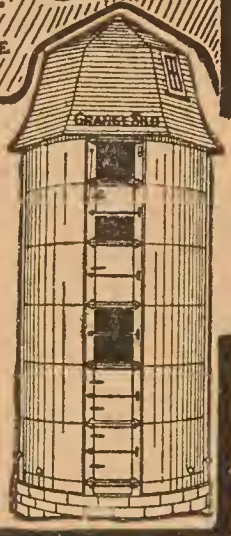
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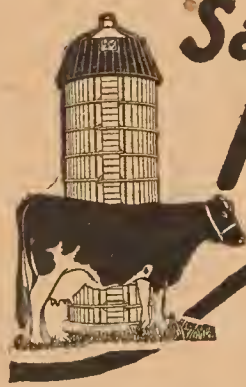
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a Livestock Doctor Book without cost. Find out why your cows lose calves—why they retain the afterbirth—why they fail to breed—why they have garget—why your calves have scours and goiters—why you have a shortage of milk. Veterinary Advice Free. Write to

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the dominant agricultural industry of the State. Prof. Morrison also touched on the importance of preserving the New York milk market as it now is, and stated that methods should be worked out for meeting the demands of the metropolitan market. He also mentioned the importance of eliminating the boarder cow, stating that the average production in New York State last year was approximately 5,200 pounds per cow while at the same time the average of all cows in dairy improvement associations was 7,500 pounds.

In speaking of the Department of Animal Husbandry, Prof. Morrison stated that at present it has poorer facilities than similar departments in other leading livestock states, and that he plans to call a conference of livestock interests of the State to make plans for the development of the department.

Joint round-table conferences dealing with the tax problem and the proposed Farm Products Show brought the meetings to a close on Friday. C. W. Halliday of North Chatham, opened the discussion on the tax problem and C. H. Baldwin of Albany opened the discussion on the Farm Products Show. Original plans called for an afternoon session of the conference on Friday, but this was dispensed with when it was deemed better to continue the morning session without the intervention of the lunch hour and so bring the convention to an earlier close. The session was concluded at 1:30 p. m. Friday.

Bovine TB Decreasing

THE following table shows the decrease in bovine tuberculosis in counties where intensive tuberculosis eradication has been in progress and where all cattle have been tested one or more times and the counties placed under quarantine.

County	Approximate Estimated per cent. of per cent. of bovine tuberculosis, bovine	
	May, 1918	Dec. 1, 1928
Hamilton	2.8	.1 of 1
Warren	5.7	.3 of 1
Yates	6.2	.2 of 1
Essex	7.2	.1 of 1
Steuben	7.3	.4 of 1
Schuyler	7.4	.2 of 1
Allegany	8.8	.2 of 1
Cattaraugus	15.3	1.0
Clinton	17.0	2.0
Chautauqua	19.0	1.0
Ontario	19.3	1.0
Wyoming	20.8	1.5
Tompkins	22.2	.7 of 1
Oswego	24.4	1.0
Livingston	25.6	.7 of 1
Greene	25.9	1.0
Monroe	27.3	1.0
Genesee	28.4	1.0
Columbia	28.9	1.0

Are We Overdoing the Dairy Business?

O. E. REED, chief of the Bureau of Dairy Industry of the United States Department of Agriculture, recently made some interesting statements in answering the question: "Are we overdoing the business of dairying?" He pointed out that there was a big expansion of the dairy industry in the southern states, but most of the milk made in Dixieland is manufactured into by-products, and Mr. Reed stated that the increase in manufactured milk products in the South was somewhat offset by the decrease in the manufacture of such products in the North and West. The older sections, it appears, are shifting to the production of fluid market milk.

"While our industry is now on a sound economic basis," said Mr. Reed, "it is readily seen that even a moderate increase in the production without a corresponding increase in demand might have the effect of upsetting the entire dairy industry."

The answer to the problem is to cut down the costs of production. Mr. Reed cited the studies made by the Bureau of Dairy Industry showing that the cow producing 100 pounds of butterfat per year returned only \$14 over the cost of feed, whereas the cow



How about the Calves?

ONE of the big things to look to while you're getting production is *reproduction*. In those calves is your future herd.

The feed that looks after the health of the herd as well as production *pays*. And that's the reason so many are feeding Purina Cow Chow for their supplement. They've seen Purina take their cows through 6 months high pro-

duction—through calving — through 12 months of increased production and *healthy reproduction*. They *know*.

Prove it to yourself for a year. It isn't fair to judge any feed in less than a year. Order from the checkerboard feed dealer.

And by the way—raise those calves on Calf Chow.

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Write us for a Purina Cow Booklet—free

TAKE MY ORDER FOR ENOUGH COW CHOW TO HOLD UP MY PRODUCTION ALL YEAR



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COMPLETE **READY TO USE**
Milk 2 to 4 cows at a time—18 to 40 an hour. Clean, convenient. Easy to use. Sold on 30 days Free Trial. Satisfaction Guaranteed.
Comes With 2 H. P. Engine or Electric Motor
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SAVE the Teat
Use Moore Bros. PURPUL medicated Wax Dilators to heal without closing. After operating, when sore or congested, for reducing spiders insert this wonderful healing dilator. Avoid expensive troubles, lost quarters.
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Write us dealer's name and we will mail generous package free. At dealers 25c. dozen; 5 dozen \$1, or mailed postpaid.
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A standard veterinary and human liniment or blister. Sold only in black and white package—a strictly American made product. Make sure you ask for and get Caustic Balsam—all druggists or direct \$2.00.
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(Continued on Page 19)

194 Dozen

more eggs from Pan-a-ce-a flock

MR. POULTRYMAN—Did you ever consider what it would mean to you to raise 17 more hens for each 100 pullets you hatch?

By decreasing mortality and improving vitality, Pan-a-ce-a put 28 more laying hens in the Pan-a-ce-a flock than there were in the non-Pan-a-ce-a flock—both flocks started even in baby chickhood.



A picture of the Pan-a-ce-a flock

What did this mean in terms of eggs?

During the first 7 months of this test the Pan-a-ce-a flock of yearling hens produced 194 dozen more eggs than the sister flock that had no Pan-a-ce-a.

Of course, the per capita production of the Pan-a-ce-a flock was higher too.

Just further proof of how the Pan-a-ce-a poultryman is saving dollars that the other fellow loses.

You see, Pan-a-ce-a decreases chick mortality and speeds chicks to maturity.

Pan-a-ce-a gives pullets and hens the laying disposition.

That's why Pan-a-ce-a outsells 10 to 1 all other similar products combined.

Pan-a-ce-a costs little to use. One extra egg pays for all the Pan-a-ce-a a hen needs in 6 months.

PAN-A-CE-A

puts hens and pullets in laying trim

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Extra quality chicks—the kind to show the greatest profits for Mr. Dollars-and-sense Poultryman. We have 100 acres here, and we know our birds. 4 breeds. Order early for wanted dates. Special prices for broiler chicks. All breeders B. W. D. tested. 100% delivery guaranteed. Circular free.

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THEY LIVE because they are bred from healthy, free range breeders that have thrived and gained in vigor for generations. They LAY because they are from selected and tested high egg power stock. White, Brown and Buff Leghorns, Barred and White Rocks, R. I. Reds, Anconas, Black Minorcas, Buff Orpingtons, White Wyandottes 12¢ and up. 100% live delivery guaranteed. Postpaid. Member International Chick Assn. Write today for FREE Chick Book.

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With the A. A. Poultry Farmer



Caring for the Turkey Breeding Stock

HOW shall I take care of my turkey breeding stock? I am asked this question so often, I am going to take this way of answering it, as I find many American Agriculturist subscribers are interested in turkeys.

First and foremost, keep the turkeys' home clean and sanitary. Have all the fresh air you can get without having drafts and be very careful about drafts for they *must be avoided*. Turkeys will stand a lot of cold if the air is pure and will also get sick very easily if they are kept where the air is bad or there are drafts. Make a chicken wire door for the building and don't close the outside door unless it storms in, then sometimes you can put muslin over and be able to leave the outside one open. Also have lots of light for turkeys do not like, dark, dismal quarters.

Grit and Shell

Arrange a large box with either coal ashes or road dust for a dust bath; another one for gravel and oyster shell, as both the latter are very necessary. Keep a hopper well filled with good laying mash. We use steam cooked as our poultry are all raised on steam cooked, vacuum dried feeds. Here also is an item to remember. This kind of feed is best for poultry as you never get any musty or germinated grain. An extra good laying mash of this kind containing butter milk and cod liver meal can be mixed 50-50 with good heavy, *clean* ground oats to a good advantage and the turkeys like it as it gives more bulk and the hens will not get too fat.

Care of Drinking Fountains

Plenty of pure, clean water should be at hand always. Never refill drinking vessel with water without washing it out first. A tablespoonful of Epsom salts to a gallon of water once a week is good for the breeders, also a teaspoonful of turpentine to a gallon of water once a week. Give the turpentine a day or so in advance of the salts. Let them get thirsty so they drink it up quickly and all get some.

Green Feed Essential

Furnish an abundance of green feed, cabbage, apples, alfalfa and nice green clover all of which are good. If you want your hen turkeys to lay early feed about what they get on range later and you will usually get results. But don't wait until it is most time for them to lay to begin to feed. Begin right away and keep it up if you expect results. Let the turkeys out every day (unless there is a bad storm) if only for a few minutes so they get a chance to run and fly and get some exercise. If they happen to get out in a cold rain, cover the floor of the house with coarse, dry straw and sprinkle some grain on it. They will scratch and warm themselves up and the straw will take up the moisture from their feathers. But *don't* leave that wet straw in the house over night. After they are on the roosts, clean it all out and put in dry straw ready for morning and you may prevent some serious colds.

Have dropping boards under the roosts and keep them clean; not just clean them once during the winter, but every week or ten days and sprinkle ground lime on the dropping boards and on the floor each time you clean it. Feed most of the feed in troughs or hoppers to keep it clean. Watch for lice and dust the birds once in a while or use some good lice ointment.

Go over the roosts occasionally with kerosene and used motor oil. Later I will tell you about nests and parks, etc. Helps to raise turkeys with less work.—Mrs. C. J. D., New York.

The Outlook for Hens

"What is the outlook ahead for the poultry business? Are we not headed for heavy overproduction in the East?"

THE immediate outlook is good. It is reported that hens and pullets on farms are 4% less in number than last year and grain crops are good so that feed is likely to be less costly than last year.

Every business has its ups and downs but poultry is a business that is easy to close up on short notice. It is also easy to start in the business but we believe the man who sticks in the business and studies it to lower costs and increase production will continue to do well. When prices are low and costs high it is the less prosperous poultrymen who drop out first.

Eastern producers have a big advantage over those farther West in that the biggest markets in the world are close at hand.

American Railway Express Company Specifications for Poultry Coops Effective January, 1929

COOPS must be large enough to prevent over-crowding and top of coop must be covered by slats not more than one inch apart or by wire or screen containing meshes not to exceed one inch in size.

Charges will be based upon the gross weight of coop and contents at the time of shipment.

Any coop which with its contents exceeds 150 pounds in weight will not be accepted.

Hens Need Proper Ration and Space

I have been having trouble with my pullets. The first thing I noticed they coughed when they ate. After that they sat around and would not eat. Their combs and faces became white. I have others that get lame. In the beginning it looked like coccidiosis. I opened a few and could find no worms but their stomachs were black. One had swollen up intestines about 1 inch thick and the flesh was just like dried up. Another has pimples on the body and tail every time a feather falls out. I also noticed when I keep them in they pull on one another's feathers. Somebody told me to put mineral in the mash but this does no good. The night droppings seem all right in the morning. Some have a white sticky dropping and others run and eat it up. What can be the cause of all this? There are some plants around my chicken coops that the chickens eat. I picked pieces off and put them in. Are they poison if the chickens eat it? Does poison ivy hurt them?—A. K.

I AM afraid that I cannot help you very much. You have been very complete in your description of possible disease symptoms, but you have failed in any way to give me a line on your feeding and the age of your birds. It is possible for birds to eat poison weeds, but it is rather unusual; a bird seems to be protected by taste or smell. Birds are more often poisoned and damaged by getting into real poisons such as paint, oils, etc., or by eating musty and mouldy feeds. From what you say in your letter, the white head, the feather pulling, the desire to eat the droppings, etc.,—I should say that your birds are being fed incorrectly.

(Continued on Page 21)

(Continued from Page 17)

producing 500 pounds of butterfat returned \$178 over her feed. "At this rate, one cow producing 500 pounds of butterfat returned as much income over cost of feed as thirteen cows that produced an average of 100 pounds. This furnishes a definite example of how the poor cow produces a surplus. One good cow supplied only 500 pounds of butterfat for the market, but 13 cows yielding an equivalent income supplied 1,300 pounds!"

"Care Should be Used in Washing the Milk Vessels"

IN almost every case when we are troubled with high bacteria counts in milk, we can generally trace the cause to milk utensils that have not been properly cleansed. The trouble may be in the pails, cans or the cooler.

We have found that pails and cans with wide open seams in them give the most trouble. It is a good plan to take such utensils to a tinsmith at once and have them soldered over smooth. It is then possible to wash them sufficiently, and scald thoroughly and they are then ready for use as there are no crevices to catch and hold dirt.

We wash utensils by first rinsing in cold water, and then scrubbing with a brush in hot water into which cleansing soda has been put, then rinsing again in cold water, and finally scalding with very hot water.

In order to retain their brightness the utensils are gone over regularly with scouring powder. Such utensils as we can get in seamless form we buy in that way, as it saves us having to have them soldered later on.—L. H. F.

Dairy Improvement Records By Mail

IT is generally admitted that the cow testing association or as it is sometimes called the dairy improvement association, is one of the most productive methods of weeding out the boarder cow and increasing the average production of the herd.

Many who have been in dairy improvement associations for years would not think of continuing the business without records. On the other hand it has been extremely difficult in some sections to get a sufficient number of men interested to make it worth while to hire a tester.

Another problem comes to the man with a small herd under the operation of the association. The tester spends a day with each herd regardless of size. The man with four or five cows finds it a rather expensive procedure.

How the Plan Works

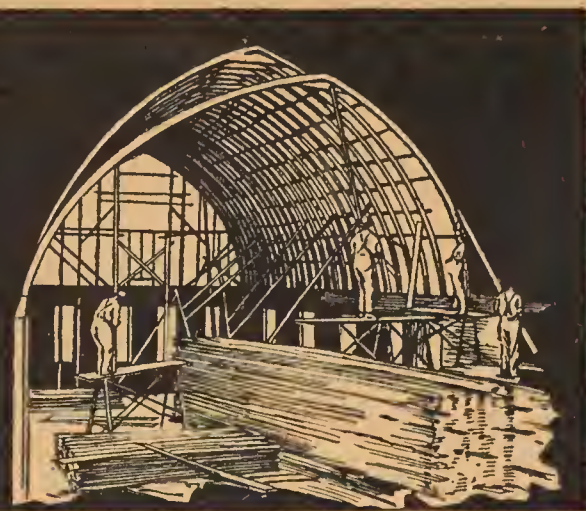
Sometime ago Robert Amundson, a tester of Outagamie County, Wisconsin, originated a scheme which has since been called the "mail box cow testing plan." By this method the dairyman weighs his own milk and takes samples one day each month. These samples are then sent together with the records of weight to a central point where they are tested by an expert. As soon as the tests are made the record is mailed back to the herd owner. At the end of the year a complete report is given showing the production of each animal together with the cost of production.

Under this plan the personal contact and help which is usually given by the tester is omitted but on the other hand the costs are exceedingly low. In Wisconsin it is reported that this plan can be operated at the cost of 50 cents per cow per year. It would seem that in certain sections of the East this plan might work out well. Two objects can be accomplished, first it cuts the cost of testing, second, it increases the number of cows on which figures are kept. We will be glad to hear from our readers who are interested in such a plan. If there is sufficient interest we will take the matter up with the Directors of Extension of the State College of Agriculture in an effort to work out a practical plan.



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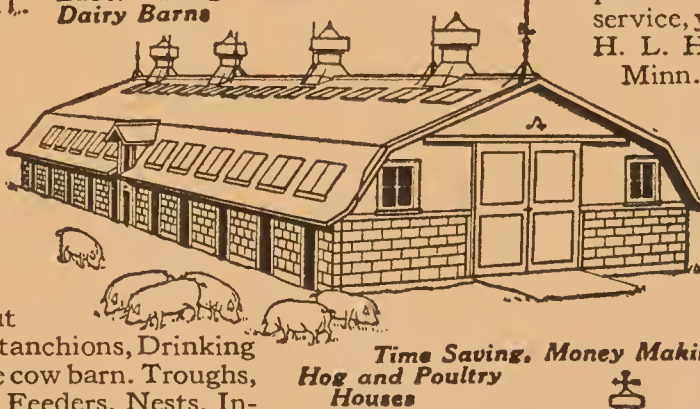
This book will show you how you can save money and have your buildings planned and equipped so that they are most convenient and practical. If you will avail yourself of Jamesway service, you'll have the same gratifying experience as H. L. Hartly, Manager of Island Farms, Duluth, Minn. Here's what he writes:

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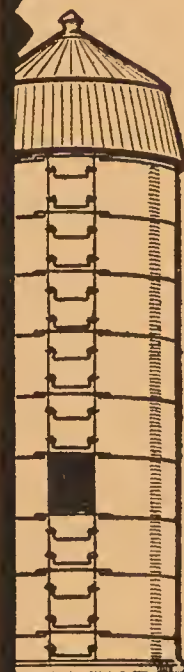
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BEST GRADE Chester, Berkshire and Poland China Pigs. 3 months old, \$12.00 each; 6-8 weeks old, \$7.00 each. (Express Paid). Bred Sows and Boars. C. E. BOSSERMAN, York Springs, Pa.

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This time we offer FISHKILL DEMEER HENGERVELD

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He is a son of a three year old (by the noted Dutchland Colantha Sir Inka) that has made two good long time records first and second calf on twice a day milking. This young bull's sire, and also his dam are son and daughter of Winana Segis May 2d, who made 876.76 lbs. of butter and close to 20,000 lbs. of milk in ten months as a four year old. Also his sire is a son of Hengerveld Homestead De Kol 4th who has a splendid list of large producing daughters, he being a son of Jenny Linn Colantha, with a record of over 30 lbs. butter in 7 days.

We will start him off at \$400.

This price will be reduced \$50 the first of each month until sold.

Dairymen's League Certificates will be accepted at face value in payment for this animal.

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Buy where quality is never sacrificed for quantity. We sell only high grade pigs, fast growers, that will prove a good investment—thrifty and rugged, having size and breeding. Will ship C.O.D.

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7 to 8 weeks old.....\$3.50
8 to 10 weeks old.....\$3.75

Satisfaction guaranteed, or money refunded. 10 days trial allowed. Crates supplied free. A. M. LUX, 205 Washington St., Woburn, Mass. Tel. Wob. 1415.



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More users than any other meat protein feed . . . Why?



ASK experienced poultrymen why they prefer Swift's Meat Scraps. They'll give reasons about like this:

Uniform high quality—assured by Swift & Company's enormous supplies of fresh meat.

Clean and sanitary—because Swift meat-making operations are conducted under Government inspection.

Big results. More eggs per hen; quicker, sturdier growth of fowls—because Swift's Meat Scraps are appetizing, digestible, and *highly concentrated*.

And for these same reasons, Swift's has *more* users than any other animal protein feed.

You can obtain Swift's Meat Scraps from your local feed dealer. If you don't know his name, write Swift & Company, Department E-2, and address the office nearest you:

Chicago, Ill.
Kansas City, Kan.
South St. Paul, Minn.
Ft. Worth, Texas
Denver, Colo.
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MORE EGGS PER HEN

BABY



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NATIONAL "SUPERBRED" CHICKS

500,000 SUPERQUALITY CHICKS FOR 1929

Insure your future poultry profits by ordering NATIONAL SUPERBRED CHICKS NOW.

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S.C. White, Brown and Buff Leghorns	\$3.50	\$6.75	\$13	\$62.00	\$120
Tanered and Hollywood W. Leghorns	3.75	7.25	14	67.00	130
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Black Minorcas and Anconas	4.25	7.75	15	72.00	140
White Wyandottes and Buff Orpingtons	4.75	9.00	17	82.00	160
White Minorcas and Blue Andalusians	5.50	10.25	20	95.00	190
Jersey Black Giants	7.00	13.00	25	120.00	230
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10 FREE CHICKS WITH EACH 100 ORDERED BEFORE MARCH 1st.

Don't miss this chance to get a start with Wolf's extra quality pure-bred high producing stock. Every breeder produced on free range and health of chicks is safeguarded. **Get Our Catalog and Price List**

Tells about prizes won by our birds. Read about Mary Heneel who made over \$1000 profit in one year with birds of our breeding. All leading breeds—prices very attractive. Write today. Chicks shipped C.O.D. Toe picking stopped instantly with Wolf's "No-Pick." Order box today. \$1.00 postpaid. Satisfaction guaranteed or money refunded.

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HUBER'S RELIABLE CHICKS

10 FREE CHICKS—ON orders booked before March 15th, we give 10 Chicks free with each 100 ordered.

When we say RELIABLE—we mean RELIABLE in every way. Breeding stock of highest quality of 19 years of careful development. Special attention paid to health of flocks and records kept.

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With the A. A. Poultry Farmer



Will It Pay to Heat the Henhouse?

(Continued from Page 3)

course, I have in mind the period from November 1 to March 1. Do we keep such poor track of outside weather conditions that we do not realize the amount of sun during the period I have named can fairly be measured in hours? There was never a poultry house made along sensible lines that could not use these sunny spots, but is it common sense to ignore for these few hours or days other conditions which not only exist, but will always exist in the open front house?

This brings us to the opposition to the use of heat, and let us agree first of all on the use of this word. I would not have you think that by heat I am thinking of a finely heated house where the average temperature runs around seventy-two degrees. It is just in such high or fluctuating temperatures that the dangers to a flock of hens arise. By the term heat I have in mind a temperature high enough to prevent freezing and low enough so that the body of a bird will remain in a state of resistance; excessive heat immediately destroys such resistance. Such heat may be obtained by conserving the body heat of the hens themselves through suitable ventilation and insulation, or by the use of some sort of heating device. There are many who oppose such steps, pointing to untold dangers, and I ask them just this: has the cold house, then, stopped colds, roup, chicken pox; has the cold house abolished dampness; has the cold house stopped the freezing of combs and serious slumps in egg production; has the cold house ever really taken a reckoning of the annual loss caused by the things I have just mentioned? There may never be a perfect hen house, but good ventilation, insulation, and heat, unless I am wrong, can do a great deal to relieve these very things.

Perhaps my definition of heat would be more accurate if I spoke of a heated hen house as one in which frost and freezing temperatures never prevail. Obviously enough there are two ways of bringing about such a condition: first, by confining and making use of the heat given off by the hens, and second, by using artificial heat to warm the house so that it never freezes.

Results from a Warm House

During the cold weather that occurred during the early part of December, I was much impressed and needlessly to say interested in a visit to a hen house near my home. The house was located in the basement of a barn. The drinking water never froze, there was very little moisture present, and the production of the hens showed a straight line with a gradual slant upward. In contrast to this I was rushing hot water around to thaw out ice and groaning daily over the dropping egg production in my own plant. And here is some interesting comedy: this man had bought day-old chicks of me, and was beating me all to a frazzle with my own stock.

It seems to me that nothing could

give a better illustration of the point that I want to drive home: if you want to compete in the winter market of today, then take the necessary steps that will insure a stable egg production in spite of any kind of weather. You can insulate your house against cold and you can carry off impurities by means of ventilation. If you simply close your house tightly and do not provide some system of ventilating, you might better freeze your birds to death. Once you have confined the heat of the birds and adopted a suitable system of ventilation, you will get a better egg production during bad weather than ever before, and yet, on pleasant sunny days, there is nothing to prevent throwing up the windows and letting the sun in. You protect yourself against bad and disagreeable weather and you make the most of the sunny days.

Heat Must Be Controlled

But a great many poultrymen are not content with insulation against cold. There are many who have not only insulated and ventilated their houses but who are using artificial heat as well. The weakness of such a system to my mind, is to be found in the word *control*; the strength of applied heat rests in its ability to warm and dry, provided you do control it. If you install a stove or heater, you must absolutely be able to control it and provide against an excess of heat; I should say forty-five degrees is the limit beyond which your heat should never go. In addition you must have heat of such a kind that the birds will not congregate in the heated spot and then go off to a cold portion of the pen to catch cold.

Let me illustrate. If you take an ordinary stove, the greatest point of warmth will be at the stove and its immediate vicinity, and the further you go away, the less heat. On the other hand, if you take that same stove and incase it or frame about it a hollow shell, making a pipeless furnace, you prevent direct radiation of heat and set up a circulation of air, cold air being drawn in at the bottom and warm air coming out at the top. By this method you stir the whole air in a given space, stop heat radiation, and set up air circulation. It now remains for you to control the temperature.

I cannot stress too strongly the dangers from too much warmth. Before coming to artificial heat I would investigate the whole situation. Experiment stations and agricultural colleges are in a position to help, and there are commercial organizations which make a special feature of equipment designed to do this sort of work. I have seen houses where heat worked well, and others where conditions were far from ideal because the heat control was weak.

One of the best houses I saw was in New Jersey. This house is manufac-

(Continued on Opposite Page)



HUSBAND—Always complaining! If the flood hadn't come and put out the fire in the kitchen stove, how the heck could you sit on that chimney?

—JUDGE

BABY



CHICKS

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In lots of...	25	50	100	500	1000
Wh. Wyandottes	\$4.50	\$8.50	\$16.00	\$77.50	\$150
Rocks or Reds	4.00	7.50	14.00	67.50	130
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S. C. Reds		\$4.00	\$7.50	\$14.00
Barred Rocks		4.00	7.50	14.00
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AMERICAN AGRICULTURIST
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(Continued from Opposite Page)

tured and patented by a large manufacturing concern. The house was well insulated and ventilated, and was heated by a hot water system having a thermostatic control. When I asked Mr. T. what luck he had had with his hen house which has been in operation a year, he replied: "Luck! No luck! The combination of ideal housing and ventilation together with suitable and well controlled heat, removes the luck and puts poultry keeping on a basis of perfection."

I spent an hour going over this fine plant and talking with the owner and when I came away I could not help but think of some of the labor he saved over my plant, and of the insurance he had against such poor weather conditions as so often prevail here; running water in his house the year round, roosts cleaned daily because the droppings never froze, freedom from dampness, a long lived floor litter, a stable egg production, and finally, a saving in the cost of feed. I wonder just how much feed I use to keep my hens warm? Certain it is that one serious slump in egg production due to a cold snap would do much to pay the coal bill, and as there are not one but many such snaps in the course of the winter, the money saved from such disaster might do much to pay for the whole equipment in a season.

In conclusion give me a tight house or a heated house. Give me a hen house that discounts the outside weather. If I am to exist as a poultryman to-day, let me admit here and now that I have been wrong, and that I am through with cold houses for good and all. Competition makes it necessary, and I think the change is for the best.

Minnesota Law Requires Registration of Poultry Buyers

THE State of Minnesota has passed a law requiring poultry dealers to register yearly with the county clerk and keep certain records on all poultry purchased. A similar law in the states in American Agriculturist territory might be a big help in curbing chicken stealing. At least the law is worthy of study.

The full text of the Minnesota law is as follows:

"A new section is added to the statutes to read: 175.10 (1) It is unlawful for any poultry dealer to purchase any live or dead poultry without registering annually with the county clerk.

"(2) Every poultry dealer shall keep a record of all purchases of poultry made by him showing in detail the place and date of purchase, the name and address of the person from whom the purchase was made, together with a general description of the kind of poultry purchased. Such record shall be kept in permanent form and be open to inspection at all reasonable times to any district attorney, assistant district attorney, sheriff, deputy sheriff or any police officer.

"(3) Any poultry dealer, his servant or agent, violating any of the provisions of this section shall, upon the first conviction, be punished by a fine of from ten to one hundred dollars. Upon a second or subsequent conviction by a fine of from twenty-five to five hundred dollars or be imprisoned in the county jail for not more than ninety days, or by both such fine and imprisonment.

"(4) Any person selling poultry to a poultry dealer who gives falsely his name or address to such dealer, his agent or servant, shall be imprisoned in the county jail for not less than thirty days nor more than one year."

Hens Need Proper Ration

(Continued from Page 18)

lack good range, and are overcrowded. If they are five months old put them on cracked corn, especially all they will eat at night, and give them a mash composed of equal parts of cornmeal, bran, ground oats, middlings, and beef scrap.—L. H. H.

KERR'S 1929 CHICKS

Strong and vigorous. True to type and bred to lay

THE keystone of Kerr's Quality Chicks is the Kerr breeding farm, where 2000 birds are now being trapnested. These heavy layers are scientifically mated to males from three or more generations of officially tested hens. Here Kerr produces the pullets that are such consistent winners in the egg-laying contests, and the great male birds to head his breeding flocks. The Kerr Chickeries can furnish utility and special matings chicks from flocks that have passed the blood test for Bacillary White Diarrhea.

Kerr's 1929 chicks are better than ever and are priced lower than ever before. Write for booklet giving prices and illustrated account of the Kerr way of producing livable, profitable chicks. Liberal discounts on orders placed before February 1st.

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	50	100	500	1000
American or Eng. SC. Wh. Leghorns	\$6.75	\$13.00	\$62.00	\$120.00
Hollywood Wh. or Brown or Buff Legs	7.25	14.00	67.00	130.00
Tancred Wh. Leg. Anconas—Barred Rocks	7.75	15.00	72.00	140.00
RC or SC Reds, Wh. Rocks, Parks Rocks	8.25	16.00	77.00	150.00
Wh. Wyandottes, Buff Orp., Blk. Minorcas	9.25	18.00	87.00	170.00
Brahmas, Col. Rocks, Blue Andalusians	11.25	22.00	105.00	200.00
Light Mixed \$9.00 a hundred. Mixed any breeds our selection			\$10.00.	Heavy
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Get our NEW CATALOGUE—It proves to you the SUCCESS our Customers have with our chicks—Breeders culled and Bred for High EGG PRODUCTION in Winter when eggs are demanding large premiums. Reference, Curwensville National Bank—100% Live Arrival—Dependable Service. Order Early.

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are bred to make money for you. Strong, healthy, vigorous from the world's best and heaviest laying strains such as—Tancred, Ferris, Owen Farms, Daniels, Thompson, Martin, Shepard, Fishel and others. Free range flocks, scientifically culled and supervised, Smith Hatched. 100% live delivery guaranteed. 16 breeds 9c and up. Postpaid. Members International Baby Chick Association. Send now for free poultry book and prices. Buy Hatchery Chicks for Greater Profits.

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Columbian & Silver Wy'd't & Rhode Island White	4.50	8.00	14.40	70.00	135.00	
Barred & White Rocks, S. C. & R. G. Rhode Is. Reds	4.25	7.50	13.50	65.00	117.50	
Blue Andalusian & Rose Comb White Leghorn	4.25	7.50	13.50	65.00	117.50	
Buff and White Minorcas	4.25	7.50	14.00	68.00	130.00	
Black Minorcas, White Wy'd't, White & Buff Orp.	4.25	7.50	14.00	68.00	130.00	
Jersey Black Giant, Snowex & Dark Cornish	7.50	14.00	27.00	132.00	260.00	
Assorted Chicks (Heavy Breeds)	3.50	6.00	9.00	42.50	82.50	
Assorted Chicks (Light Breeds)	3.00	5.00	8.00	37.50	72.50	

J. W. OSSEGE HATCHERY
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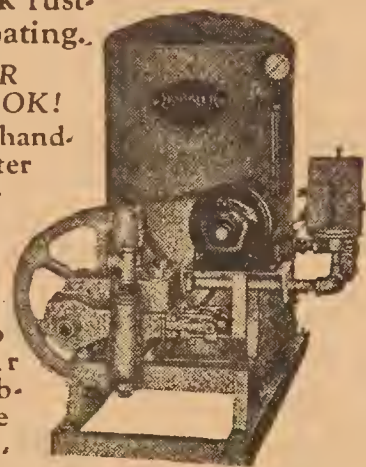
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The modern farmer appreciates modern conveniences. The HOOSIER provides water under pressure for every farm and home use. It's essential to have pure, fresh, running water for household, stock and garden. The HOOSIER operates from any source of power—electricity, gasoline, wind—and will furnish water from wells, springs or lakes with equal facility. The HOOSIER system is economical to operate. It will give years of uninterrupted operation because it is protected INSIDE and OUT by the famous GalVAZink rust-resisting coating.

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Best Remedy for Obstinate Cough Made at Home

You'll never know how quickly a stubborn cough or chest cold can be conquered, until you try this famous recipe. It is used in millions of homes, because it gives more prompt, positive relief than anything else. It's no trouble at all to mix and costs but a trifle.

Into a pint bottle, pour 2½ ounces of Pinex; then add plain granulated sugar syrup or strained honey to make a full pint. This saves two-thirds of the money usually spent for cough medicines, and gives you a purer, better remedy. It never spoils, and tastes good—children like it.

You can actually feel its penetrating, soothing action on the inflamed throat membranes. It also promptly loosens the germ-laden phlegm, and at the same time, it is absorbed into the blood, where it acts directly on the bronchial tubes. This three-fold action explains why it brings such quick relief even in severe bronchial coughs and those dreaded coughs that usually follow the "flu".

Pinex is a highly concentrated compound of genuine Norway pine, containing the active agent of creosote, in a refined, palatable form, and known as one of the greatest healing agents for severe coughs, chest colds and bronchial troubles.

Do not accept a substitute for Pinex. It is guaranteed to give prompt relief or money refunded.

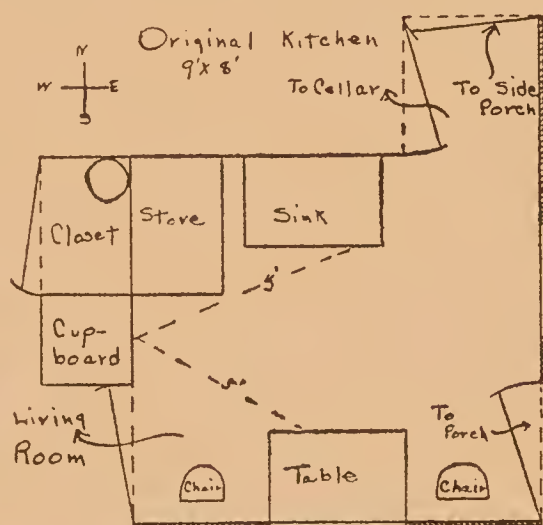
When Writing Advertisers
Be sure to say you Saw it in
AMERICAN AGRICULTURIST

Remodeling Our Kitchen

Fourth Prize Letter in Kitchen Contest

WHEN we started to remodel our kitchen it was 8 feet wide and 9 feet long. The woodwork was painted dark brown and the walls sage green. The bare floor was painted yellow. The sink was iron. There was only a small cupboard near the stove. We had no dining room. We used kerosene lamps and burned wood in the black iron stove. We had neither refrigerator nor laundry.

The first thing we did was to build a 4-foot addition all across the house, making more width on the kitchen and also on the living room. This made space for a built-in cupboard and a breakfast nook. By removing the partition between two small bedrooms we have a nice sized dining room, and could make the kitchen wider on the other side. Another built-in cupboard near the dining room door has upper



doors of glass while the under part has drawers.

We then changed the location of the cellar stairs, and enclosed one end of the side porch to make a laundry containing the range boiler with electric heater, stationary tubs, a small electric ironer, (this folds so that it can be used as a table) and an electric washer, as well as a downstairs toilet. A shelf over the tubs holds soap, soap powder, bluing, etc. Two windows, one above the tubs and the other above the washer, hinged and opening inwardly, provide plenty of light and, with a ventilator in the ceiling, insure good ventilation at all times. In here is a reel clothesline, clothes bars and also hooks for outside garments. There is a center ceiling light.

There was a 2 feet closet between kitchen and living room containing a galvanized iron boiler. This, and the cupboard near it were taken out and a new copper boiler installed in the laundry. Thus the kitchen was made 2 feet longer. We removed the iron range and put in a new blue porcelain electric one, next to the wall near the laundry. We also put in a white porcelain sink and drainboard with a cupboard under the drainboard that holds dishpans, kettles, etc. A shelf over the sink holds soap and other cleansing agents. The hand soap-dish hangs between the faucets. A rack below the shelf holds cutlery. There is a mirror above the shelf and towel bars are at the side.

The ceiling, walls and woodwork are painted white with a finish that cleanses easily but does not turn yellow. Inlaid linoleum on the floor is cemented over felt lining. This is a three-inch tile pattern in gray and blue and is kept waxed.

Window shades, or curtains are white Indian Head with blue morning glory border stenciled on the bottom, stiffly starched and mounted on shade rollers.

Tables have white porcelain enameled tops—one new table and the other is a new top on an old table. The one shown in the sketch in center of the room has large swivel casters with rub-

ber tired wheels and moves easily wherever needed.

The stool in front of the sink is a very solid white enameled folding step-ladder stool with two steps and top on which are nailed rubber treads. The other stool is white enameled with back and has rubber tips on legs. Chairs are white enameled with blue morning glory sprays on backs. The kitchen cabinet is enameled in white. All cupboards are painted white inside. The white porcelain-lined electric refrigerator will be flush with the wall inside the kitchen and will extend on the enclosed back porch. A hinged, one-sash window above the refrigerator opens inside.

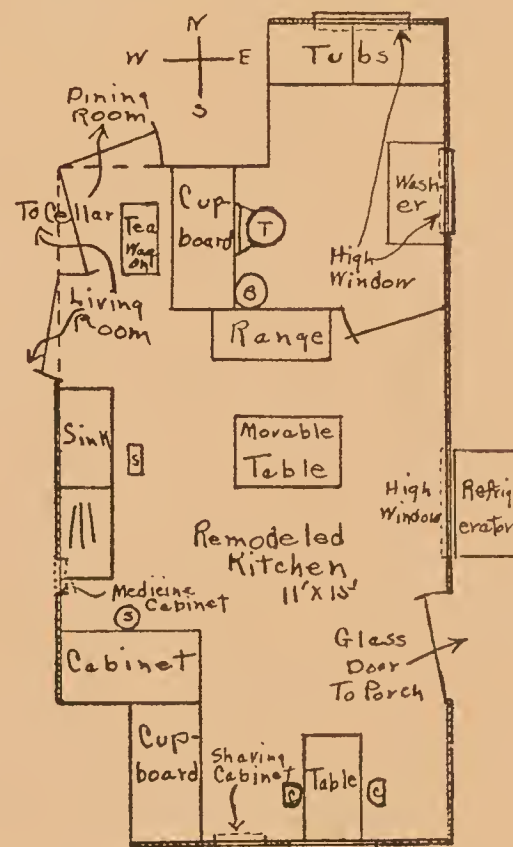
A medicine cabinet is built in the wall near the kitchen cabinet. A shaving cabinet with a mirror in the door is built in the wall between the window and cupboard and contains all necessary furnishings.

To make more light, we put in an outside door with the upper part of glass. Center indirect ceiling light, and side wall fixtures over sink and behind stove, are of plain white porcelain. An electric fan is on the sidewall in the breakfast nook. An electric iron is used.

A blue and white clock, and blue enameled scales that weigh by ounces to 24 pounds sit on top of the kitchen cabinet. The tea wagon has a removable glass tray and is finished in blue lacquer. The garbage can and waste basket under the sink are enameled blue. The shelf across the south window holds flowering plants—at present ageratum and pink geranium.

All windows have outside copper screens and there is an outside screen door for use in summer. The tool drawer in the cupboard near the window contains both large and small hammers, screw drivers of different sizes, pliers, a file, liquid solder, mendets, a ball of twine, a tube of glue, china cement, an awl, a pair of tin shears, a roll of gummed paper as well as tacks, nails and screws.

A rack inside of cellar door holds



broom, dust pan, dust mop and dustless duster.

All kitchen cutlery is of stainless steel, baking dishes of oven glass and basins, pans, griddle, saucepans, boilers, kettles, etc., are aluminum.

Our water supply comes from a large spring with a covered concrete reservoir, and our sewage disposal is a septic tank planned from Extension Bulletin 48.

The improvements are not all finished, but we are working at, and plan-

(Continued on Opposite Page)



Can You finish your washing by 10 o'clock?

Ten o'clock in the morning and the washing all done! That is the story in the hundreds of farm homes nowadays where they have modern power washing machines, power wringers and the other conveniences that make this old, back-breaking job an easy one.

For a woman to slave over an old-fashioned wash tub, rubbing clothes by hand, or to turn a crank of the old-fashioned washer, is like living before the days of automobiles or even railroads. It is doing the hardest kind of work for a cent or two an hour!

If your laundry work is handled in this old-fashioned way, make it a point to come to this "Farm Service" Hardware Store and let us show how much the right laundry equipment will save you. We want to show you our quick-heat laundry stoves, water heaters, and other laundry conveniences.

Come in and ask about it anyway!

Your "Farm Service"
Hardware Men.



Your
Farm Service
HARDWARE
STORES

Aunt Janet's Corner

A Recipe for Making Better Citizens

THERE is material for much philosophizing in this "Recipe for Better Citizens". What a fine place this world would be if we could only manage the mixture!

Take:

- 2 pounds Love
- ½ pound Good Looks
- ½ pound Sweet Temper
- ½ pound Buttered Youth
- 2 pounds of Self-forgetfulness
- ½ ounce Dry Humor
- 2 tablespoons of Sweet Argument
- 1 pint Commonsense

Put the flower of love, good looks and sweet temper into a well furnished home; mix the butter of youth together with blindness to faults and self-forgetfulness, throw in dry humor and sweet arguments, then add to the above. Pour in rippling laughter and commonsense, work together till well mixed and **BAKE GENTLY FOREVER.**—AUNT JANET.

write to Mrs. John Alden, Sunshine Headquarters, 96 Fifth Avenue, New York City. She will help towards getting an appointment for the child from the State Board of Education which handles all the appointments.

Tested Recipes

Prune Shape

- 1 pound prunes
- 2 teaspoonfuls gelatine
- ½ pint juice
- sugar to taste

Wash and soak prunes overnight. Stew till tender. Add sugar. When cold, stone the prunes and beat up with a fork. Break open some of the stones and chop the kernels. Add these to the prunes. Take the juice of the

Unusually Appealing



2561



The ever-useful COAT-DRESS 2561 is very smart for general wear. Wood jersey, wool crepe, sheer woolen, or velveteen would be well suited to such design. The pattern cuts in sizes 16, 18 years, 33, 38, 40, 42 and 44 inches bust and is extremely easy to make. Size 36 requires 3½ yards of 40-inch material with ¾ yard of 32-inch contrasting. PRICE 13c.

Unique Styling



2664

BLOUSE PATTERN 2664 is a highly satisfying design to fill the demand for fancy blouses. Printed silk, crepe, silk velvet, or metal cloth with a contrasting neckband would make a handsome outfit when combined with a velvet or flat crepe skirt. The blouse pattern cuts in sizes 16, 18 years, 36, 38, 40 and 42 inches bust measure with 1½ yards of 40-inch material with ¾ yard of 27-inch contrasting. PRICE 13c.

TO ORDER: Write name, address, pattern numbers and sizes clearly and correctly and enclose with correct remittance in stamps or coin (although coin is sent at own risk). Add 12c for one of the new fashion catalogs and send to Pattern Department, American Agriculturist, 461-4th Avenue, New York City.

Remodeling Our Kitchen

(Continued from Opposite Page)
ning for a more convenient and attractive kitchen than the one we began with.

List of Movable Equipment for Kitchen

Kitchen cabinet, 2 tables, 2 chairs, 2 stools, 1 teawagon, 1 clock. Glass coffee

He Heard a Chicken Squawk

A Bell System Advertisement

ONE evening between 9 and 10 o'clock a farmer was returning to his home from Sinclairville, New York. He noticed a car parked beside his road and a short time later heard a chicken squawk in the direction of a neighbor's farm. Immediately suspicious, he telephoned the deputy sheriff at Sinclairville who got an assistant and came at once. They caught three men who had chickens in their car. The chickens were identified and the three thieves sent to jail.

The telephone is a timely aid in any emergency. It brings help in time of fire, accident or sickness. Runs useful errands to town and market. Communicates with friends and neighbors. Often pays for itself many times over by finding when and where to buy or sell. A farmer living near Stephenson, Miss., was offered 5c a pound for his calves, but he telephoned another buyer and got 6½c. Saved by telephone, \$150.

The modern farm home has a telephone.



Prevents Rust
Cleans and Polishes

FYR-PRUF

Stove and Nickel Polish

Absolutely Fireproof, Dustless ~
Odorless, and gives a Beautiful
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The Little Shepherd of Kingdom Come-By John Fox, Jr.

"WHY, who's that?" asked Richard Hunt. "Oh, yes," he added, getting his answer from Margaret's face. "Bless me, but he's fine—the very spirit of '76. I must have him in the Rifles."

"Will you make him a lieutenant?" asked Margaret.

"Why, yes, I will," said Mr. Hunt, decisively. "I'll resign myself in his favor, if it pleases you."

"Oh, no, no—no one could fill your place."

"Well, he can, I fear—and here he comes to do it. I'll have to retreat some time, and I suppose I'd as well begin now." And the gallant gentleman bowed to Chad.

"Will you pardon me, Miss Margaret? My mother is calling me."

"You must have keen ears," said Margaret, "your mother is upstairs."

"Yes; but she wants me. Everybody wants me, but—" he bowed again with an imperturbable smile and went his way.

Margaret looked demurely into Chad's eager eyes.

"And how is the spirit of '76?"

"The spirit of '76 is unchanged."

"Oh, yes, he is; I scarcely knew him."

"But he's unchanged; he never will change."

Margaret dropped her eyes and Chad looked around.

"I wish I could get out of here."

"We can," said Margaret, demurely.

"We will!" said Chad, and he made for a door, outside which lanterns were swinging in the wind. Margaret caught up some flimsy garment and wound it about her pretty round throat—they call it a "fascinator" in the South.

Chad looked down at her.

"I wish you could see yourself; I wish I could tell you how you look."

"I have," said Margaret, "every time I passed a mirror. And other people have told me. Mr. Hunt did. He didn't seem to have much trouble."

"I wish I had his tongue."

"If you had, and nothing else, you wouldn't have me"—Chad started as the little witch paused a second drawing—"leaving my friends and this jolly dance to go out into a freezing yard and talk to an aged Colonial who doesn't appreciate his modern blessings. The next thing you'll be wanting, I suppose—will be—"

"You Margaret; you—you!"

It had come at last and Margaret hardly knew the choked voice that interrupted her. She had turned her back to him to sit down. She paused a moment, standing. Her eyes closed; a slight tremor ran through her, and she sank with her face in her hands. Chad stood silent, trembling. Voices murmured about them, but like the music in the house, they seemed strangely far away. The stirring of the wind made the sudden damp on his forehead icy-cold. Margaret's hands slowly left her face, which had changed as by a miracle. Every trace of coquetry was gone. It was the face of a woman who knew her own heart, and had the sweet frankness to speak it, that was lifted now to Chad.

"I'm so glad you are what you are, Chad; but had you been otherwise—that would have made no difference to me. You believe that, don't you, Chad? They might not have let me marry you, but I should have cared, just the same. They may not now, but that, too, will make no difference." She turned her eyes from his for an instant, as though she were looking far backward. "Ever since that day," she said, slowly, "when I heard you say, 'Tell the little gurl I didn't mean nothin' callin' her a little gal'—there was a low, delicious gurgle in the

throat as she tried to imitate his odd speech, and then her eyes suddenly filled with tears, but she brushed them away, smiling brightly. "Ever since then, Chad—" she stopped—a shadow fell across the door of the little summer house.

"Here I am, Mr. Hunt," she said, lightly; "is this your dance?" She rose and was gone. "Thank you, Mr. Buford," she called back, sweetly.

For a moment Chad stood where he was, quite dazed—so quickly, so unexpectedly had the crisis come. The blood had rushed to his face and flooded him with triumphant happiness. A terrible doubt chilled him as quickly. Had he heard aright—could he have misunderstood her? Had the dream of years

of him some day. He wondered where she was, and what she was doing. She could not be asleep, and he must have cried aloud could he have known—could he have heard her on her knees at her bedside, whispering his name for the first time in her prayers; could he have seen her, a little later, at her open window, looking across the fields, as though her eyes must reach him through the morning dusk.

That happy dawn—for both, that happy dawn!

It was well that neither, at that hour, could see beyond the rim of his own little world. In a far Southern city another ball, that night, had been going on. Down there the air was charged with the prescience of dark

The Story Thus Far

CHAD leaves "Lonesome" with his dog "Jack." His foster parents are both dead from the plague and plans have been laid to bind Chad out to a hard fisted neighbor. After the funeral, Chad collects a rifle, some powder, and shot and a haversack and with "Jack" by his side, starts out for unknown parts. He meets the sons of Joel Turner from over the mountain who take him home. Chad's cleverness at school gains the admiration of Caleb Hazel, the schoolmaster. They become close friends. Hazel tells Chad of the "Bluegrass Country" beyond the hills. Logging operations take Chad to a distant city where he gets lost and starts home on foot. He is picked up by Major Calvin Buford. It appears that Chad is also a Buford and is believed to be a kinsman of his new found friend, who takes him to his home in Lexington in the heart of the "Bluegrass." Chad accepts the Major's offer of a home and an education. Chad enters into the social life and becomes very popular at school. He falls in love with Margaret Dean, daughter of General Dean, neighbor of the Bufords. Meanwhile feeling grows bitter between North and South and war clouds gather. Chad attends a dance costumed as a Colonial general.

really come true? What was it she had said? He stumbled around in the half darkness, wondering. Was this another phase of her unceasing coquetry? How quickly her tone had changed when Richard Hunt's shadow came. At that moment, he neither could nor would have changed a hair had some genie dropped them both in the midst of the crowded ball-room. He turned swiftly toward the dancers. He must see, know—now!

The dance was a quadrille and the figure was "Grand right and left." Margaret had met Richard Hunt opposite, half-way, when Chad reached the door and was curtseying to him with a radiant smile. Again the boy's doubts beat him fiercely; and then Margaret turned her head, as though she knew he must be standing there. Her face grew so suddenly serious and her eyes softened with such swift tenderness when they met his, that a wave of guilty shame swept through him. And when she came around to him and passed, she leaned from the circle toward him, merry and mock-reproachful:

"You mustn't look at me like that," she whispered, and Hunt, close at hand, saw, guessed and smiled. Chad turned quickly away again.

That happy dawn—going home! The Major drowsed and fell asleep. The first coming light, the first cool breath that was stealing over the awakening fields, the first spring leaves with their weight of dew, were not more fresh and pure than the love that was in the boy's heart. He held his right hand in his left, as though he were imprisoning there the memory of the last little clasp that she had given it. He looked at the Major, and he wondered how anybody on earth, at that hour, could be asleep. He thought of the wasted days of the past few months; the silly, foolish life he had led, and thanked God that, in the memory of them, there was not one sting of shame. How he would work for her now! Little guessing how proud she already was, he swore to himself how proud she should be

trouble, but, while the music moaned to many a heart like a god in pain, there was no brooding—only a deeper flush to the cheek, a brighter sparkle to the eye, a keener wit to the tongue; to the dance, a merrier swing. And at that very hour of dawn, ladies, slippered, bare of head, and in evening gowns, were fluttering like white moths along the streets of old Charleston, and down to the Battery, where Fort Sumter lay, gray and quiet in the morning mist—to await with jest and laughter the hissing shriek of one shell that lighted the fires of a four years' hell in a happy land of God-fearing peace and God-given plenty, and the hissing shriek of another that Anderson, Kentuckian, hurled back, in heroic defence of the flag struck for the first time by other than an alien hand.

* * *

XIX

THE BLUE OR THE GRAY

IN the far North, as in the far South, a man had but to drift with the tide. Among the Kentuckians, the forces that moulded her sons—Davis and Lincoln—were at war in the State, as they were at war in the nation. By ties of blood, sympathies, institutions, Kentucky was bound fast to the South. Yet, ten years before, Kentuckians had demanded the gradual emancipation of the slave. That far back, they had carved a pledge on a block of Kentucky marble, which should be placed in the Washington monument, that Kentucky would be the last to give up the Union. For ten years, they had felt the shadow of the war creeping toward them. In the dark hours of that dismal year, before the dawn of final decision, the men, women, and children of Kentucky talked of little else save war, and the skeleton of war took its place in the closet of every home from the Ohio to the crest of the Cumberland. When the dawn of that decision came, Kentucky spread before the world a record of independent-mindedness, patriotism, as

each side saw the word, and sacrifice that has no parallel in history. She sent the flower of her youth, forty thousand strong—into the Confederacy; she lifted the lid of her treasury to Lincoln, and in answer to his every call, sent him a soldier, practically without a bounty and without a draft. And when the curtain fell on the last act of the great tragedy, half of her manhood was behind it—helpless from disease, wounded, or dead on the battlefield.

So, on a gentle April day, when the great news came, it came like a sword that, with one stroke, slashed the State in twain, shearing through the strongest bonds that link one man to another, whether of blood, business, politics or religion, as though they were no more than threads of wool. Nowhere in the Union was the National drama so played to the bitter end in the confines of a single State. As the nation was rent apart, so was the commonwealth; as the State, so was the county; as the county, the neighborhood; as the neighborhood, the family; and as the family, so brother and brother, father and son. In the nation the kinship was racial only. Brother knew not the face of brother. There was distance between them, antagonism, prejudice, a smouldering dislike easily fanned to flaming hatred. In Kentucky the brothers had been born in the same bed, slept in the same cradle, played under the same roof, sat side by side in the same school-room, and stood now on the threshold of manhood arm in arm, with mutual interests, mutual love, mutual pride in family that made clan feeling peculiarly intense. For anti-slavery fanaticism, or honest unionism, one needed not to go to the far North; as, for imperious, hot-headed, non-interference or pure State sovereignty, one needed not to go to the far South. They were all there in the State, the county, the family—under the same roof. Along the border alone did feeling approach uniformity—the border of Kentucky hills. There unionism was free from prejudice as nowhere else on the continent save elsewhere throughout the Southern mountains. Those Southern Yankees knew nothing about the valley aristocrat, nothing about his slaves, and cared as little for one as for the other. Since '76 they had known but one flag, and one flag only, and to that flag instinctively they rallied. But that the State should be swept from border to border with horror, there was division even here; for in the Kentucky mountains, there was, here and there, a patriarch like Joel Turner who owned slaves, and he and his sons fought for them as he and his sons would have fought for their horses, or their cattle, or their sheep.

It was the prescient horror of such a condition that had no little part in the neutral stand that Kentucky strove to maintain. She knew what war was—for every fireside was rich in memories that men and women had of kindred who had fallen on numberless battle-fields—back even to St. Clair's defeat and the Raisin massacre; and though she did not fear war for its harvest of dangers and death, she did look with terror on a conflict between neighbors, friends, and brothers. So she refused troops to Lincoln; she refused them to Davis. Both pledged her immunity from invasion, and, to enforce that pledge, she raised Home Guards as she had already raised State Guards for internal protection and peace. And there—as a State—she stood: but the tragedy went on in the Kentucky home—a tragedy

(Continued on Page 26)



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A disk harrow lasts 8 years exposed, 15 housed, and costs \$9.38 for repairs.

Housing and care of farm machinery, therefore, saves not only a large part of the first cost of the implements but

also greatly reduces the yearly outlay of time and money used in repairing them—TRACTOR FARMING.

Two Oil and Paint Questions

"Has used oil drained from crankcase any preservative value for preserving wood parts of machinery exposed to the weather? Where wooden wagon wheels from which the paint has worn are cooked in a hot linseed oil bath, will fresh paint stick to them?"—A. B.

USED crank case oil has practically no value either as a preservative for treating fence posts or as a protective paint for wooden parts exposed to the weather. If mixed half and half with gas house tar and given a prolonged hot and cold treatment, it probably would have considerable preservative effect on fence posts and other timbers, but would be very much less efficient than creosote. Such a mixture would probably have some protective effect when applied as paint with a brush, but would not compare at all with good linseed oil paint and would hardly be worth the labor of applying.

I think there would be no trouble at all getting paint to stick to the wagon wheels which have been soaked in hot linseed oil. The first coat of any good paint job should be largely linseed oil, and I see no reason why the prolonged oil heating should give trouble.—I. W. D.

Putting Pitch on Inside of Silo

"Please give me any information you can as to the advisability of putting pitch and tar, such as is used by roofers, on the inside of tile, brick, and cement silos. As roofers we have had several inquiries as to doing this sort of work."—G. F.

IT is very common to coat the inside surface of all types of silos with hot asphalt, such as is used in road and street work, and this is considered good practice. It not only stops air leakage which will injure the quality of the silage, but helps to protect the silo wall from the moisture and weak acid in the silage. It is not considered so desirable to use coal tar for this purpose, but so far as I have observed this would have serious detrimental effects, aside from making the silage somewhat less palatable. Probably some of the silage next to the wall would have to be discarded. We should be glad to have the experience of our readers on the use of coal tar as a silo coating.—I. W. D.

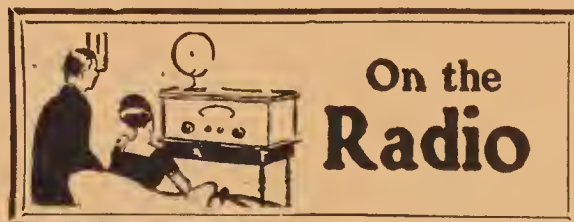
Disk Harrow Sharpening

"We have no way of sharpening our disk harrow. We would indeed like to know if it is possible to rig up some device to turn the disk with, so that by holding a stone against the disk one might be able to do a good job with a minimum of labor. Any suggestions will be appreciated."—C. E. C.

DEVICES of various types are now on the market for sharpening disk harrows, and I think that in general these can be bought more cheaply than makeshift devices can be made by the farmer himself. One type is a heavy frame into which a disk gang is fastened and the gang is then driven by means of belt and sprocket chain from a gas engine. The sharpening is done by a piece of hardened steel held against disk edge as it rotates. Other devices rotate the disk and sharpen it with a grinder. In some cases the disks are removed and ground separately and then polished at the same time. Still another method is to sharpen the disks while at work in the field by means of a heavy rod or pipe which hooks over the disk thimble or axle, while pressure on the other

end by the operator holds a piece of sharp hardened steel or file against the edge as the disk turns.

For best work the disk should be sharpened each year, yet many go many years without attention and their owners wonder why they do not do satisfactory work—I. W. D.



Boys—Why Not Build a Loud Speaker

ALTHOUGH the construction of a radio receiving sets for broadcast reception is not as popular as it used to be when manufactured sets were scarce and high-priced, there still is room enough for home construction in the loud speaker line. For boys who like to handle tools, follow sketches and "build" something "real", the construction of a loud speaker has everything to offer.

The essential parts may be purchased at extremely low cost in "kit" form, as a starter. It is desirable to select a really good unit, as a careful boy is not likely to damage it by frequent re-building beyond economical repair, and the results are worth-while. The "kit" may consist of the parchment or paper to construct the cone the proper sort of adhesive, the mounting framework and the necessary directions.

Then there are so many different forms of speaker that can be built, and radio magazines and newspapers having constructional departments abound with new ideas constantly. The same unit can be installed in many different shapes and kinds of speaker and Dad may be surprised to discover that his youngster has succeeded in getting together a loud speaker that is a whole lot finer in performance than the \$35 one he bought a couple of years ago and still swears by.—B. FOOTE.

* * *

Could I receive amateur stations with an ordinary neodyne if I connect switches to use only half the coils?

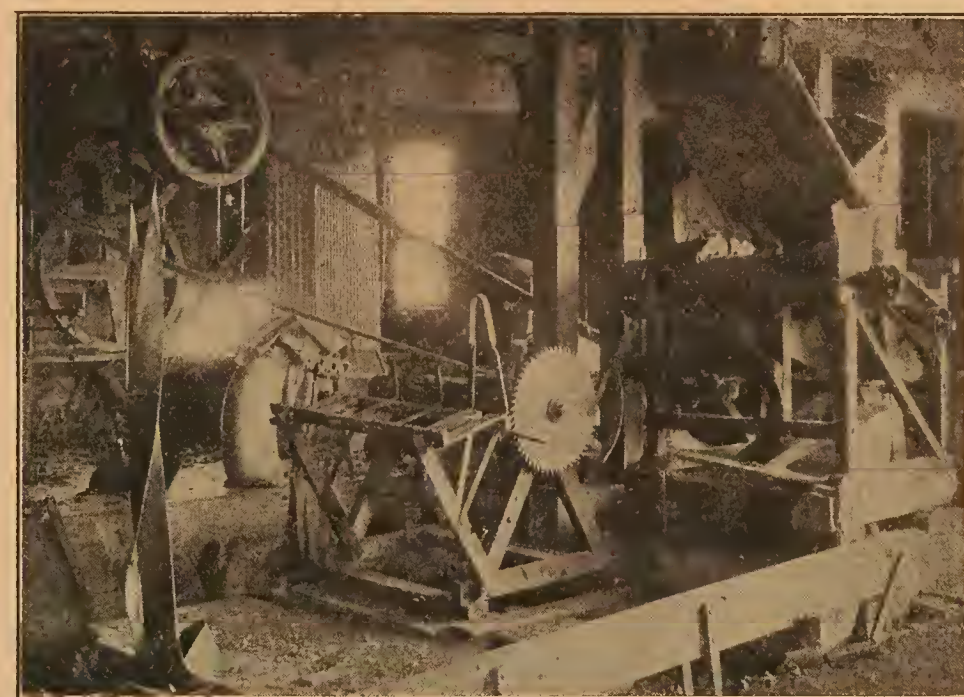
NOT very well, as you would have to change the primary windings, too. The best method is to use an entirely different receiving set. The same audio amplifier can be employed if you wish. Only one tube is needed for the set and this may be a dry cell tube with good results. Get a radio amateur magazine or instruction book.

He Shook Hands With Lincoln

(Continued from Page 5)

great-great-grandfather, Mordecai Lincoln, and of the Lincoln house in Exeter township, about one mile from Birdsboro.

(To be Continued Next Week)



This picture shows part of the farm shop belonging to Mr. M. M. Bushong, of Columbia, Pa. Mr. Bushong does everything possible in this shop with machinery operated by electric motors. A part of the room is also used to house the electrically operated feed grinder and to store feed. Mr. Bushong is rated as a very successful dairyman.

—Courtesy, Electricity on the Farm.

Additional Classified Advertising

SEEDS—NURSERY STOCK

PEACH AND APPLE TREES \$5; \$7.50 per 100 and up. Complete assortment fruits, berries, vines, ornamental trees, vines, shrubs, evergreens. Catalog in colors free. TENNESSEE NURSERY COMPANY, Box 102, Cleveland, Tenn.

PEACH AND APPLE TREES \$5 per 100 and up. Fruits, ornamental trees, vines. TENNESSEE NURSERY CO., Box 202, Cleveland, Tenn.

PEDIGREEED SEED POTATOES, Cobblers, Mountains, Russets, Peachblow. Write for catalogue. ROY HASTINGS, Malone, N. Y.

GLADIOLUS BULBS 36 page illustrated Catalog free. HOWARD GILLET, Box J, New Lebanon, N. Y.

HIGH GRADE SEED Potatoes—Russets. Green Mountain, Gold Coin, Cobbler, Banner, Walter Raleighs and Carman No. 3. Prices right. Catalog free. THE KEYSTONE POTATO FARMS, Richfield, Pa.

SEED POTATOES, certified Michigan Russets, first generation. Grown in high New York altitude. \$3.50 per bag of 2½ bushels. Subject to prior sale, etc. 30% deposit required. CALEY'S CO-OPERATIVE CO., Cortland, N. Y.

TOBACCO

LEAF TOBACCO. Good, sweet chewing, 5 lbs. 90c; 10 lbs. \$1.25; 20 lbs. \$2.00. Smoking, 3 lbs. 60c; 5, 90c; 10, \$1.50. UNITED FARMERS, Mayfield, Ky.

HOMESPUN TOBACCO: Chewing 5 lbs. \$1.50. Smoking 5 lbs. \$1.25. Box 50 Cigars \$1.75. Pay when received. Pipe free. FARMERS UNION, A6, Paducah, Ky.

CIGARS from factory, trial 50 large Perfectos postpaid \$1. SNELL CO., Red Lion, Pa.

HOMESPUN TOBACCO: Chewing 5 lbs. \$1.50; ten \$2.50; Smoking 10 lbs. \$2.00; pay when received. FARMERS ASSOCIATION, West Paducah, Ky.

WOMEN'S WANTS

SWITCHES—Combing made up. Booklet. Flannelette house dresses \$1.50. EVA MACK, Box 298, Ithaca, New York.

LADIES SILK and WOOL Bloomers, white, grey, tan, 36-44. 2 pair \$1.50. Good openings for agents. A. H. TALBOT SALES COMPANY, Norwood, Mass.

WOOL—HIDES—FURS

WANTED EASTERN STATES Muskrats \$1.40 to \$1.60 average free of poor. Ship immediately. O. FERRIS & CO., Dept. A.A., Chatham, N. Y.

FURS—HIDES will bring the best prices when shipped here. Write for prices, market information, tags. No lot too small or large. S. H. LIVINGSTON, Suco. to Keystone Hide Company, Lancaster, Pa.



When You Have Money to Invest

WHEN you have money to invest, we suggest that you consider carefully the following suggestions. These are the result of many years of experience of the American Agriculturist Service Bureau in investigating investment possibilities of all kinds.

I. Unwise Investments

1. Stocks.

(a) Any stock of any kind not listed on the New York Stock Exchange must be regarded as a speculation and not as an investment. The Stock Exchange makes a careful investigation before it receives stocks for listing. Few farmers have money enough so that they can afford to risk principal as well as interest in any speculative enterprise, and the use of life savings for such purposes is nothing short of suicidal. Listen not to the wiles of smooth-tongued stock salesmen. They are looking out for their interests and not yours.

(b) Remember that for every small investor who gains in speculation there are dozens who lose. Somebody must always lose, and you can be sure that it is not the big financial interests who have made a life study of financial investments.

(c) Listed stocks may be found in any good daily newspaper.

2. Listed Stocks.

(a) Even listed stocks may be dangerous for amateurs. This is especially true in times like the present when the stock market is so unsettled.

(b) If you feel that you must buy stock, we advise you strongly to talk the matter over with some good banker. American Agriculturist Service Bureau cannot undertake to pass upon the reliability of stocks for all are subject, especially now, to large fluctuations endangering the safety of the principal.

(c) Do not set this advice down to over-conservatism for we know from years of watching our readers get hurt in unwise investments that you cannot beat the financial sharks at their own game.

(d) If you have unlisted stocks, we strongly advise you to sell them, if possible, and re-invest your money more safely.

3. Local Enterprises.

(a) Do not invest your savings in local enterprises which are new and untried. Few of these live up to expectations and the majority close, leaving blasted hopes behind them. Such enterprises include small village manufactories, fox farms, etc.

4. Unseen Real Estate.

(a) Do not invest in real estate that you have not seen personally.

(b) All contests offering lots as prizes are simply schemes to sell those lots for more than they are worth.

(c) Not only should a farm not be bought until you have examined it personally, but you should make such examination in the summer time when you can see the condition of the fields and crops.

5. Take Time to Investigate.

(a) Take plenty of time before making any investment. Let no man hurry you on the plea that opportunity is fleeing. It is much more difficult to get your money out of an investment than it is to put it in.

II. Some Wise Investments

1. Your Own Business.

(a) Invest in your own business of farming. You know this business better than you do any other. If you have some extra capital, it is a pretty good thing to acquire good land, if you can do so at a low price. Capital wisely invested by the good farmer in better stock and in new improvements almost always pays good returns.

2. First Mortgages.

(a) First mortgages on first class property not too highly appraised are good investments. Real estate always represents tangible value. Your banker or your local lawyer can probably tell you of opportunities to invest in mortgages.

3. Life Insurance.

(a) Few farmers understand the investment value of life insurance. Not only is life insurance protection for your family but it will also protect your business in time of financial stress, and the right kind of insurance pays fair dividends or interest.

4. Bonds.

(a) Money invested in bonds backed by good property is usually safe and pays fair rate of interest. Your banker should be able to make suggestions.

5. Building and Loan Associations.

(a) There are many of these cooperative associations that are reliable and pay a very good rate of interest. As a rule, investments are much safer in a building and loan association than they are in stocks.

6. And lastly, no person should consider other investments until he has a goodly reserve in the good old savings bank.



Be sure
you have

RCA RADIOTRONS

When you choose a radio set make sure that it is equipped throughout with RCA Radiotrons. Manufacturers of quality receiving sets specify RCA Radiotrons for testing, for initial equipment and for replacement.



RADIO CORPORATION OF AMERICA

NEW YORK CHICAGO ATLANTA DALLAS SAN FRANCISCO

RCA RADIOTRON

MADE BY THE MAKERS OF THE RADIOLA

ings bank. In our opinion, this is the first and best place for small savings. The banks pay a fair rate of interest which is compounded, and the principal is safer than in practically any other investment.

The A. A. Service Bureau is glad to help you in any way we can, but the wisest financial expert in the world cannot give you better advice than we have outlined above.

Look Out for This Man

"I cashed a check for a stranger for \$3.00, which has been returned marked 'no funds'. He showed me a bank book with deposits of \$800. I realize I was foolish but thought perhaps you could warn others. I am enclosing a letter from the bank."

THE LETTER enclosed by our subscriber comes from a bank in Hallstead, Pa., and states that one Harry Cross, who issued the bad check is a very clever crook. The letter went on to say that Cross made a deposit in the bank, but was warned not to draw checks on his account until the checks he deposited were collected. However, Cross immediately wrote several checks and cashed them. The checks which he deposited in the bank were returned marked, "no account". It is reported that Cross has recently worked the same game in the vicinity of Buffalo. Any of our subscribers who learn anything of the whereabouts of this man should communicate with their local authorities and with American Agriculturist at once.

Picture Enlarging Agent Becomes Abusive

This morning a man stopped at our house and persuaded us to have some pictures enlarged. He took a number out of a package which entitled us to a check for \$45.00 and which could be used as

part payment. The cash cost to us would be \$15.00. Later we became worried about this and ask your advice.

ALTHOUGH we realized that our subscriber doubtless signed a legally binding contract, experience with picture-enlarging firms has been so universally unsatisfactory and so much has been misrepresented that we advised them to refuse to accept the pictures in case they were unsatisfactory when delivered. Yesterday we received the following letter from our subscriber:

"The man delivered the pictures while I was away from home and although my wife and I had agreed we would not accept them, he became so abusive that she finally did accept them. When I reached home, she was crying and she said that he stated the price was \$33.00, and that the extra money was for the frames. She refused and they became very abusive, said that she had signed for them and was compelled to take them. She gave them no money but they did threaten her into signing a paper which, no doubt, was a note. I am not so much concerned about the loss of the money as I am about the way they abused my wife as she has been far from well for some time."

Such tactics are despicable. We publish the above letter just as an illustration of how agencies of these picture enlarging companies work. Our subscribers will be avoiding trouble by showing them the door immediately. The note which our subscriber signed has doubtless been sold into the hands of an innocent third party and is collectable. We are helping as much as we can by warning our subscribers in order that they may not be caught in a similar way. If you have pictures that you want enlarged, a good local photographer is the right man to see.

Fire, cattle, and the ax are three dangers to the profitable farm woodlot. Prevent the first, keep out the second, and use the third judiciously.

Reward Goes to Steuben County Man

PROMPT action on the part of James W. Neally of Addison, N. Y., has resulted in his winning the \$25.00 reward offered by Henry Morgenthau, Jr., Publisher of AMERICAN AGRICULTURIST to those furnishing evidence leading to the arrest, conviction and imprisonment of chicken thieves.

Around eleven o'clock P. M., December 10th, Mr. Neally caught three men who were stealing chickens from his brother's farm near Addison, N. Y. He reported the theft at once to the sheriff who came next day and took the

thieves before the justice of the peace. Two of the men, Harvey and Eber Clark were sentenced to 30 days in jail, while the other man, Clinton Mayo, was sentenced to ninety days.

Within three days after the theft had occurred, Mr. Neally's statement was in this office accompanied by a letter from the justice corroborating Mr. Neally's facts. Best of all, of course, was the fact that Mr. Neally actually caught the thieves at their thieving, which made identification easy and eliminated delays which ordinarily occur when a "cold" trail has to be followed.

NUMBER 20673

NEW YORK, N. Y., December 22nd 1927

Manufacturers Trust Company

513 FIFTH AVENUE CORNER 43rd STREET

PAY Twenty-Five Dollars

\$ 25.00/100

James W. Neally

Addison

New York

AMERICAN AGRICULTURIST, Inc.

Henry Morgenthau, Jr.

A FLOCK TYPICAL OF THOUSANDS

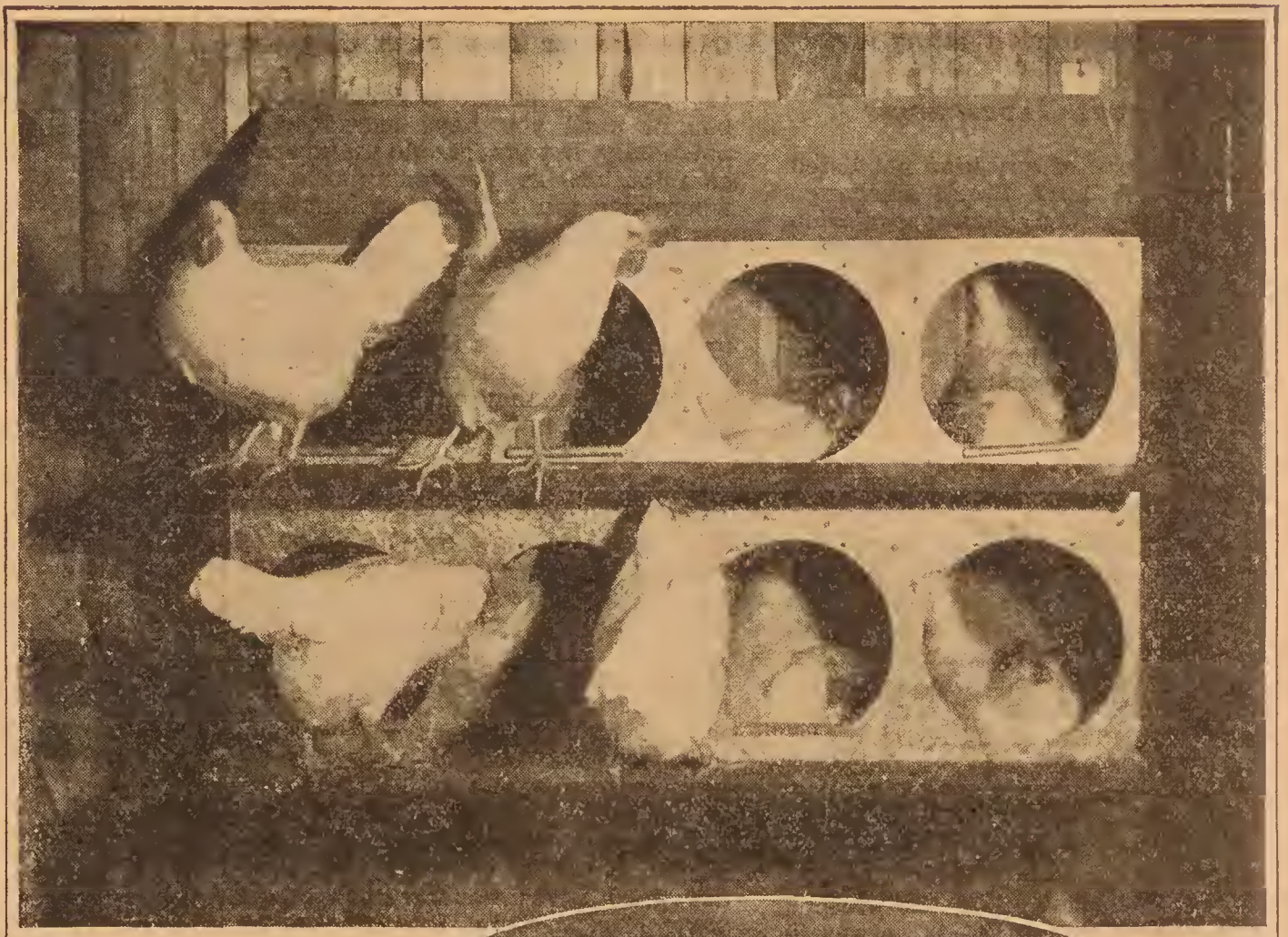
raised the G. L. F. way

THE flock here described was raised by Mrs. N. B. Royce of Ithaca, N. Y., but it might have been any one of thousands of G. L. F.-raised farm flocks because the conditions were so typical—poultry raising was a side issue, housing arrangements were average, and a woman had the care of the flock.

On March 4, of last year Mrs. Royce took on 810 chicks to raise for the Weaver Bros. of Inlet Valley, Ithaca. They cost 18 cents apiece—a total of \$145.80. From their first feeding they had G. L. F. STARTING AND GROWING MASH until the latter part of the rearing period when they were changed over to G. L. F. Growing Mash with Meat Scrap. Broilers brought \$189.80 and Mrs. Royce turned over to Weaver Bros. 310 mature pullets.

The feed cost to five months of age was \$250; this item included not only G. L. F. feed, but also coal for brooder stoves, grit, cod liver oil, and other small expenditures. By adding the cost of the chicks and feeding cost and subtracting from this sum the income from broilers, Mrs. Royce found that it cost her 66 1-2 cents apiece to raise the pullets to maturity. Aside from losses due to smothering and crowding, the mortality rate was very low.

Since they were placed in winter quarters the pullets have been fed G. L. F. Super Laying Mash and have been laying 50 to 60 percent.



A few of the laying birds in the flock of 310 raised by Mrs. Royce on G. L. F. STARTING AND GROWING MASH. This flock is now averaging 50 to 60 percent production on G. L. F. SUPER LAYING MASH.

(Right) Well-grown, active pullets at five months of age, just after Mrs. Royce turned them over to Weaver Bros.



FEEDING DIRECTIONS

CHICKS should not be fed until 36 to 48 hours of age. From that time on G. L. F. STARTING AND GROWING MASH should be kept before the birds in shallow pans or boxes.

At six to eight weeks of age begin feeding G. L. F. Scratch Grains in hoppers and in small amounts increasing until at twelve weeks of age the birds are consuming equal parts of grain and mash.

For feeding young chicks a box three feet long and one foot wide and two inches deep is convenient, allowing one box to each 50 chicks. As soon as possible, get the chicks away from the flat open box to the hopper which the chicks cannot get into, yet can always get feed easily. Care should be taken to increase hopper space as the chicks grow so that all chicks have an equal chance to eat.

G. L. F. STARTING AND GROWING MASH

The Formula

300 lbs.	St. Wheat Bran
300 "	Flour Middlings
840 "	Corn Meal
100 "	Heavy, Fine-Ground, Low-Fiber Oats
200 "	Meat Scrap 55-60%
200 "	Dried Buttermilk
40 "	Steam Bone Meal
20 "	Salt

GUARANTEED ANALYSIS

Protein	(Minimum)	17%
Fat	(Minimum)	4%
Fiber	(Maximum)	6%

AMERICAN AGRICULTURIST

\$1.00 Per Year

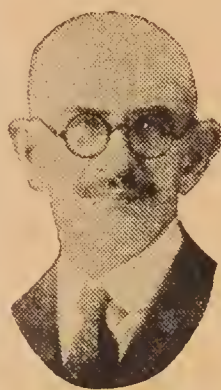
January 26, 1929

Published Weekly

A New York Farmer Visits Vermont

A Fireside Reflection on the Unquenchable Spirit of the Pioneers

DID I, four or five years ago somewhere in the A.A., quote that really splendid bit of verse in which a riotous Vermont patriot flings his devotion to the world? If I did once quote it may I do so again? I think it worthy of remembrance.



*"The sun shines no where else so bright
As up in old Vermont
The snow lies no where else so white
As up in old Vermont
So when the native comes to die
He loves to go back there and lie
Up where the mountains meet the sky
In little, old Vermont."*

It is wonderfully fine to be in love with your own state and then put those sentiments into verse like that.

Jared Van Wagenen, Jr. It was more than ten years ago that I first went to the state for a very intensive Farm Institute campaign which carried me well over the state and for one reason or another I have been back almost every year since so that when we visited there on our vacation it was really only the renewal of old acquaintance.

There are a few outstanding facts about the state that may be set down in one short paragraph.

In area it is a little more than one fifth the size of New York and the latter state has a population about thirty five times as great. Vermont's population has remained practically stationary for 70 years and it was one of three states (Nevada and Mississippi being the others) which actually lost population during the last Federal Census period. Its people at their best remain the finest example of Puritan culture surviving in the world. In the Civil War it sent to the front more soldiers in proportion to its population than any other state. One half of all its citizens of military age joined the colors. No man can deny that the pure flame of patriotism burned with especial fervor up here in this rock-bound commonwealth. So, too, the state has

By JARED VAN WAGENEN, JR.

given to the world more than its fair share of great men. We farm people ought not to forget that it was U. S. Senator Justin Morrill of Vermont whose agricultural enthusiasm and far seeing statesmanship resulted in the legislation by which our Land Grant Colleges were set up. In a legislative way he may fairly be called the Father of Agricultural Education in America. Then, too, in recent years as all the world knows Vermont has "raised" a President—something that many far larger and more populous states have failed to do.

* * *

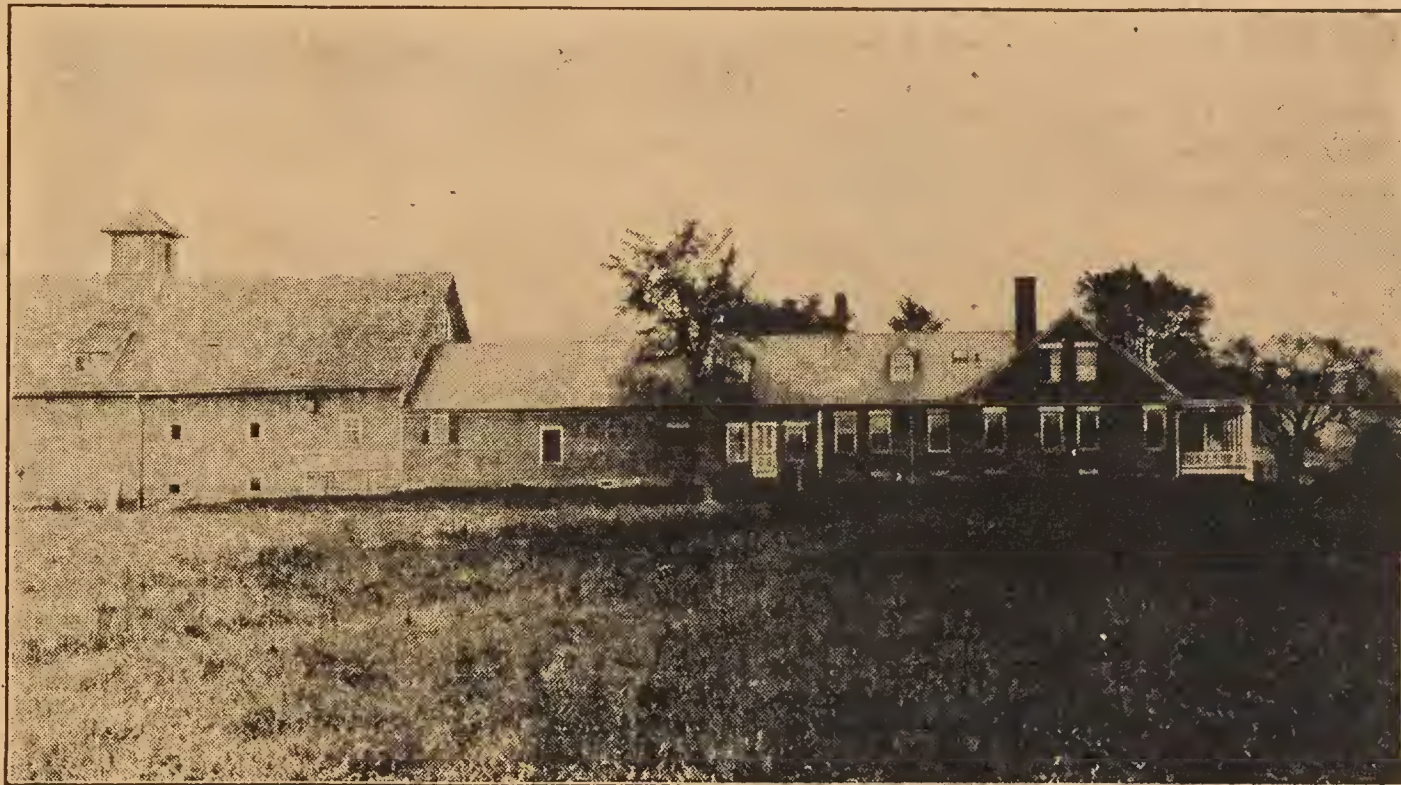
They told us at Rouses Point that there were three usual ways by which we could enter Vermont. We might drive eight miles north into Canada where we would find a bridge across the Richelieu river—the stream through which Lake Champlain discharges its water into the St. Lawrence. Otherwise we could drive south and find a ferry that crosses the "broad Lake" to Burlington—a distance of some eleven miles or we could ferry at Rouses Point. We choose the latter route. The lake at this point is a mile and a quarter wide and is here crossed by the very long Rutland Railroad bridge.

The ferry boat was a strange contraption with a maximum capacity of seven cars and was propelled back and forth by a steam en-

gine which instead of screw or paddle wheels drove a revolving drum which picked up one steel cable from the bottom of the lake and at the same time reeled out another. This method of propulsion is surely uncommon but it dispenses with the services of a pilot and does away with all danger of going astray in fog or darkness.

This ferry connects with a state highway popularly known as the "Island Route." Northern Champlain has several large islands separated from each other by narrow bridgable channels and both the highway and the railroad proceed for some thirty miles by the rather unique plan of jumping from one island to another. These islands are a part of Vermont and being made up mainly of gently rolling well drained land with few rocky outcrops and with a climate favorably modified by the water of the lake are probably to be reckoned the most desirable part of the state. We lay the night at Burlington, chief city of the state and site of the University of Vermont with which institution is associated the State College of Agriculture and the Agricultural Experiment Station. Men who have traveled very widely declare that, by scenic location, Burlington is one of the most beautiful cities in the world. It occupies the high ground running up from the Champlain shore with the broad stretches of the lake in the foreground and always with the distant peaks of the Adirondacks outlined against the western horizon.

From Burlington we followed the Winooski valley to Montpelier. A few miles out of Burlington we passed a country cemetery beside the road and noted a monument to Thomas Chittenden, first Governor of Vermont. Born in Connecticut, he joined the emigration to the new lands of Vermont and became a most noteworthy figure in its early history. He was surely secure in his hold upon the popular regard for with the exception of a single year he was
(Continued on Page 10)



A Vermont farmstead. Note how the brick house is, as mechanical engineers say, "direct connected" to the enormous barn. A fine arrangement for convenience in doing the chores but a fire means the loss of everything.

NECESSARY . . .

Potash pays because plants need potash. A complete fertilizer containing plenty of potash produces profitable yields, improves crop quality, and helps plants resist disease.

CHEAP . . .

Potash is as cheap today as before the war. The price of potash, per unit of plant food, is about 20% cheaper than the average price of the twelve leading fertilizer materials.

PLENTIFUL . . .

Fertilizer manufacturers carry large stocks of potash. If you have trouble getting potash, write or wire our nearest office and we will help you.

Agricultural and Scientific Bureau
N. V. POTASH EXPORT MY.
of Amsterdam, Holland

19 West 44th Street
NEW YORK

McCormick Bldg.
CHICAGO

First Nat'l Bank Bldg.
BALTIMORE

Hurt Building
ATLANTA

Lampton Bldg.
JACKSON, MISS.

Bank of San Jose Bldg.
SAN JOSE

POTASH
'PAYS'

The Question Box



Fertilizer Does Not Deteriorate

In May 1928 I bought from a dealer here \$49.40 worth of fertilizer. This was of course supposed to be fresh. I have been informed that it was carried over the winter, that it got hard and was very badly caked. The dealer reground this on his mill, packed it in new bags and sold it to me as fresh. I understand that treated in this manner it loses its value.—P. E. W., Pennsylvania.

WE believe that the fertilizer you purchased was just as valuable as it was last year.

Fertilizers are made of pure chemicals and in some cases some organic material such as tankage or cottonseed meal, and unless the material is stored out in the weather where plant food could be dissolved out and carried away we see no reason why there should be any loss in its value.

The only possible chance would be that there might be a chemical change which would result in some of the plant food becoming slightly less available but we are inclined to feel that this possibility is negligible.—H. L. C.

Butchering Kettle Makes Lard Black

"I have a butchering kettle I bought at a sale a few years ago. Sometimes when I render lard in it, the lard looks dirty, as though the kettle still has some old harness oil or something of that kind in it. At other times it works all right. I have scoured it out with lye and have used it about a dozen times to make lye soap. The kettle looks nice and smooth inside. Was wondering whether one could paint it with acid or something to clean it. Any suggestions will be appreciated."

IT seems almost impossible that any grease of any kind could remain either on the surface or in the pores of the iron after lye had been boiled several times in it in making soap. The fact that the trouble occurs only once in a while makes me wonder if the dark color to the lard is not due to scorching or to something in the lard itself.

If there is any oil left in the pores I do not know anything better than to scrub thoroughly with gasoline, then with strong Lewis lye and hot water. I doubt if using acid of any kind would do any good. Possibly heating it quite hot without anything in it would help, but there is always danger that this would crack the kettle.—I. W. D.

tested free herds, or modified accredited areas, without further test.

(b) From a herd not under supervision which has passed one complete test by an approved veterinarian and a subsequent retest to be applied in from 60-90 days and during such period must be kept separate from the herd.

Cattle added to other tested herds under this plan, unless complying with the provisions of paragraphs (a) or (b) shall pass two (2) official tuberculin tests applied at an interval of from 60 to 90 days and during such period shall be kept separate from the herd.

Growing Christmas Trees

Do you believe that there are good prospects for making a profit from growing Christmas trees as a side line?—A. M., New York.

THERE are two methods of making a Christmas tree plantation. One is to grow the trees in connection with a commercial forest. This method requires about 2,720 trees to the acre planted four feet apart. When the trees are eight to twelve years of age about 1,200 are removed for the Christmas market. It is estimated that these trees may be sold for 25c to 30c a piece as they stand on the plantation. With expenses for planting, interest and maintenance this method ought to net approximately \$300 an acre.

The other method involves planting the same number of trees but using all of the trees for the Christmas trade. This method ought to yield in the course of eight or twelve years about \$750 an acre. If the plantation has to be protected during the Christmas season from depredations the profit would be considerably reduced.

Protecting Rope in Outdoor Use

"The rope on my elevator wagon jack is out in the weather when in use. Is there anything I can treat the rope with to preserve it from the weather?"—W. K.

THE most commonly used lubricants and waterproofings for rope are tallow and black lead or tallow and graphite. If these are put on heavily while warm (not hot), worked in well in a warm room, and then the excess well wiped off, the rope should give a lot of service out of doors without damage. In cold weather, equal parts lard and tallow might give less trouble from stiffness. Hot beeswax and lard is also a good lubricant and water repellent.—I. W. D.

Cinder Concrete

CINDER concrete is often used where great strength is not necessary and light weight is desirable, since the weights per cubic foot run about 90 pounds for cinder concrete and 150 pounds for the ordinary concrete. Thus a concrete roller 14 inches in diameter would weigh about 90 lbs. per foot of length of cinder concrete and 150 lbs. of ordinary concrete. However, it would be well to use three or four one-half inch rods to reinforce the cinder concrete roller.

Cinders should be hard and solid, should contain no fine ash or coal, and should be thoroughly wetted for at least 24 hours before using so as to slack out any free lime or ashes and to neutralize the effect of any sulphur present. Household ashes are too fine and powdery and should never be used. The proportion usually used is one bag of cement to five cubic feet of cinders.—I. W. D.

The Law on Adding Cows to Clean Herds

What is the law about adding cows to a once tested clean herd of cows (TB test)?

THE question of adding cows to accredited and once tested clean herds is covered in the accredited herd plan agreement. The provisions are as follows:

Cattle may be added to an accredited herd that:

(a) Originate in an accredited herd.
(b) From a once-tested free herd on one additional test applied in from 60-90 days and during such period shall be kept separate from the herd.

(c) From modified accredited areas and subsequent retest to be applied in from 60-90 days and during such period shall be kept separate from the herd.

(d) From a herd not under supervision which has passed one complete herd test by an approved veterinarian and subsequent retest to be applied in from 60-90 days and during such period shall be kept separate from the herd.

Cattle may be added to once tested free herds:

(a) From accredited herds, once

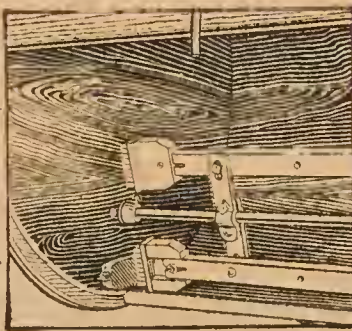


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Turning Waste Into Profit

Farm Income Will Be Increased from Products Now Thrown Away

A FEW years ago, relatively speaking, industrial chemists developed an almost endless variety of useful products from coal tar. It is now believed that the next great advance in industrial chemistry will be in the development of products made from cellulose, one of the principal products of plant growth. Professor Sweeney of the Iowa State College of Agriculture recently stated that at least 200 useful products can be manufactured from corn stalks and as chemists continue to study the problem it is expected that a still larger number will be discovered.

Some time ago George Rommel of the U. S. Department of Agriculture, at the suggestion of Secretary Jardine, made a thorough study of the possibilities of the chemical use of farm wastes and reported that hundreds of millions of dollars may ultimately be added to the farm income through manufactures from portions of crops now wasted. Mr. Rommel does not advance this as a cure-all for the agricultural problem but does suggest that the addition of a billion and a half dollars to the agricultural income might go a long way toward solving many of our troubles.

Recently United States Senator Schall introduced a bill into Congress which, if passed, will provide for the appropriation of over six and a half million dollars. This money will be used in building plants in various sections of the country in order to demonstrate the manufacture of useful products from farm waste. This bill appropriates a million dollars to erect a plant for manufacturing pulp and paper from flax and wheat straw, a half million for a plant to manu-

facture industrial alcohol from potatoes and one million dollars to demonstrate the manufacture of paper from rice straw. Other plants will manufacture xylos from peanut shells, insulating boards from straw, and paper from cornstalks and rice and wheat straw. Six and a half million dollars is a considerable sum and it is quite possible that the bill may not pass. It is pointed out by those in favor of the bill that the use of corn stalks for the manufacture of paper will go

and another plant for the same purpose was recently completed at Dubuque, Iowa. Up to date the manufacture of paper from corn stalks has probably received the most publicity although it is by no means the only line along which experiments have been made.

Mr. Blair Coan, newspaper correspondent of Washington, D. C., is authority for the statement that the United States now uses 56 per cent of the paper products of the world and that more than \$147,000,000 is paid to Canada and European countries yearly for paper and wood pulp. It is stated on reliable authority that enough corn stalks are grown in the United States to supply the entire needs of the country for news print. At the present time paper mills are located on large streams where cheap water power is available. Much less power is required to make pulp from corn stalks, consequently it is suggested that paper mills can be scattered over the country resulting in an immense yearly saving on freight. *The Prairie Farmer* of Indiana recently published an entire issue on paper manufactured from corn stalks.

Perhaps one of the most interesting products made from farm waste is xylos. This is a sugar which, however, has no food value. It is stated that the present market price is \$100 per pound. It naturally is too costly to be used to any great extent. Xylos can be made from peanut shells. It can be used as a substitute for rayon silk, for the manufacture of explosives and as a raw product in the manufacture of

(Continued on Page 7)

Making Paper from Cornstalks

FARMERS living near Danville, Illinois, sold their cornstalks to the Cornstalks Products Company at a price that added from three to five dollars per acre to their returns. The development of the manufacture of paper from cornstalks and straw, and the use of other farm wastes, in addition to increasing the agricultural income of our farms by an amount estimated at a billion and a half dollars, may help to slow down the rate at which our forest reserves are being depleted. At the same time industrial chemists are constantly studying to develop a larger number of useful products that can be manufactured from farm products that are now wasted.

a long way in controlling the European corn borer. Last year ten million dollars was appropriated for controlling this pest with rather doubtful results. The bill provides that the plants erected shall be sold to private interests at some later date.

A start has already been made. The U. S. Bureau of Standards sometime ago was given \$50,000 for experimentation. The results secured by them on this small amount are very encouraging. A plant for manufacturing paper from corn stalks was erected near Ames, Iowa

Livestock Parasites Cause Staggering Losses

Estimates Put Figure at One Hundred Millions Annually

By AMOS KIRBY

THE tribute taken by the internal parasites that infest the animals on the 6 million odd farms of this country make the racketeer and bank robber appear as mere pikers. It is conservatively estimated that the farmers in the United States are unknowingly losing \$2,000,000 a week as tribute to these pests. In New Jersey alone, poultry parasites are costing the industry between two and three million dollars a year.

There is probably no other problem confronting our farmer today that is causing such serious losses and yet one that is so little understood. Unlike most diseases and troubles, parasites often exist on farms unknown to the owner. Unless a veterinarian has been consulted and a post-mortem performed, the owner is liable to burn or bury the dead animals without ever suspecting the nature of the injury. This, however, is not the end of the trouble. Other animals in the same flock may die and the loss be increased many-fold in a short time. Yet all animals infested with parasites do not die. Large numbers may be showing low vitality, lack of appetite, stunting and general unthriftiness without the owner ever once suspecting the cause.

It is only in recent months that the experiment stations and live stock breeders have fully realized the extent of the parasite problem. The fact that they are costing the New Jersey poultryman \$6000 to \$7000 a day in lowered egg production and poor quality roasting chickens, has apparently aroused poultrymen and research men to make a definite search for better methods of control. The bulk of this loss consists of low-

ered egg production and birds that are underweight and that sell for low prices.

A recent trip through a large poultry buying plant disclosed the seriousness of this situation as it applies to our poultrymen who are producing meat. This was a wholesale farmers' market where the poultry was brought in fresh-killed from the farms and poultry yards. Even at this place the eye of the poultry buyer could detect

chickens that had been infected with worms. The thin breast, the absence of color in the skin, the dark shank, the prominent backbone were all evidence that something was wrong with the bird.

Compare this with the bird having a plump breast, a yellow skin and layers of surplus fat. The real story is told in the price paid to the producer. Birds with the yellow skin and plump breast sold up to 45 cents a pound, while the bird with a parasite handicap sold as low as 30 cents a pound.

As far as could be ascertained both flocks were hatched at the same time. Both were grown under the same conditions and had been fed alike. One bird sold at or below costs for \$1.20 while the other one sold for over \$3.00.

This situation is becoming most serious in communities where live stock has been kept in large numbers over a period of many years. This is particularly noticeable in sections where hogs, sheep, chickens and turkeys are grown without proper regard for sanitation.

The swine industry of the country is particularly susceptible to losses from parasites. These losses also run into the millions and some experts are now convinced that the loss from worms far exceeds the loss from cholera. Young pigs are especially susceptible. In the opinion of Professor Lionel Stevenson, Provincial Zoologist of Ontario, probably ten per cent of all pigs born die because of their presence and the remaining 90 per cent are badly handicapped during the first four months of life. While the injury lessens as the pig grows older the menace still remains. Much of the lack of thrift seen in young pigs is due to parasitism, while the old animals in the herd develop a partial immunity



Dosing a sheep for stomach worms with the copper sulphate treatment.

—Courtesy U. S. D. A.

(Continued on Page 16)

Editorial Page of the American Agriculturist

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Vol. 123 January 26, 1929 No. 4

Thought for the Week:

Do not keep the alabaster boxes of your love and tenderness sealed up until your friends are dead. Fill their lives with sweetness. Speak approving, cheering words while their ears can hear them and while their hearts can be thrilled by them.—Henry Ward Beecher.

Uniform Milk Production is Nearest the Cities

ONE of the most interesting facts about New York City's milk supply—in fact, it holds true of the supply in any city—is that the most uniform production throughout the year is always nearest the city. For example, within the 100 mile zone of New York City, 9.9 per cent of the annual milk supply is delivered in the month of January, while in the 400-499 zone only 4.3 per cent of the milk is delivered in January.

In other words, dairymen nearest New York produce almost as much milk in January and during the short periods as they do in June. There are probably several reasons for this, the chief of which is that they have been producing fluid milk longer than other sections and have learned that a uniform production pays best. In this lies one of the biggest solutions of the surplus problem. More and more dairymen must get their production nearer a uniform basis throughout the year. We believe that the practical way to do this is by price regulation. Make the prices profitable enough for the short periods and there will be no short periods.

The solution of the surplus problem, however, is not as easy as A-B-C, for in order to take care of the varying demand which fluctuates from time to time there will always have to be some surplus.

Retailers of Eggs Should Guard Quality

WE hear and read much about the producer's responsibility in maintaining a high standard for eggs. It is pointed out that consumption depends to a very large extent upon quality and that one bad egg does more damage than can be remedied by several cases of good ones.

We agree to the general idea, yet we wonder if too little emphasis has not been placed upon the retailer's responsibility. Eggs should receive approximately the same care by the merchant that is given to milk or butter. All too frequently

we find eggs exposed in a sunny store window or warm show case for periods varying from several days to a week.

Is it any wonder that tests recently made on eggs in the grocery stores as they were delivered to the consumer showed that many of them labelled "Grade A" did not meet these requirements, although they undoubtedly were Grade A at the time they were originally candled.

Again we repeat that the retailer, too, has a responsibility in this matter which has received too little attention.—H. L. C.

Business and Farming Getting Together

"The Prairie Farmer, a Standard Farm Paper, reports a most interesting experiment now being made in Illinois. In Rock Island County, city and country business men are working together to find out what the farms produce, secondly, who in that area buys the farmers' products, and thirdly how to get the producers and consumers together most effectively.

"Some of the co-workers in this job are the Moline Association of Commerce, the Rock Island Chamber of Commerce, the Rock Island County Farm Bureau, the Illinois State Chamber of Commerce, the United States Chamber of Commerce, the United States Department of Agriculture, the State College of Agriculture, the University of Illinois and the Prairie Farmer."

WE mention this here with the hope that some of our eastern communities will take up and carry out the same idea. How many times the Chambers of Commerce in villages and small cities make every effort and spend considerable sums of money to bring in some small manufacturing concern, never thinking that agriculture, surrounding the city on every side, is bigger and more important than all the other local industries taken together.

Here is a splendid chance for Chambers of Commerce, Kiwanis and Rotary Clubs, and local farm organizations to get together. The first step is a luncheon or banquet attended by business men and farmers to get acquainted. The second step is further meetings with working committees to see how the business both in the city and on the farm can be furthered by co-operation of all concerned.

Thomas B. Wilson

IT is with sorrow that we announce the death of Thomas B. Wilson of Hall, N. Y. Mr. Wilson was long prominent in public affairs of the State. He represented his district in the New York State Senate some years ago and for several years preceding his death, was a member of the Board of Trustees of Cornell University.

However, Mr. Wilson's chief occupation and interest was always farming and he was a real farmer with all that the term implies as a first-class husbandman, citizen and homemaker.

It was our privilege to see and visit with Mr. Wilson frequently in recent years and such opportunities were as refreshing as the outdoors itself. His outlook upon life and upon his own business of farming was always wholesome, constructive and optimistic.

More Than Half of Our Boys and Girls Go to High School

IT is estimated that in 1927 at least 28,000,000 children and youths were enrolled in American educational institutions. There were 22,500,000 in elementary schools, about 4,500,000 in secondary schools, and 1,250,000 in colleges, universities and professional schools.

It is interesting to note what a revolution has been going on in the matter of high school education. It has not been so long since only a comparatively few children ever went to high school; but now the Information Service of the Federal Council of Churches in America estimates that more than half of America's children of suitable age are enrolled in high schools. One of the best developments has been the growth of junior high schools, which reach downward to include

the eighth and sometimes the seventh grades of the elementary schools.

In higher education there has been the same rapid growth. In 1890 there were only 157,000 persons attending all the colleges, universities and professional schools, including normal schools. In 1926 there were over a million and a quarter students in these higher institutions.

Now let us admit that our schools are not perfect. Almost anyone feels competent to criticize the teachers and the educational institutions, and often there is real cause for criticism. All human institutions are imperfect. But in spite of all the howling of the critics, the American people themselves are convinced that education pays. So they are sending their children to schools and colleges, faster even than facilities can be provided to take care of them.

This bringing not only of elementary but of secondary and higher education with all of its imperfections to so many of the youth of the land is the very best guarantee of the future success of our American people and of the democratic institutions on which this Republic is founded.

Bad Diet Causes Sickness

AS we call to mind all of the farm families in the big A. A. family, we think of all the sickness and suffering that prevails among our folks at this time of year. What better wish could we make than that everyone of you might be restored immediately to good health.

Was it Shakespeare or someone else who wrote "Now is the winter of my discontent." Certain it is that winter is the season of illness, especially on the farm and we must admit that much of this illness is due not so much to bad weather as to bad diet. This too, in spite of the fact that there are no better cooks in the world than farm women. The trouble is they do not cook the right things, for one reason, because they are harder to get in the winter time than the summer.

Typical winter diets contain too much meat, potatoes, white flour products and fats and sweets. For breakfast there are the fried potatoes, sausage or other pork, great stacks of pancakes swimming in syrup, then cake, cookies, doughnuts and coffee. At noon there is meat again, potatoes, beans and pie or pudding and for supper potatoes once more, meat in some form, eggs, cake and tea. The only thing that saves the farmer on such a diet is his constant exercise and fresh air, and many do get sick.

Most of us have not yet learned that for most persons beyond thirty a diet heavy in starch and sugar is deadly and that good health is greatly aided by lessening the amount of starches, sugars and meats eaten, and by increasing, especially in the winter time, vegetables, particularly green and leafy vegetables, all kinds of fruit, milk and wholewheat products. Try it for a time and see how much better you feel.

How Is Your Soil?

SEVERAL county agents, working in cooperation with the Soils Department of the State College, have been making soil tests on many farms in their counties. The results of these tests are very interesting. They show where lime is needed, where it is not needed at all, and give the farmer some idea of how much should be applied to correct the acidity.

If you interested, write or telephone your county agent and as soon as he can get the time he will make your farm a visit.

Eastman's Chestnut

BILLY came home from school bearing evidence of having had the worst of a fight.

"Why, Billy!" exclaimed his mother. "How often have I told you to play only with good little boys? Good little boys don't fight."

"Well," said Billy thru his tears, "I thought he was a good little boy till I hit him."

Are Crop Reports Helpful?

A Bunch of Letters on All Subjects from Readers

AS a crop reporter on Long Island may I answer an article in your January 5th issue. I, too, am a Long Island potato farmer and also a crop reporter serving without pay. I read with interest the article where the Long Island potato farmer complained about the stories in city and farm papers that mentioned the big potato crop harvested on Long Island and blamed this on the government crop reports. Let me state here that all crop reports for Long Island potatoes (1928) gave Long Island a very much smaller yield than 1927.

The false reports in the papers come from the Long Island farmers themselves and not the crop reports. When the 1928 crop started I heard many farmers talk of digging 350, yes 400 bushels to the acre. I met, in August, a well known New York dealer and talked to him about the light crop of potatoes on Long Island, but he laughed and answered me, "What are you talking about? I have talked to more than 20 farmers and all report crops of 300-400 bushels per acre."

All I could tell the dealer was that I didn't believe that they were getting such crops and that he would see later who was right.

It is not the government reports; it is this big talk, this blowing by the farmers themselves that hurts prices. Such talk is always picked up by dailies and farm papers, printed and if possible made yet a little stronger. Then the Long Island potato farmers read their own stories which were meant only for home consumption.—H. M.

EDITOR'S NOTE—While production per acre on Long Island was probably lower in 1928 than in 1927, it is evident at this date that the government forecast of a crop considerably above the five-year average for the entire country was pretty close to the actual yield.

* * *

Crop Reports Help This Reader Make Money

WE receive the market reports issued by the Department of Agriculture and Markets at Albany. Three years ago we put in a field of white pea beans. At that time we were not receiving the market reports. This was a year when pea beans were scarce but we did not know it. Before harvest we received two offers from two buyers and we sold as soon as threshed, to our loss as I remember it. We took six cents per pound and by the first of the year they could be sold for eight cents.

This year we have been watching the cabbage market. In the first place we contracted our Danish for \$8.00 a ton (four to six pound heads only) and inasmuch as cabbage did not make as good a growth as other years, we had considerable to sell on the open market at \$40.00 per ton. Therefore, we made \$32.00 on each ton sold on the open market. Had it not been for market reports we would have sold for \$8.00 a ton.

In the past we have kept seven and eight milk cows and depended on replacement from the cattle dealers. About 50 per cent were above the average, the other 50 per cent were off for one reason or other. Finally we received the report of a shortage of dairy cattle and we proceeded to replace our herd with calves from our best cows and at the present time we have five head of real good young cattle, none

of which have failed us thus far. If we were to go out and buy such cows, with cows at the present price, it would mean an investment of 50 per cent more than they cost us. In the first place they are clean and free from disease. We know when they were bred and how they were fed before freshening.—H. B. P.

* * *

Believes Crop Reports Incorrect

IN the January fifth issue of A. A. your comment upon what a potato farmer wrote regarding the accuracy of the government crop reports is very interesting. We farmers that produce the goods had an inkling for some time that the government worked this crop report game as did the fellows who bought hogs out west. When they weighed them they would balance a plank over a stump, place a hog on one end of the plank, put stones on the other end to balance, then they would tell what the stones weighed.

In explaining how the government gets at the amount raised you say the government sends out "intentions to plant reports". We producers find that these reports are, in many cases, made not by farmers but by consumers. This class wants to boost all crops and make it appear that there is an abundance when the very reverse is true. In this way the government counts its chickens when the eggs are set and not when they are hatched.

To show you some of the tricks of the trade, I will state a case of mine. Last November my crop of potatoes was a total failure as most others in our section of the country. Seeing accounts of potatoes being shipped from Avon, N. Y., at 35 and 40 cents a bushel, I wrote to potato farmers there saying I wanted to get a carload and would pay cash on delivery. I was told there were no potatoes shipped or sold for any such price and would not be as such prices would not pay the expense of digging.

Another writer who had 18 acres to dig wrote that he was going to dig his and store them but would furnish what I wanted at \$1.00 a bushel. Buyers came from the cities to buy but went home empty after telling newspaper reporters they were buying and shipping potatoes. Later I

heard that I could get potatoes at Phelps, N. Y., for 75 cents per bushel. I had my son go there and see what he could do. He bought some but when I saw them they were not first class. He, too, was holding for better prices and he will get them as the potato crop is a failure in most states and as long as any crop has to be shipped in, the price is nearly doubled by transportation charges.

This counting chicks before hatching is poor business. The government is doing this sort of business all over. Wherever the government puts its hands in things, costs double.—D. M.

EDITOR'S NOTE—The above letter, of course, does not express our opinion. We are printing it in order to give both sides of the question. We hope our friend, who is holding his potato crop for a higher price, will succeed in getting it, but we are afraid he will not.

* * *

Advises Against Heavy Potato Acreage

TWO weeks ago you advised farmers to plant more potatoes next spring; that prices will be better after a year of cheap potatoes. That was foolish advice, because the quitter is what spoils the market one year and the next year makes it good again.

When I was a young man I arranged my farm to a three-year crop rotation, the same as all the farmers of upper Lehigh County did, and that rotation is kept right along to this date. When we had years that were lean, we were sure of fat years to come because of the quitters, and we got them. But alas; the county agents came along and showed people how to raise potatoes where twenty years ago people could raise no potatoes. They were not satisfied with that; they showed us old potato growers how to grow two hills of potatoes where we could raise only one before and they taught us to spray our potatoes, and make each hill produce twice as much as before. Now we have over-production.

If the farm papers urge those farmers who are ready to quit to plant more, when do we get our fat prices again? I say if you and the county agents keep it up and the farmers listen, then potato raising is doomed. If you want to help the potato farmers, advise them to reduce their acreage 10 to 15 per cent, work ten hours a day instead of sixteen and eighteen and stop over-production. If you do otherwise, you only help the consumer to get cheap potatoes.—J. W. B., Jr., Pennsylvania.

* * *

About Loans to Producers

HAVING read the article on page two of the November 10th issue, "Do Loans to Growers Stimulate Production", I would like to comment on it. First I would ask this question, "How can a man that only gets a commission on the product he sells, loan to the man that owns the product?" If the commission man gets the most money, why does not the producer be his own commission man?

To illustrate this I will tell you a little instance that happened in real life. A certain farmer was offered one dollar and twenty-five cents per gallon for his maple syrup by a commission man. One hour's run took him to a city. He rang door bells for another hour, sold

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It Can't Be Done

By DR. J. W. HOLLAND

The A. A. Philosopher

WHO said "It can't be done?" Almost everybody. From the commencement of

time to this hour it has been one of the most overworked phrases in all languages. The man who constructed the first rude plow received this word from those who



Dr. John W. Holland our early brothers. Come nearer. Moses was told that "The law is too high for human beings."

Isaiah was reviled for teaching that God is moral. Socrates was informed that "Youth cannot be self-contained."

Jesus of Nazareth was crowned with thorns by those who thought that the Kingdom of Heaven was an idle dream. Harvey was criticised for teaching that the blood circulates. Columbus was laughed at for thinking that the earth was round. The world hadn't yet been discovered, and "it couldn't be done."

Edison endured the patient years of unbelief in the

minds of most people who believed that "no machine could be made to talk." Lincoln was cartooned as a giant baboon. Timid souls said to Caesar, "You can't cross the Rubicon."

The first oil well in Pennsylvania was called "Drake's Folly." McCormick patented his reaper in the face of the crowd who knew that "A machine could not tie a knot."

Goodyear was described as a fool who was trying to "do something with rubber that could not be done."

Every idealist, dreamer, inventor, and reformer has had to do his work in the face of ridicule and doubt.

I am thinking of the young men and women living upon our farms, many of whom are being told that they cannot secure an education, cannot succeed, cannot become cultured. I know better. Practically all of them can if they "Want To Badly Enough."

I am thinking of the host of burdened people who find the earth a sad place to live, who might by the Grace of God be healed of their fears and made victorious over their besetting weaknesses.

Some one gave this motto to the world:

"What I can do, I ought to do;

What I ought to do, I may do;

What I may do, I can do;

What I can do, I WILL do."



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Peter Sperow, N. Mountain, W. Va.	York	330	550	220	124.00
Edgar Hurley, Sabina, Ohio	35 year old Mixed	100	160	60	114.00
John Humphries, Monticello, Ind.	22 year old Maiden Blush	120	240	120	294.00
Ed. Strickfaden, Pekin, Ill.	18 year old Grimes	500	805	305	750.84
O. C. Webster, LaCrescent, Minn.	20 year old N. W. Greening	296	472	176	285.20
Walter J. Braun, Atchison, Kan.	Jonathan	204	346	142	249.36
Average 7 Growers		287	461	174	\$267.69

Note: Tests Peter Sperow made by Joseph B. Prettyman, Vocational Agricultural Teacher, as cooperator; Edgar Hurley by Levi Lukens, Lee's Creek High School, as cooperator.

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A.A.'s Western New York Farm and Home Talk

Much Fine Land Not Producing

IT is very difficult, if not altogether impossible to get a correct and adequate understanding of farm problems by reading about them or even by looking

By M. C. BURRITT

dividual understanding of these problems and more intelligent personal management—education, training—and its application.



M. C. Burritt

at farms from an automobile on a state road, and yet these are the chief sources of information of the majority of people on this much discussed subject. Neither does it follow that one who lives in the midst of these problems and who even experiences them himself understands fully their causes or the remedies for them. But one who thus comes in close contact with them can at least testify that they are real. I know of no way to get closer to the situation than to walk over farms to appraise them for loans and by talking with owners.

Much Land Not Producing

The fact that as much as twenty-five per cent of fine level fertile land here in western New York is out of production came as a surprise when it dawned on me. Most of such land, but not all by any means, is on the unimproved cross-roads four or five miles from the towns. Here one can find many farms with wonderful sets of buildings, often out of repair, whose fields are overgrown with weeds and whose orchards and fences are eloquent of neglect. I walked over several hundred acres of such land last week all within twenty miles of a city of 350,000 people. Most of it can be bought for from forty to fifty dollars an acre. What is the trouble?

While the answer in each case always involved personal reasons, yet there are many adequate background reasons common to nearly all. (1) The young people have been attracted to the city by the larger opportunities and the easier life. (2) The farm income has been inadequate to keep up the property, e. g. reroof, remodel, paint buildings, replace fences. (3) Capital was not available to reequip the farm with modern power machinery when the old wore out or became antiquated. (4) Owners becoming too old to operate the farms themselves moved off and were unable to secure labor to work them at wages or rentals they could afford to pay. (5) Taxes increased many fold, farm values fell but mortgages did not and equities often shrank to little or nothing. Are more reasons necessary?

What Are the Remedies?

There are many angles to the problem and there is neither the space nor the desire to discuss them fully here. We do not want all these farms back into production now. They are not needed yet. Here are a few possible remedies to think about. (1) Better utilization and adaptation of land, use of only the good land for cropping and the remainder for reforestation and pasturage. This involves a careful survey. (2) Recapitalization of land on the basis of its present sale and productive value. Mortgage holders must recognize their obligation to share in the losses consequent on necessary readjustment. (3) The shifting of taxation, particularly for the maintenance of roads and schools from farms unable to bear it to productive enterprise and to those who use them. (4) Better in-

These suggestions are apropos of the present awakened interest of government in the problem and the desire of both our legislature and our governor to do something about it. We ought not to let the occasion pass without some results—a thorough survey, revaluation, reduction and shifting of taxes, education.

What is Our Own Valuation of Our Farms?

One other suggestion is important. The attitude of the people who live in an area whether in the towns or on the farms has much to do with values. If merchants bankers and even farmers think that there is no future in farming in a certain region there cannot be much value. But if the general attitude is one of faith in the region, constructive analysis to find its best adaptation and utilization, there may be and probably will be value. Our farms are worth at least in part what we think they are. If we do not value them highly who will? Let us talk our region up, not down. New York farms are still highly desirable places to live and to earn. Talk them up. Boost, don't knock.

A Side-line for the Boys

Somehow, one thinks of trapping as belonging to pioneer days now gone by. It was therefore somewhat of a surprise to me that my older boy has been able to catch a good lot of muskrat in his traps close by the farm since the season opened. He is thus provided with some good recreation and a little spending money as well. It is a strong interest just at this time and he is up early in the morning to look for the night's catch. He has learned to skin the rats and market the skins, his first lesson in packing and marketing. Fine skating adds to the advantages of winter life on a farm and contributes to that fine background of boyhood memories which all of us who have them so cherish in later days. What a thrill to have skated to the lake several miles away through creek and bay and watched the breakers from the ice banks!—M. C. Burritt, January 13, 1929.

Pruning Grapes

IN its briefest terms, the principle of grape pruning is to leave a comparatively few (generally four) long, vigorous canes of the past summer's growth and cut them back to eight or ten buds each. As a rule, a mature grape vine should not carry more than about forty buds. In the older vines, spurring of canes near the trunk is practiced in order to avoid the development of long arms of old wood. These spurs are canes close-in to the trunk which are cut back to two buds and provide fruiting canes for the next season.—N. Y. State College of Agriculture.

What is "A Large Block"?

I have recently read quite a bit about some experiments concerning cross pollination of apples. What would you consider a "large block of one variety" as regards pollination?

WE would consider a "large block of one variety" as meaning one four rows or more in width.

Changing Grape Varieties by Grafting

I have a grape vine which is the late variety and will not mature in this climate (New York). I have an early one which I would like to graft into the late one. Will you please advise me the time and the way this can be done?

THERE are two periods at which grape vines that are now growing in the vineyard may be grafted to good advantage, the first is in early spring before active sap flow has begun and the second soon after active flow has ceased. The latter period is probably the better. In the event that the latter period is chosen it is well to remove the earth from about the base of the vine to be grafted a few days in advance of the grafting and then to saw the trunk off so that the stub surface is two or three inches below the normal level of the soil. For this purpose a hack saw is desirable, the teeth being fine, disturb the plant tissues less than an ordinary pruning saw.

The scions which are usually of two or three bud lengths are prepared just as in cleft grafting the apple, the bevels being made in the same manner. A cleft is now opened in the stub by means of the hack saw, going only deep enough to accommodate the length of bevel of the scions. This cleft is then opened with a wedge and held open while the scions are inserted. With a stub an inch or more in diameter two scions may be inserted. These are so placed near the outer surface of the trunk that the cambium or growth layers are in contact, they being pushed firmly in so that an inch or more of the beveled surfaces are in contact with the same area in the cleft.

In order that the growth layers of both are in contact at one point at least it is well to give the scions a slight outward slant. After the scions are set the wedge is removed and if the stock be less than an inch in diameter, strong twine should be used to hold stock and scions in close contact. The natural grip of large stocks suffice to hold firmly. The soil is now mounded up around the stock and scions to just below the upper bud of the latter. No wax or other covering should be used. After mid-summer the mound should be gradually removed until only enough remains to shed water from around the base of the vine during winter.—F.E.G.

Turning Waste Into Profit

(Continued from Page 3)

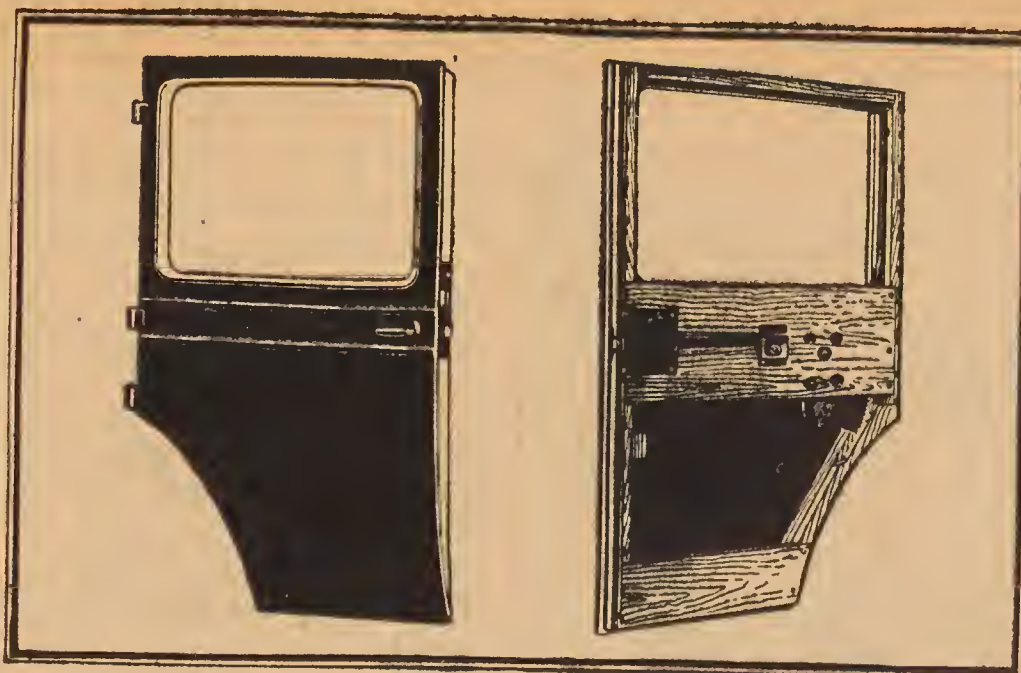
glucose. Another interesting chemical is called furfural. It can be manufactured from rice hulls, oat hulls, cotton seed or corn cobs. It is used in the manufacture of paint removers and varnish and it is one of the ingredients of bakelite, a relatively new product which has many uses. It is also stated that if the natural supply of petroleum should ever become exhausted that a fuel for running gas engines could be made from it.

Last summer, potato growers produced a bumper crop. As a result the price is, in some cases, below cost of production. It is stated on good authority that the United States is at present importing black-strap molasses to the value of \$10,000,000 annually which is used in manufacturing industrial alcohol. Experiments have shown that this product can be manufactured from potatoes at a price which can compete with that made from molasses. At the same time some of the higher grades of industrial alcohol which are used in lacquer and which cannot be made from molasses can be made from potatoes.

It is estimated that the full utilization of products now wasted will add \$12.00 per acre to the income of the corn grower, \$7.00 per acre to the income of the cotton and peanut grower and \$15.00 per acre to the income of the rice grower.

Industrial chemistry as applied to agriculture is still in its infancy. It would be visionary to even attempt to predict the uses which will be found for these products. There is little question, however, but that this development will come and that it will have a very important effect upon agricultural prosperity.—H. L. Cosline.

In the average door on a Body by Fisher there are 9 1/4 board feet of lumber and 15 1/2 square feet of sheet steel. The door frames are built on jigs the same as the body, being clamped and screwed together under pressure. A band iron brace runs practically the full length of the door lock pillar. This brace prevents warping of the door.



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GENERAL MOTORS

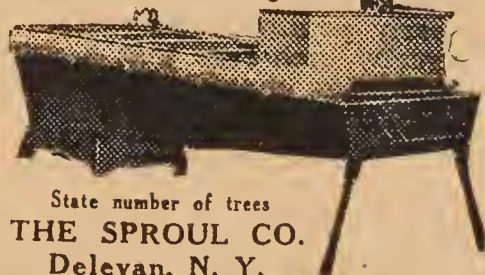
The pleasant, deadened thud of closing a door on a Fisher Body tells the experienced car that the body is solidly, durably constructed. Fisher doors are powerfully braced to stand up in the hardest kind of service, month after month and year after year. The lumber for the door frame is finely selected hardwood. One of the features of the bracing of a Fisher door is a band iron brace which runs practically the full length of the lock pillar. This brace prevents any possibility of the door warping. Another feature of Fisher Body doors is the fact that one door of a certain model will fit any other body of that model just as accurately as it fits the body on which it is originally mounted. Fisher standardization means real service economy for the car owner, for, should there ever be occasion to replace a door or any other part, Fisher can do so quickly and at low cost.

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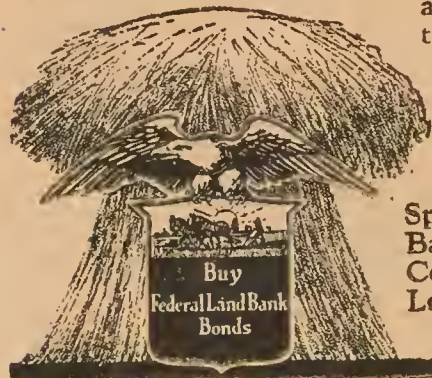
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With the A.A. Crop and Vegetable Grower

Growing Asparagus

Will you please give us instructions as to when you should plant and how to raise asparagus.—A.O., Pennsylvania.

ASPARAGUS is one of the easiest crops to raise except that it takes two or three years before you get a good crop.

The usual procedure is to buy year-old roots along in the spring and then to dig a trench a foot or a foot and a half in depth and put the roots in the bottom of the trench. Better results will be secured by plowing the land deep a year or two before the roots are put in so that they will not be planted in the subsoil which is always less fertile than top soil. It is of course possible to dig the trench a little deeper, putting good soil at the bottom. The roots are put in the bottom of the trench which is not filled completely at once but is filled around the plants as they begin growth.

All that is necessary following this is to keep the plants cultivated, keep down weeds and to add some fertilizer as needed. The usual recommendation is not to cut any until the second year after they are set out.

Farmers Bulletin 829, published by the U. S. Department of Agriculture, Washington, D. C., gives more complete directions for growing asparagus.

horse manure is likely to increase the amount of scab although it is not the direct cause of the disease.

Forcing Rhubarb in the Cellar

What is the procedure for growing rhubarb in the cellar during the winter?—C. D., New York.

RHUBARB is grown in the cellar by digging the roots in the fall after the ground is well frozen, putting them in the cellar where the temperature is moderate and growing the rhubarb from the plant food which is stored in the roots. It is better if little light is present as this results in long shoots and small leaves. The best temperature to have is from 50 to 55 degrees. Rhubarb forced in this way brings a good price on the early market.

Celery Goes to Seed Prematurely

We have had trouble with our celery which goes to seed before it reaches marketable size. Can you tell us what causes this?—R. J., New York.

EXPERIMENTS at the New York State College indicate that low temperatures early in the life of the celery plant is responsible for its going to seed prematurely. The remedy is to delay planting as long as possible and to use care so that the plants are not subjected to too low temperatures while hardening before they are set out in the field.

New Tariff on Onions Will Protect New York State Growers

PRESIDENT COOLIDGE has approved a recommendation of the United States Tariff Commission to increase the duty on onions from one cent a pound to one and one half cents a pound. The new duty will be effective thirty days after December 22, the date of the President's approval.

The new duty will benefit the farmers of New York, Indiana, Ohio, Massachusetts, California, and Texas, who are now suffering from foreign competition.

Early Potato Growers Plan To Reduce Acreage

A PRELIMINARY report from the U. S. Department of Agriculture indicates that growers of early potatoes in southern and eastern states are intending to plant an acreage 29 per cent smaller than was planted last season.

This figure of course, is simply an indication of what farmers had in mind when they made the report. The actual acreage may be smaller or greater than this figure. Sometime in January another "intention to plant" report will be gathered.

The proposed reduction in acreage seems to be distributed among both large and small growers in the important early potato growing states. It has usually been true that a year of overproduction in any crop is followed by a reduction in acreage.

Lime for the Garden

What are the recommendations concerning the use of lime on garden crops?—G. C., New York.

SOME garden crops respond to lime while others do as well or better on acid soil.

At the New Jersey station they found that the yield of carrots was much higher on limed soil than it was on acid soil. Similar results were secured on beets.

On the other hand lime may increase scab on potatoes or other crops that are affected by this disease and as a usual thing is not recommended as profitable for land on which fruit is grown.

For Ginseng Growers

WE have recently received a number of letters from subscribers asking for information about growing ginseng. The U. S. Department of Agriculture recently published Farmers Bulletin 1184 F, Ginseng Culture, which discusses this subject in a thorough manner.

The department recommends that plunging in this crop is likely to prove disastrous but that sane cultivation offers some possibilities for growers who have plenty of patience and who appreciate the limitations of the crop.

A copy of the bulletin can be obtained as long as the supply lasts by writing to the U. S. Department of Agriculture at Washington, D. C.

Horse Manure Likely to Increase Potato Scab

"Will horse manure scab white potatoes? I am going to plant certified Irish cobbler seed potatoes."—J. H. B., New Jersey.

THE cause of potato scab is a living organism that is carried on the seed potatoes or in the soil. Under certain conditions this organism does not develop seriously. For example it has been demonstrated that potatoes grown on acid soil are less likely to be scabby than they are on the soil which is well supplied with lime. It has also been shown that heavy applications of

Varieties for the Home Garden

It is commonly recognized that more attention can be given to quality of vegetables for the home garden than can be given where they are grown for market. Many varieties which are of excellent quality do not stand shipping well or do not produce heavily enough to make the crop profitable.

Sweet corn varieties recommended especially for the home garden are:

(Continued on Opposite Page)

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Mr. Kendall Told Us A Few Things

We like to know what farmers think of Clark "Cutaway" Harrows and their suggestions are always welcome. So every once in a while we write them and ask questions.

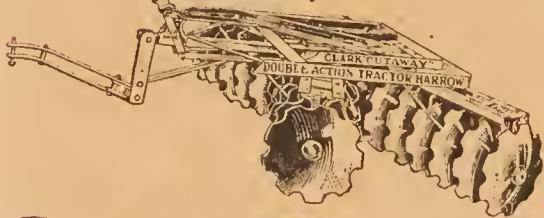
Mr. C. S. Kendall of Madison, Tenn. told us a few things in answer to some of our questions.

He told us that his Clark "Cutaway" Harrow leaves his land more level and in better condition than any other disk harrow he ever used.

He told us that our forged edge, cutout disks stand up better, penetrate deeper, and pulverize finer than plain disks.

And he says he is sure the draft is lighter because one team will accomplish more on his Clark "Cutaway" than with the average plain disk harrow.

Clip the coupon for free catalog. It tells about the disk harrow just suited to your farm and what other farmers who are using it say about it. FREE book, "The Soil and Its Tillage," also included.



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(Continued from Opposite Page)

Early white Cob Corey, Golden Bantam, Early Sunshine, Golden Giant, Country Gentlemen, Evergreen and Whipple's Yellow.

Thomas Laxton and Gradus are the best varieties of peas for quality. Alaska is the earliest. The dwarf kinds such as American Wonder, Knotts Excelsior, Little Marvel and Laxtonian give more peas to the pod and are more tender. Telephone, Stratagem and Alderman are late, big-bodied peas.

Among the beans, Stringless Green Pod which is round, early and tender, and Bountiful are to be recommended. Most good beans have curved pods.

Does It Pay to Prune Tomatoes?

Will it pay to stake and prune tomatoes. We are growing a rather limited acreage and want to get as big a crop as possible. Can you give us some idea regarding the cost of staking?

IT is generally agreed that an earlier crop can be secured by staking and probably a crop of better quality. The costs will run around \$100 an acre. We do not feel that this practice will pay unless tomatoes are grown for the early market. The gain of a few days on early ripening, particularly in some seasons, may pay good returns.

About Loans to Producers

(Continued from Page 5)

all his syrup at three dollars per gallon, delivered it the next day and got his money. I would add that the quality of the syrup was A No. 1. Another farmer was offered eighty cents per bushel for his potatoes. These he sold through correspondence to the consumer—mind you, not to a commission merchant—for \$1.50 per bushel, the purchaser paying the express charges. Some farmers have cut their eye teeth and still there is more to follow.—Mrs. W. S., New York.

EDITOR'S NOTE—Under certain conditions it pays to sell direct to the consumer but it would hardly be practicable in New York City. Those who object to loans to producers by commission men feel that producers who cannot finance themselves should not be encouraged to produce. This would leave the market in better shape for the man who can finance himself.

* * *

Leaving the Farm to Work Out

IN the November 17th issue of AMERICAN AGRICULTURIST, E. S. P. writes on leaving the farm to work out and thinks it does not pay to leave the crops. I think he is right provided he is growing a paying crop and of course if the crop does not produce a reasonable profit he should not attempt to grow it, but there are ways in which a farmer may spend a part of his time working for others and earn more money than if all his time is spent on the farm.

Years ago my father made it a rule to spend all his time on the farm. He grew all the grain he needed on the farm and usually had a surplus to sell. Wages were low and a person could not earn much working for others. Conditions have changed in this part of the country. Wages are relatively high. A laborer who depends upon his employer for a house to live in has to pay a high rent and if the work stops for a while, house rent and cost of living soon eat up his wages.

There are small farmers who make it their main business to farm, still they find time in leisure seasons to earn wages for themselves and teams. They grow most of their feed on the farm, have a home all the time without having to pay rent and are able to lay up some money each year. I know of numbers of such farmers only a few miles away. I do not think that the owner of a large farm, if he pretends to cultivate it himself can afford to work for others at ordinary wages, but the small farmer may do so to advantage.—A. J. L.

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AFTER all, there is just one reason why Mapes users are so loyal to Mapes Manures; why more and more good farmers every year are using Mapes Manures—because they can make more money with Mapes.

Mapes results are so remarkable, so outstanding, so evident, that you have only to see them to be convinced that the Mapes slogan, "cost little more—worth much more", is a modest statement of the true worth of Mapes Manures.

Mapes Manures have always produced outstanding results because we find out from the crop what materials it likes best and we put these materials into Mapes. Mapes Manures are made to grow good crops—not to sell at a price. They are first made right, then priced as low as possible.

Try Mapes this year. Compare the results—yield, quality, profits—with the results from any other fertilizer you can buy. Write today for list of crop brands and prices—also for Special Trial Offer.

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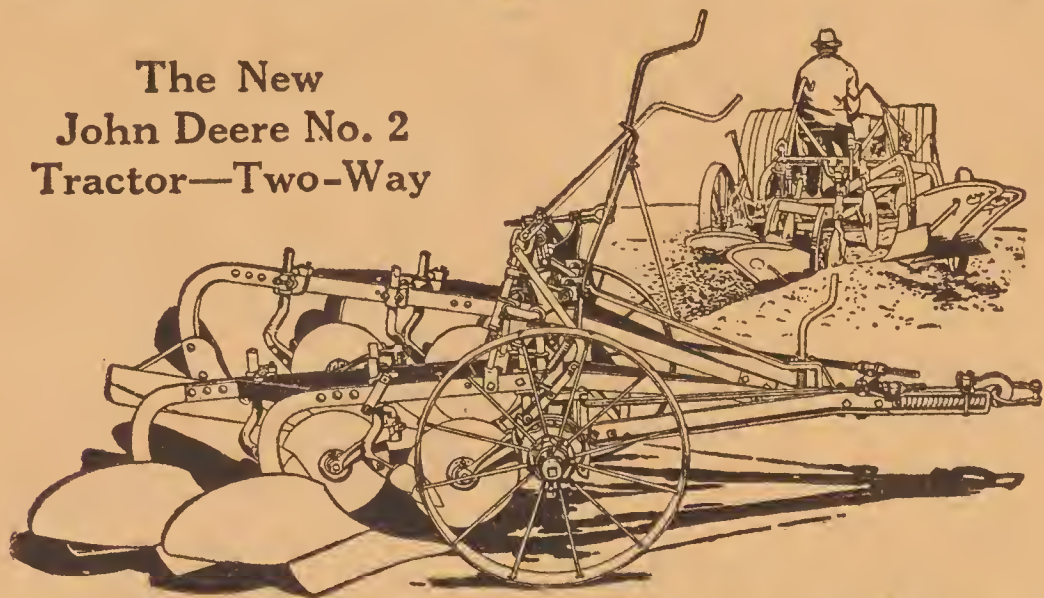
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A New York Farmer Visits Vermont

(Continued from Page 1)

reelected for 19 consecutive years and his tenure of office was terminated only by death. For several years after he was Governor he lived in a log house and insisted that he desired no better. I assume that he was a strong, dominant figure in unsettled and troublous times—a genuine statesman from the backwoods.

This Winooski valley is agriculturally one of the best in the state with some beautiful stretches of valley flats, big dairy herds and great barns as imposing as anything that I know of in Delaware County, N. Y.—and this last comparison is the highest praise that I can bestow. Also, many of these hillside pastures are almost incredibly steep and rocky—more so than any thing that I remember in Delaware County.

It is interesting to note how different regions develop special local types of architecture, due I suppose to the power of example and the special ideas of the community "boss carpenter". We observed that many of these fine Vermont barns had dormer-windows set in the roof. This is a feature almost never found in our state. It surely adds considerably to roof costs and unless carefully guarded gives special opportunity for leaks to develop, but it must be a great comfort both in the way of light and ventilation when poking away hay close up under the rafters on a torrid July afternoon. It is quite possible that in this respect they do things better than we.

This particular valley suffered fearfully in what will be long remembered as "The Great Flood". They say that in the higher Green Mountains ten inches of water fell in twenty-four hours on a soil already water soaked so that it had no retaining powers. There had been nothing like it for an hundred years before and it is to be hoped that its like may never occur again. Usually insignificant rivers became wide, rushing floods that filled the valley from hill to hill and tiny mountain brooks became mad torrents that swept to destruction orchards and bridges and homes. The flood took the lives of scores of people and many thousand cows—I hesitate to quote the figures given me for cows for fear of gross exaggeration. The property loss has been officially estimated at thirty million dollars—an appalling loss to be endured by one of the smallest and most sparsely populated places of our eastern country. It is a splendid tribute to the dauntless spirit of the state that as soon as men had time to recover from the first shock and to realize what had happened, the Legislature met in special session and pledged the credit of the state for the issuance of bonds to the amount of eight and one-half millions—and this not for the luxuries of park systems and ornate public buildings but for the bare necessities of civilization—roads and bridges and shelter. I here take off my hat to a people with an unquenchable spirit such as that.

The condition of the Winooski valley up which we drove is typical of what happened in much of the state. We saw the region eleven months after the catastrophe and the evidences of it were still everywhere apparent. Some of the injury can never be erased. In some respects a great flood like this is worse than a fire. A farm conflagration is a crushing blow at the time but the buildings which arise are almost invariably far better than the old and the calamity may be a blessing in disguise. But some of these valley farms are damaged beyond repair. Here are large areas where the fertile alluvial soil—the precious, slow accumulation of untold centuries—has been swept away in a night leaving behind only an arid waste of gravel, while here is a place where a tributary brook has brought down thousands of tons of sand and stone and buried the good soil beyond hope of redemption. We saw places where the farmsteads had been swept clean from their foundations and other places where the buildings still clung to the old sites but with the foundations undermined so that they stood at all sorts of grotesque angles, short of actually tipping

over. Once we noted that all the farm buildings were gone except the big silo which still stood lonely and erect. I suppose that the silo loaded down with a hundred tons of contents was able to stand firm in the rushing flood while the barns floated off. The loss included thousands of bridges counting great and small, hundreds of miles of highway and scores of miles of railroad that had to be—not repaired—but wholly reconstructed, in many cases on a new right of way. A man with whom I talked told me of seeing long stretches of railroad track ties and rails still holding together and finally "set up edge ways like a picket fence". We saw great trees—some uprooted—others snapped off at the ground—while rubbish entangled in wire fences and the crotches of trees and in one or two instances among the telephone wires gave incontestable evidence of the almost unbelievable heights to which the water rose.

We followed the river with some extensive detours for new road construction as far as Montpelier which all of us who retain our district school geography will remember as the capital of the state. Montpelier is not a city in size, but rather a not very big country village. The capitol of native granite is a structure built on classical lines and with a big gilded dome. Constructed nearly an hundred years ago, it is still declared by architects to be remarkable for its harmonious proportions. I called at the office of the Secretary of State to ask for some Vermont publications and felt that I received extraordinary attention and courtesy.

I would like to say a word relative to Vermont roads. It goes without saying that a state of scattered population and with no cities of any considerable size "could by no possibility imitate New York's wonderful statewide system of boulevards. I once heard a famous public official say with a sneer that he had recently been in Vermont and that "two dollars and a half seems to be considered quite a sum of money up there". Well—I suppose this is true and I think none the less of the Vermonters because of this fact. There is no large mileage of concrete road in the state although some of the new construction after the flood is of this type. The typical Vermont road is of gravel kept in condition by the local use of the road drag. Of course the first cost is only a fraction of that required for a hard surfaced road and I judge that the maintenance due to the occasional use of the drag or hone is by no means excessive. These roads it is true offer no such speedways as are the concrete ribbons that lace our state but they are good enough for all necessary purposes and they are emphatically the roads for the community of modest means. In my thinking regarding this road question, I am not particularly concerned about the man who like me happens to live by the side of a trunk line. We fortunate ones are already taken care of but the man who needs action is the fellow who lives back from the valley and who would like some sort of a half improved track so that he can drive the family car or milk truck down to the main line in spring and fall as well as in mid summer. We need a slogan "Better dirt roads".

I think I would like to set down a few of the outstanding historical facts concerning Vermont. Perhaps the most interesting point is that Vermont was long—perhaps is still—the backwoods or as we sometimes say, the hinterland of New England. Those early Puritans had a strange energy and genius for pioneering. In June, 1636, only sixteen years after the landing at Plymouth, Pastor Thomas Hooker at the head of some one hundred or more of his flock led a march in excess of a hundred miles through the trackless forest and so came to the broad, gleaming river and the site of Hartford and there laid the foundations of the colony of New Haven. On this historic migration they drove with them 160 head of cattle—striking testimony to the rapidity of

(Continued on Page 15)



Feeding Cows Before Freshening

MANY dairymen firmly believe that the feed and care given to a cow during the dry period pays handsomely in better production throughout the entire lactation period. Care before freshening has two objects, to put the animal in good condition with a body reserve of fat and to feed her just before freshening in such a manner that her udder will be in good condition and that she will freshen normally.

Naturally a ration intended to put flesh on an animal should contain less protein than one for milk production. The following ration is taken from "Better Dairy Farming" by Savage and Maynard:

100 pounds hominy feed
100 pounds ground oats
100 pounds wheat bran
50 pounds oil meal

The amount of grain needed to put the cow in good condition will depend on her condition at the start of the dry period, the length of the dry period and the kind of roughage she is getting. With plenty of the best roughage three or four pounds a day will be enough.

Silage or other succulent feed is important for the dry cow since she needs to be in a healthy physical condition.

Another item that needs thought in the dry cow's ration is that of minerals. During heavy production a cow does not seem to be able to absorb enough minerals to supply her needs and as a result she actually removes some from her body to put into milk. During the dry period this reserve can be built up again.

There is some evidence to indicate that sunlight or green feed is necessary in order that a cow may assimilate minerals. In other words it is possible to give a cow plenty of minerals yet she may not assimilate them. Properly cured alfalfa is important both because of its high mineral content and its ability to help a cow absorb other minerals. In addition to good roughage it is a common practice to add minerals to the grain ration.

Feeding Just Before Calving

The idea at calving time is to have the cow's digestive system loose and to avoid heating feeds of all sorts. Feeding heavily of the ration suggested for the dry period would be likely to result in a caked udder if continued up to date of calving.

About a week before calving it is a good idea to reduce the grain one half and feed a mixture of 2 parts bran and 1 part oil meal. Plenty of silage also helps. If there is any evidence of con-

stipation a pound of epsom salts may be given. In a day or two before calving it is a good plan to cut down on the amount of roughage fed.

The better a cow is as a producer the more care she needs at this time in order to start her off right. At the same time there is no doubt but that this attention pays big dividends all through the year.

Holstein Breeders Review Progress and Plan For More

At the recent annual session of the New York State Holstein Friesian Association, a number of matters of importance to all breeders of black and whites were discussed.

The standing committees reported and the calf club work seemed to be the most important project. Over \$700 was paid by the state association to the boys and girls raising the best calves, and it is proposed to spend one thousand dollars for this work this coming year.

The scrub bull elimination contest resulted in the first prize of \$100 going to the township of New Hartford, Oneida County. The second prize went to the township of Nichols, Tioga County. In the township of Nichols, the Holstein breeders donated sixteen good pure bred bull calves to farmers who had never before kept a purebred sire.

Advertising Milk

The work of the committee on improving the advertising of milk at state and county fairs was commended and this will be a leading project for the coming year.

During the past year the State Holstein Association has erected a marker in honor of the first pure bred Holstein bull in America. Plans for the dedication of this marker which will take place during the summer, were discussed.

Several new projects were recommended, one being an effort to cause the construction of a boys' and girls' building on the state fair grounds before the next state fair. Henry Morgenthau, Jr., publisher of American Agriculturist, was selected as chairman of this committee.

The farm products' show, as suggested by the N. Y. State Agricultural Society, was endorsed and a committee, of which Willard Hall, of Oswego, (Continued on Page 14)

We Asked 60,000 Chicks "On What Feed Do You Grow Best?"

LARRO Chick Starter had the most remarkable beginning of any chick feed ever made.

For three years before a pound of it was made for market Larro experimented to find out what the most profitable chick feed would have to be.

Sixty thousand chicks were used in three years of experiment. Tests were made with many different formulae including all the leading commercial feeds.

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FEEDS THAT DO NOT VARY
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More Butterfat Holsteins average highest in yearly butterfat yield and predominate in the leading dairy states. 80% of the cows which have produced more than 1,000 lbs. butterfat in a year are Holsteins.

Extension Service

The HOLSTEIN-FRIESIAN ASSOCIATION OF AMERICA
230 East Ohio Street, Chicago, Illinois



Hilson Guier, a Kentucky 4-H club boy with his Jersey cow, Proud Prince's May, who recently broke the world's record for production in her class. Proud Prince's May produced 784.04 pounds of butterfat and 12,624 pounds of milk in 305 days.

Reviewing the Latest Eastern Markets

Milk Prices

The following are the January prices for milk in the basic zone of 201-210 miles from New York City.

Dairymen's League prices are based on milk testing 3.5%. Sheffield on the basis of 3%.

Class	Dairymen's League	Sheffield Producers
1 Fluid Milk....	3.42	3.17
2 Fluid Cream		2.30
2A Fluid Cream	2.46	
2B Cond. Milk..		
Soft Cheese...	2.71	
3 Evap. Cond. Milk Powder		2.30
Hard Cheese	3.00	
4 Butter and American cheese. Based on New York City Market quotations on butter and American cheese.		

The Class 1 League price for January 1928 was \$3.37 for 3.5% milk and Sheffield's \$3.27 for 3%.

The above prices in each class are not the final prices the farmer receives. The final price received from the dealer is the result of the weighted average.

Unsatisfactory Situation in Butter Market

CREAMERY	Jan. 16	Jan. 9	Jan. 18, 1928
SALTED			
Higher than extra....	47 1/2-48	48 3/4-49 1/2	48 -48 1/2
Extra (92sc).....	-46 1/2	48 1/4-48 1/2	47 -47 1/2
84-91 score.....	43 1/2-46	44 1/2-48	41 1/2-46 1/2
Lower Grades.....	42 1/2-43	43 -44	40 -41

The New York butter market has been experiencing an extremely unsatisfactory period of business during the last week. Ever since our report of a week ago trade has been going up and down hill following a zig zag course that has everyone up in the air. In the first place it is generally conceded that Mrs. John H. Housewife is not buying as much butter as she did before the holidays. Just why the consumptive demand should fall off so sharply since the first of the year no one seems able to explain. At the same time, the New York market has been getting free receipts of fresh creamery butter. These two factors have placed the market in anything but a firm condition. As a result the buying element has been unusually cautious, no one being willing to take on more supplies than the immediate trade needs. When buyers operate close to their current requirements, it leaves the market in a very unsettled condition. Since our last report prices have been cut with a hope that a reduction would open up other trade channels. The chain stores have reduced their retail prices in some cases as much as 4c and even 5c a pound, but as yet this move has had little or no effect.

The weather is expected to have a temporary effect. Lower temperatures have served, so advices state, to curb production. It is claimed, however, in the producing sections, that we are manufacturing more butter than we did a year ago which is naturally making the buyers very cagy.

It is reported that two direct boats from New Zealand are expected the latter part of January, but unless something very radical takes place in the near future, it is not expected that any of this butter will be unloaded in New York in view of the fact that English markets are still above par compared with New York.

Cheese Prices Remain Steady

STATE	Jan. 16	Jan. 9	Jan. 18, 1928
FLATS			
Fresh Fancy	25 1/2-27	27 1/2-29	
Fresh Average.....			
Held Fancy	27 1/2-29	25 1/2-27	29 -29 1/2
Held Average			

There has been no change either in the tone of the cheese market or in

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Oldest Live Poultry house in New York City. Established 1883, offers you an unlimited outlet for your live poultry. Write for shipping tags and free holiday calendar folder K 27.

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EGG CASES Wholesale dealer and shipper of second hand egg cases. Car lots a specialty.

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FARMERS BUY FROM FARMERS

Let us suggest for you as breeders the best ages to breed. 7 weeks old \$3.50 each; 8 to 9, \$3.75 each. The breeds are Chester White cross color; White Berkshire cross color, Black and White. Our prices may be a little more, but you get what you buy. Just now we can ship from 2 to 100 C.O.D. Our stock is from Real Type Strain. Our guarantee is to please you. Crating will be free.

THE MISHAURIN STOCK FARM

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P. S.—No pigs sold at the farm except by appointment.

the prices on the various grades of that commodity. We have been enjoying a demand for higher grades of cured cheese that has been sufficient to keep the market steady and prices at unaltered levels. The receipts of cheese have been comparatively light so that we have not had an unusual supply. At the same time, the out-of-storage movement has been quite satisfactory. Fresh cheese, which is arriving sparingly, is only moving fast enough to absorb the supply. Fresh makes are not kicking up much of a dust as far as selling goes, inquiry being rather quiet.

According to the *Producers' Price-Current*, the cold storage holdings in United States on January 1 amounted to 68,297,000 pounds, compared with 47,765,000 pounds at the same time a year ago. From December 1, 1928 to January 1, 1929 our cold storage holdings were reduced slightly over 6,000,000 pounds. During that period approximately 400,000 pounds more were taken out of storage than during the same period the year previous.

Weather Helps Egg Market

	Jan. 16	Jan. 9	Jan. 18, 1928
NEARBY WHITE			
Hen'y Sel. Extras....	47-49	45-46	50-51
Hen'y Av'ge Extras....	44-46	42-44	48-49
Extra Firsts	42-43	30-41	47-
Firsts	41-	26-39	45-46
Undergrades		25-	
Pullets	35-36	35-36	44-45
Pewees	30-33	30-33	37-
NEARBY BROWNS			
Hennery	44-45	46-	50-52
Gathered	38-43	27-45	48-49

Old Man Weather usually gets a lot of cussing but the egg trade feels quite the reverse about that fickle old gent, for he has stepped into the breach at a most critical time. His action has sent prices upward. The egg market has been in a very serious condition. There is no question about that. The fresh egg trade was stagnant and the cold storage men all had a headache. Autumn like conditions had kept Bidy fooled as to the true season of the year, and she, thinking it was time to go to work, has kept the egg basket full. These heavy supplies have made the buyers very cautious with the result that we have been experiencing a very unsettled market for many weeks. With genuine wintry weather throughout the entire East however, even down into the Southwest, the picture has changed. Buyers have shown considerably more interest and the cold storage men have taken on renewed confidence. On Monday the fourteenth, the change in the egg market was so marked that it was like a different neighborhood entirely. By the sixteenth the optimism had worn off slightly, large buyers operating a little more conservatively, undoubtedly waiting for further weather developments. It is generally conceded that conditions in the producing sections have much to do with future developments.

Most of the nearbys are bringing from 41c to 46c, although some of the known marks of extra choice lines, coming out of New Jersey, are bringing as much as 51c.

Live Poultry Market Unsettled

	Jan. 16	Jan. 9	Jan. 18, 1928
FOWLS			
Colored	-37	-35	25-26
Leghorn	-35	-40	23-24
CHICKENS			
Colored	30-33	32-40	23-30
Leghorn	30-33	32-34	-26
BROILERS			
Colored	36-42	33-40	37-45
Leghorn	32-38	33-36	-35
CAPONS	37-41	42-45	35-45
TURKEYS			30-40
DUCKS, Nearby	30-33	30-32	29-33
GESE	-28	25-30	25-26

The live poultry market is in a very unsettled condition although price levels are highly satisfactory. The disturbing element is found in prospective arrivals. At this writing it is a little too early in the week to say definitely how the market is going to turn. There are some who say that the demand will be sufficient to absorb the heavier anticipated arrivals.

The live poultry market has not been over supplied. In fact the prices have been so satisfactory that considerable stock has been sent to New York by express, from other cities, particularly Philadelphia and Baltimore. At this

writing, buyers and sellers are at loggerheads over prices. Dealers have been making an effort to advance prices but buyers have been resisting very strongly. Some business has been accomplished at advanced levels, but not sufficient to warrant alterations in the price columns. Leghorn fowls were enjoying considerable premium business. Plymouth Rock broilers were very irregular as to price, sales being reported at many levels. On the whole however, the live poultry market as far as the shipper is concerned has been paying and is expected to continue to pay fairly good prices.

Slight Changes in Potato Market

STATE	Jan. 16	Jan. 9	Jan. 18, 1928
150 lb. sack...	1.85-2.00	1.75-1.90	
Bulk, 180 lbs.	2.10-2.35	2.00-2.25	
MAINE			
150 lb. sack...	2.10-2.25	2.00-2.15	2.85-3.25
Bulk, 180 lbs.	2.40-2.60	2.35-2.50	3.50-3.85
PENNA.			
150 lb. sack			
No. 1			
Bulk, 180 lbs.	2.10-2.35	2.00-2.25	
LONG ISLAND			
150 lb. sack			
No. 1	2.50-2.75	2.35-2.75	2.50-3.75
Bulk, 180 lbs.	2.85-3.15	2.85-3.15	4.00-4.25

There has been only one slight change in the potato market since our report last week. Prices remain substantially the same as a week ago with the exception of States in sacks. They have improved about 10c per sack, the quotations covering a narrower range than they did a week ago. The market on Maines and Long Islands continues quiet.

Briefs on the Fruit and Vegetable Trade

Apples are moving fairly well where stock is good. The best Baldwins have advanced to \$7 while the best Greengings bring \$7.50. Northern Spies of the top grades are worth \$8, and McIntosh are still at \$11. Those prices quoted are for the very best. Inside figures range from \$2.75 up. According to the New York State Department of Agriculture and Markets, on January 1, the cold storage holdings of apples in the entire United States, totaled 2,350,000 barrels compared with 1,699,000 barrels on January 1, 1928; and the five year average of 3,479,000 barrels. Also there were held on January 1, 4,233,000 bushels compared with 3,177,000 bushels a year ago; and a five year average of 2,054,000. Total carlot shipments for New York upstate apples this season to date are 8,458 cars, compared with a carlot movement during the same a year ago of 6,728 cars.

Cabbage holds steady. Sales of bulk goods range from \$48 to \$52 a ton with some jobbing sales at \$55. Much depends on the quality and size of heads. Reports state that the carlot movement this season to date totals 7,035 cars, compared with 10,980 cars during the same period a year ago.

Western New York celery has been bringing from \$3 to \$3.50 per two-thirds crate for stock in the rough. So far this season, 4,054 cars of celery have moved out of upstate, compared with 5,775 cars during the same period a year ago.

Carrots are selling fairly well. State washed have been bringing from \$2 to \$2.25 with rough at \$1.50 to \$1.65. Sacks have been bringing from \$3 to \$3.35 per 100 pounds. The carlot movement this season to date, from upstate New York has totaled 984 cars, compared with 1,309 during the same period a year ago.

Meats and Live Stock

Live veals still hold a top figure of \$19.50 with good demand and the market steady. A week ago the situation was not quite so good. Calves (whole milk-feds excluded) generally top at \$13.50, the same as a week ago, ranging down to \$6.50 for culls. Last week a typographical error had culls at \$16.50, \$10 too much.

The steer market is still irregular. Some fancy steers are still bringing \$13.75 to \$14, but most of the arrivals sell below those figures.

Bulls have advanced. A few good ones are bringing \$10 with medium stock from \$8.75 to \$9.50. The market

is steady and a shade better than a week ago.

The cow market is unchanged. Tops bringing \$8.75, others ranging down as low as \$4.50 for culls.

Lambs are still enjoying an active demand and prices are higher. Some of the better lines are bringing from \$16 to \$16.50, while medium stock brings from \$13.50 to \$15.50.

Hogs are steady. Those weighing from 85 to 100 bring \$9 to \$9.25; medium weights (130 to 160 lbs.) from \$9.25 to \$9.50; those from 165 to 220 lbs., \$9.75 to \$10.

Trade has only been fair for country dressed veal. Prime to choice have been bringing 24c to 25c, but these prices are extreme, and the market is just barely steady ranging from 14c up.

Dressed hothouse lambs are also selling slowly. A few very fancy ones are bringing a premium, but \$13 generally represents the top of the market, with prices ranging downward as to grade to \$8.

Prices Improve on No. 1 Hay

Hay prices are better for No. 1 timothy in large bales, reaching \$27. However, supplies are liberal on all but No. 1 timothy and as a whole the market is very irregular. Medium and lower grades are moving slowly, so that as a whole, the undersurface of the market is not as good as it first appears. Mixtures containing grass or clover are generally from \$2 to \$4 under straight timothy prices.

Pea Beans Higher

Pea beans have again advanced, so that the choicest lines are bringing \$10.50, with common stock generally around \$9.75. Red Kidneys hold full steady at \$8 to \$8.75. Marrow Jumbos are unchanged at \$11.50 to \$12.50, with average goods from \$9.75 to \$10.50. Limas range from \$12 to \$12.50 but that price is extreme.

Feeds and Grains

FUTURES	Jan. 16	Jan. 9	Jan. 18, 1928
(At Chicago)			
Wheat (Mar.)	1.19 3/8	1.16 1/2	1.29 1/4
Corn (Mar.) .....	.96 1/4	.88 3/4	.90 1/4
Oats (Mar.) .....	.50 1/4	.49 1/8	.55 1/8
CASH GRAINS			
(At New York)			
Wheat, No. 2 Red	1.58 1/4	1.54 3/8	1.56 3/8
Corn, No. 2 Yel.	1.15 3/8	1.09 1/8	1.08 3/8
Oats, No. 2 .....	.61 1/2	.60	.66 1/2
FEEDS			
(At Buffalo)	Jan. 12	Jan. 5	Jan. 14, 1928
Grade Oats	38.00	37.50	37.00
Spring Bran	34.00	34.50	35.50
Hard Bran	36.00	37.00	37.00
Standard Mids	33.00	34.50	35.00
Soft W. Mids	41.00	43.00	43.00
Flour Mids	38.00	39.00	39.50
Red Dog	40.50	42.00	41.00
Wh. Hominy	39.00	39.00	41.00
Yel. Hominy	39.00	38.50	38.00
Corn Meal	40.00	38.50	38.50
Gluten Feed			46.50
Gluten Meal			55.00
36% C. S. Meal	46.50	46.50	45.50
41% C. S. Meal	51.00	51.00	51.00
43% C. S. Meal	53.00	53.00	54.00
34% O. P. Linseed Meal	57.50	58.50	48.50

The above quotations are those of the local Buffalo market and are F. O. B. They are reported in the weekly letter of the N. Y. State Department of Agriculture and Markets.

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AMERICAN AGRICULTURIST

Farm News from New York and Pennsylvania

Gov. Roosevelt's Agricultural Advisory Commission Makes First Report

THE first report of Gov. Roosevelt's Non-Partisan Agricultural Advisory Commission, of twenty-two members, was made to him on January 16. Following a two day meeting, the Commission adjourned to meet again on January 30th. Following is a report of the Commission as given to Gov. Roosevelt, by Henry Morgenthau, Jr., Chairman of the Commission and Publisher of the AMERICAN AGRICULTURIST.

Your Agricultural Advisory Commission held its first session in Albany on January 15th and 16th. It first considered the scope of its work. It realizes that many subjects come within its purview, such as the school problem, the health problem, agricultural education, reforestation, research and other related subjects, studies of which it is hoped will tend to develop the agricultural industry in the State of New York and make the home life of our agricultural population more attractive.

Necessarily many of these subjects must be studied. It is too much to expect that in a two-day session all of the agricultural problems of the state may be solved and definite recommendations made to you in respect to them.

Before introducing its first recommendation, your commission desires to say that it realizes that the agricultural industry is but one of many industries and that the agriculturists form but one of many tax-paying groups. It appreciates that the agricultural industry should not ask for relief at the expense of other industries or tax-paying groups unless that can be predicated on an unequal distribution of the existing and future tax burden. The fact is that the tax burden has been increasing more rapidly in the rural than urban sections of the state and it is apparent that the rural counties are paying a greater proportion of the cost of highway construction than their use of them warrants. The plan herein proposed calls for a more nearly equal distribution of the tax burden as it relates to certain highway construction. It is not a farm tax relief measure pure and simple. It grants relief to home owners, merchants, manufacturers and public utilities in the same relative proportion that it relieves the farmer.

At this first session, attention was given to the rural tax problem as it is related to highway construction and development. It was found that the rural tax burden has during recent years been increasing more rapidly in some sections of the state than in others and that to a considerable extent this is due to highway costs. With respect to this one feature your commission is prepared to make unanimously definite recommendations as follows:

1. That there be enacted a two-cent gasoline tax law.
2. That of the revenue to be derived therefrom that at least 40% thereof shall be used and applied to effect an equalization of the burden of constructing county highways and to relieve the towns of their respective shares of the cost of the maintenance thereof; the remainder of this 40% to be apportioned to the counties for the purpose of using and aiding them in developing a secondary or lateral system of improved highways.

To effect this equalization of cost or burden of constructing county highways, your committee recommends that the equalization plan shall not call for a contribution by the counties of less than one-fourth of one per cent per \$1000 of equalized value per mile of highway nor more than 35% of the cost of the road outside of incorporated cities and villages.

In respect of bridges on highways yet to be constructed the cost shall be in the same proportion as the cost of building the highway.

As regards bridges on state routes heretofore completed, the state shall bear the entire cost and as regards bridges on county highways, heretofore constructed, the respective counties

shall contribute the same share or proportion as is required to be contributed by that county toward highways hereafter to be built.

It is also recommended that appropriate amendments be made to existing statutes requiring that each county through its commissioner of highways shall project a secondary or lateral system of highways for his county, subject to the approval of the Board of Supervisors and the State Superintendent of Public Works, the thought being that the county system of improved highways should be coordinated with the state system and that funds contributed by the state should not be expended except under the approval of

the State Superintendent of Public Works, and, moreover, that this plan should cover and include motor vehicle revenue now received by counties under the motor vehicle law, funds now received by the county under the so-called Lowman Act and such additional funds as shall be received out of the proceeds of the gas tax law.

There was also considered the subject of the distribution of state aid to towns for the maintenance of dirt roads under section 101 of the highway law. It is manifest to your commission that the original intent and purpose of that section is no longer effective and that some revision thereof is necessary. It begs leave, however, to subject this to

further study and to submit a recommendation thereon at its next meeting.

The commission recognizes that far-rapid extension of electrical power lines to the farms of the state is of great importance. To this end it urges that the Public Service Commission and the public utilities shall cooperate in every possible way so as to encourage the rapid extension of these power lines throughout the rural sections.

The commission recommends a continued support for the work that the state has been carrying on for several years in the control and elimination of bovine tuberculosis from the cattle of the state, and it recommends that the state shall take over the responsibility for the testing of the fully accredited herds of the state.

The commission recognizes that farmers and other rural people are constantly demanding research work in agriculture, veterinary science and home economics, and the extension of this work into new fields. It recommends that the state shall give an increased support for the research work in these fields and an increased support for the extension of that research work to the people of the state.

Your commission adjourned to meet again in Albany on January thirtieth.

HENRY MORGENTHAU, JR.,
Chairman.
January 16, 1929.

Jersey Breeders Meet

THE annual meeting of the New York State Jersey Cattle Club will be held at the Onondaga Hotel, Syracuse, on Saturday, January 26th, at 1:30 P. M.

The Farm and Home Bureau Are a Help to the Indians

UNTIL within recent years the Seneca Indians on the Tonawanda Reservation have farmed out their land to the white men. Consequently the land which was very fertile has run out because of frequent sowing to wheat without fertilizing or seeding and the hay cut from year to year.

Better farm buildings and machinery are taking the place of the crude affairs they used to have. The young folks are learning to dress better and cleaner. The farm and home bureaus have done wonderful work among the Indians.—Mrs. R. E. G.

Pennsylvania Farm Notes

DEFEATING Charles A. Swoyer, who had been the secretary of the Berks County Agricultural and Horticultural Association for five years, by J. William Kline, was the all-absorbing interest of the annual meeting. It was said that Swoyer was defeated by a nine to six vote by the directors' votes. Harry J. Schad declined a reelection for president. Abner S. Deisher succeeded Mr. Schad.

It was announced at the meeting that the net profit from the 1928 fair was \$35,391 and that after the payment of the customary dividend the treasurer's balance was \$5,851.

A comparatively few years ago ice cream was considered to be a luxury, especially on the average farm where it was reserved for holiday celebrations and special occasions such as picnics during warm summer months. Today ice cream is used by all classes of people during the year round and is properly endorsed by leading authorities on nutrition and by medical men as a valuable food combining wholesomeness with a delicacy of flavor that is hard to equal. The volume of production has assumed gigantic proportions.

To advance the farming industry to a safe and sound business plane and to make it healthy and successful was a united effort of the vast army of radio owners and our leading broadcasting corporations. No other State has better radio facilities than Pennsylvania by means of which the markets of New York and Philadelphia are brought to our homes at least semi-daily.

Pennsylvania continues to lead in

mushroom culture and now establishments are being developed in southern Pennsylvania counties. New York City purveyors handle the largest portion of our production. Present wholesale prices range from 40 cents to \$1.25 per three pound baskets with occasional sales still higher for highest grade stock.

A visit to the famed Reading Terminal Market, Philadelphia demonstrated the fact that although the farms near Philadelphia are the natural habitat of the goose, and that during the holidays in particular, geese command high prices, good, well-fed Toulouse and large specimens were scarce, while the demand was greater than the supply. Ducks, however, were in abundant supply, and sold at lower prices.—OLIVER D. SCHOCK.

Pennsylvania County Notes

Northampton County—The weather has been very changeable, varying from 8 degrees to 60 degrees. We had several heavy rains which broke the drought. There was a light fall of snow but it turned to slush. We have no Grange in this part of the county but the Farm Bureau is doing quite a bit of work in the way of club work. Potatoes are selling at wholesale for 50 cents and 75 cents per bushel at retail. Eggs have dropped to 50c per dozen owing to the open winter. Pork is selling from 15 to 13 cents per pound. Milk is \$3.42 per hundred-weight.—F.P.H.

New York County Notes

Montgomery County—A large acreage of land was plowed last autumn. The high price of coal causes farmers to collect fire wood from old fields and second growth wood. Hay sells at \$15.00 to \$16.50 per ton in the barn according to quality. The demand for hay is for clover. Eggs sell in the market at \$.65 per dozen, butter 50 cents per pound. Eight inch ice has been formed on the milk pond and milkmen are preparing to harvest a supply.—G. P. V.

Greene County—The thermometer is ranging from 32 degrees to 10 degrees but there is no snow. Ice harvest has been delayed because of a thaw on January 6th. As a result of the open season farm work is well along. T. B. testing is progressing satisfactorily, there being only about 1 per cent infection now. The Board of Supervisors has appropriated \$4600 for the carrying on of this work next year and \$4200 for the Farm Bureau. There are now 556 paid Farm Bureau members for 1929, a slight increase over one year ago. One hundred and twenty-five people attended a joint banquet of the Greene County Guernsey Breeders and Farm Bureau Committeemen. County Judge Wm. E. Thorpe presided. The out of county speakers were Chas. A. Taylor of Cornell University, and C. M. Cummings of the American Guernsey Cattle Club.—E. B.

In the Hudson Valley

Sullivan County—A small amount of snow is on the ground and farmers are busy drawing wood and logs. The weather is keen but during the day it is moderate about noon. Eggs are selling from 44c to 50c a dozen; crack corn \$2.25 a hundredweight, mash \$2.60, and middlings at \$2.15. Snow fences are up along the main roads and some roads have been cleared of snow while others are not. Many farmers have sent in orders for their early baby chicks. Prices seem very reasonable.—P. E.

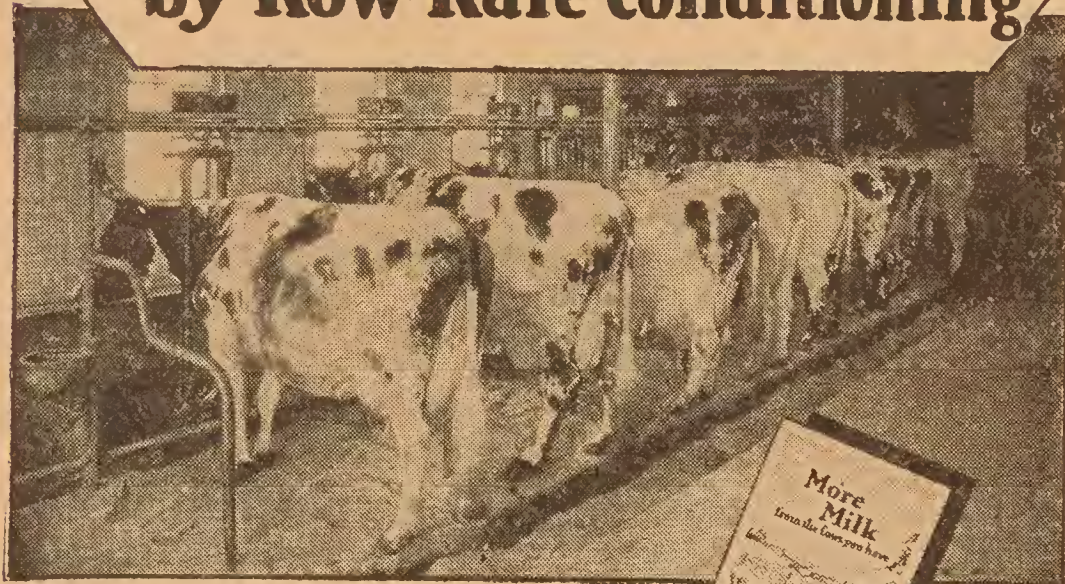
Saratoga County—There has been no sleighing yet. Many are working in the woods cutting logs and fire wood. It is very cold. No ice has been harvested yet. There was much illness, a sort of influenza epidemic, but much lighter than in 1918. Many have butchered pigs and beef. Heavy pork is not much in demand. Butter is about 50 cents per pound and eggs are not very plentiful. Many are out of work and some are employed on the telephone line being built between Glens Falls and Albany. Grain prices are high.—Mrs. L. W. P.

In Western New York

Genesee County—A high wind and blizzard did considerable damage here Saturday night and Sunday. A great many residents of Genesee County are ill with the gripe and flu. Prof. E. Worthen of the Agronomy Department, and Prof. W. Crandall of the Animal Husbandry Department of the New York State College of Agriculture, are holding a five-day course on economical milk production for dairymen of Genesee County this week. These meetings are under the auspices of the Genesee County Farm Bureau. The first meeting was held Monday at E. Pembroke, Tuesday Leroy, Wednesday Bergen, Thursday Bethany Center and Friday at Alexander.—Mrs. R. E. G.

Allegany County—Winter came riding in yesterday on a heavy gale after an all night's rain which melted the snow and raised creeks and streams. Tonight the mercury has fallen to near zero. Many farmers have been busy in the woodlots. According to Supt. Hall's report of Belmont the cost of maintaining the poor in Allegany in 1928 was \$53,605.17; \$15,000 of this amount was for outside relief; \$13,500 for hospitals, and the balance

Forcing for more milk is now made safe— by Kow-Kare conditioning



How to Meet the Winter-feeding strain

FOR the long winter grind, when feed comes high and milk comes hard—your cows need more than good food and comfortable quarters. To show a profit instead of a loss there must be no laggards, no cows off feed, sickly or irregular.

The plan that spells profits is—*regular* conditioning. Regulating and toning up the digestion and assimilation gives the cow a chance to convert—at a profit—the dry, hard-to-digest winter feeds. Without such aid, breakdowns are invited—and cow ills are costly.

Kow-Kare is a scientific compound of Iron—the great builder and blood purifier—blended with potent medicinal herbs and roots. Its action is by *regulating* rather than by *stimulating*. It builds permanent vigor and responsiveness into the productive and genital organs where weakness first finds a foothold.

The regular use of Kow-Kare with backward milkers brings into your pocket many times the few cents a month per cow it costs to supply this aid.



Free Cow Book

New illustrated 36-page book on cows mailed on request. Full of useful dairy hints and information.

The extra quarts tell their own story before your eyes. And remember, it takes but a slight milk increase per cow to actually *double* the net profit from the herd.

When Cows Freshen

aid them through their trying period with Kow-Kare a few weeks before and after. Once used in this way, you will never again let a cow freshen without this great builder of vigor.

Kow-Kare is sold by drug, hardware, feed and general stores—\$1.25 and 65c. If your dealer is not supplied we will mail direct, postpaid.

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A mineral mixture of recognized conditioning value is made by mixing 30 lbs. salt, 30 lbs. fine-ground limestone, 30 lbs. steamed bone meal and four cans (large) Kow-Kare. For well under \$6 per hundred you will have an unbeatable mineral. Use 80 lbs. of this mixture to a ton of grain.

Another CHINESE Auction

This time we offer FISHKILL DEMEER HENGERVELD
Born February 6, 1928

He is a son of a three year old (by the noted Dutchland Colantha Sir Inka) that has made two good long time records first and second calf on twice a day milking. This young bull's sire, and also his dam are son and daughter of Winana Segis May 2d, who made 876.76 lbs.

of butter and close to 20,000 lbs. of milk in ten months as a four year old. Also his sire is a son of Hengerveld Homestead De Kol 4th who has a splendid list of large producing daughters, he being a son of Jenny Linn Colantha, with a record of over 30 lbs. butter in 7 days.

We will start him off at \$400.

This price will be reduced \$50 the first of each month until sold.

Dairymen's League Certificates will be accepted at face value in payment for this animal.

FISHKILL FARMS HENRY MORGENTHAU, Jr., Owner
461 Fourth Avenue New York

Holstein Breeders Review Progress and Plan For More

(Continued from Page 11)

is chairman, appointed. The association went on record as favoring such a show and pledging its cooperation with the N. Y. State Agricultural Society.

The secretary's and treasurer's reports showed the association to be in good financial condition, with a very satisfactory balance in the treasury. Two new directors were elected, one being Mr. George Potter of Chemung County, and the other LeRoy Munro of Elbridge, Onondaga County. The balance of the officers were reelected. —C. H. B.

A Successful Guernsey Herd in Connecticut

AS an example of what can be done in dairy herd improvement, we offer the story of Selden Bros. of Haddam, Conn. The farm owned by Selden Bros. is located on a high bluff overlooking the Connecticut River in the fine old county of Middlesex, and consists of one hundred and fifty acres. It is part of the original holdings upon which Thomas J. Selden built his home in 1728.

At the present time the farm is occupied by the two brothers, Thomas and Leonard Selden. Under their management the farm has prospered, and it and its splendid dairy herd are well known throughout central Connecticut.

When the brothers took over the farm the dairy herd consisted of four Devon cows. They soon purchased two purebred Guernsey cows and a purebred sire and today the herd numbers thirty animals, of which number twenty-six are purebreds and four are high class grades.

The herd is headed by the sire "Jasmines Gendarme." He is three years of age and traces six times to May Rose, while his sire was a double grandson of Bellefounder, a sire with nineteen A. R. daughters and two A. R. sons. Jasmines Gendarme is the sire of twenty-three purebred calves born on the farm, of which seventeen are females, a record of which many local breeders are envious.

Herd Averaged Thirty Pounds of Butterfat in Month

Selden Bros. have always been interested in dairy improvement work and were among the first to join the Middlesex County association when it was formed in 1927, and it is interesting to note some of the records made by their herd. During the first seventeen months the association was in operation, the Selden herd led in average butterfat production three different months, averaged over thirty pounds of fat nine different months and had leading cow in fat one month.

The Selden herd receives a good quality silage and alfalfa and clover hay as far as possible and it is believed that a great deal of its success can be attributed to the superior quality of the roughage, Selden Bros. being among the many successful growers of alfalfa in Middlesex County.—Karl R. Manning.

Can You Pick Your Best Cow?

THE average dairy farmer can tell you, off hand, how many cows he has, how many cans of milk they produced during the month, what the feed bill was and the size of his milk check.

Step into his barn and ask him which cow gives the most milk and he will point her out and tell you she is a "whale of a cow" and wishes he had twenty just like her. Ask him to point out the poorest one and he will show you two or three and ask you to make him an offer for them. This is about the limit of his knowledge. If you ask him what it cost to feed each individual cow and how many pounds of milk each one gave during any month, he is stuck. Right there is the cause of 90 % of our heartaches (Continued on Opposite Page)

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we ever used"

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Satisfaction guaranteed, or money refunded. 10 days trial allowed. Crates supplied free. A. M. LUX, 206 Washington St., Woburn, Mass. Tel. Wob. 1415.

(Continued from Opposite Page)

as dairy farmers. There is only one remedy. Know what each cow is doing.

The barns are full of equipment, running into hundreds of dollars but look around for a scale for weighing each cow's milk as it is produced and it can't be found. Scales can be purchased for \$1.00 and up. It only requires an instant to set the pail of milk on the scale and write down the weight as each cow is milked. By measuring the feed and feeding each cow in proportion to the milk she gives, the guess work is all taken out. A simple chart can be made in about five minutes that will carry both the milk and feed record for any number of cows for a month. If we would all try this "stunt" for six months and dispose of the "boarder cows", we would discover a most gratifying difference in the net profit and dairy farming would not be such a bad business after all.—W. P., Pa.

A New York Farmer Visits Vermont

(Continued from Page 10)

the increase of the scanty herds of the first comers. If only we could know all its details what an epic story might be made of that first swarming of the Puritan hive. Remembering the incredible difficulties and obstacles that they overcame we can only echo the ancient explanation, "Now there were giants in the land in those days".

Within sixteen years following the first landing of the Pilgrims at Plymouth every New England state except Vermont had established within its bounds some permanent settlement, but Vermont was so remote, so far in the interior, that it was an hundred and four years later (1724) when the first adventurers were chopping out a clearing near the future site of Brattleboro.

Historians commonly date the settlement of Vermont from 1760 and after that progress was very rapid. Within the next eight years 138 townships had been erected. At the time of the Revolution the "Green Mountain Boys" were sufficiently numerous to play a considerable part in the local military operations and at the first census in 1790 the state had a population of eighty-five thousand—testimony to the pioneering energy of the older New England states as well as the teeming birth rate of that day.

Some years ago in driving down a valley over on the eastern border, I halted the car to read a marker memorializing an event which has for me a thrill and pathos beyond any other that I can bring to mind. There is a stone with inscription set up to mark the birthplace of the first white child born in the state of Vermont, but that child was born to a Massachusetts mother during a halt beside the trail as she was being carried a captive by the Indians into the northern wilderness. After all the generations the anguish of that still remembered mother seems a fearful thing, and now we may at least in the ancient phrase of the Prayer Book "render humble and hearty thanks" because in these secure years our women are spared tragedies such as that.

So Vermont stands—in some respects unique among our forty-eight states. In Massachusetts and Connecticut the original Puritanism has been submerged beneath an alien flood with very different standards and ideals. But Vermont because she has been spared any great industrial development still retains in comparative purity the Puritan culture that once made New England great. Within her narrow borders are a third of a million people who perhaps better than any other region in America still typify the Spartan virtues of economy, industry, sobriety and godliness.

Surely she cannot boast her self in terms of material things. A widely known writer has put it thus: "Beautiful, dying Vermont". He is wrong. I would not dare say that to a Green Mountain farmer. That Puritan stock has a racial and spiritual heritage which wealth cannot buy and which adversity cannot take away.

In a single minute this Goodrich Giant pounds through months of wear

IN one stride, ten thousand steps! You could scrape your rubber boots or overshoes on concrete, stub them against rocks, walk miles in them, wade knee-deep through ditches—and do all this for months! Still you wouldn't give them as hard treatment as testing machines in our factory give in a few minutes.

One machine tests the sole rubber. It rubs it violently back and forth—one hundred times a minute!

Another machine stretches the rubber used in the uppers. You would not yank it as much in a year.

A third machine twists and bends and twists again the special rubber used in toe and instep.

Goodrich rubber boots and overshoes must pass all these tests be-

fore they are stamped with the Goodrich name. It's as if a "giant farmer"—working for your protection—pulled on a pair of Goodrich boots and marched through a whole year's wear in a single afternoon.

These tests assure you of good value when you buy Goodrich footwear. Look for the name Goodrich. It is plainly stamped on all our boots, overshoes and rubbers—the honor mark of a great company.

From sturdy boots, overshoes and work-rubbers for men and boys to dainty stylish Zippers and rubbers for women and girls, the Goodrich line of tested rubber footwear meets the needs of every member of your family. *The B. F. Goodrich Rubber Company, Akron, Ohio.*

Goodrich

RUBBER FOOTWEAR FOR EVERY MEMBER OF THE FAMILY



A favorite with farmers—this brown Goodrich boot with white sole. Sizes, boys' to men's. All lengths, knee to hip.



This sturdy Norka comes in black with white or brown sole. Unrivalled for heavy wear.



These strong, comfortable all-rubber overshoes come in all sizes with 4, 5 or 6 buckles.

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LIFT YOUR DAIRY
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COVERS FOR OLD SILOS
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461 Fourth Avenue.

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most profitable sizes for flocks; contains house plans, construction details and concise and easily-followed Feeding and Rearing Charts. It is a book that you will find full of suggestions and inspirations and which you will want to keep handy for frequent reference. Some of my customers claim that they owe to it their first steps toward the comfort and peace of mind that come with an assured income.

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S.C. White, Brown and Buff Leghorns.....	\$3.50	\$6.75	\$13	\$62.00
Tancred and Hollywood W. Leghorns.....	3.75	7.25	14	67.00
Barred and White Rocks, R. I. Reds.....	4.25	7.75	15	72.00
Black Minorcas and Anconas.....	4.25	7.75	15	72.00
White Wyandottes and Buff Orpingtons.....	4.75	9.00	17	82.00
White Minorcas and Blue Andalusians.....	5.50	10.25	20	95.00
Jersey Black Giants.....	7.00	13.00	25	120.00
Mixed or Odds and Ends.....	3.00	5.50	10	50.00



Send for our Free Catalog with prices on Chicks from our SPECIAL MATED FLOCKS. All chicks sent prepaid by either Parcel Post or Express. 100% live delivery guaranteed. Bank references furnished on request. Write us. You will save money by ordering Superbred chicks NOW.

NATIONAL CHICK FARMS Box 408 MIFFLINTOWN, PENNA.

WOLF SELECTED CHICKS

10 FREE CHICKS WITH EACH 100 ORDERED BEFORE MARCH 1st.

Don't miss this chance to get a start with Wolf's extra quality pure-bred high producing stock. Every breeder produced on free range and health of chicks is safeguarded. **Get Our Catalog and Price List**

Tells about prizes won by our birds. Read about Mary Hencel who made over \$1000 profit in one year with birds of our breeding. All leading breeds—prices very attractive. Write today. Chicks shipped C.O.D. Toe picking stopped instantly with Wolf's "No-Pick." Order box today. \$1.00 postpaid. Satisfaction guaranteed or money refunded.

WOLF HATCHING & BREEDING COMPANY, BOX 1, GIBSONBURG, OHIO

HUBER'S RELIABLE CHICKS

10 FREE CHICKS —ON orders booked before March 15th, we give 10 Chicks free with each 100 ordered.

When we say RELIABLE—we mean RELIABLE in every way. Breeding stock of highest quality of 19 years of careful development. Special attention paid to health of flocks and records kept.

CATALOG FREE—CHICKS SENT C. O. D. IF YOU WISH
Write for details—get our illustrated catalog which tells all the story. Our prices reasonable. A book on Raising Chicks worth many dollars given free with each order of \$10.00 or more. Big discount for early orders.

HUBER'S RELIABLE HATCHERY, No. High St., Fostoria, Ohio

BABY CHICKS

From Heavy Laying Free Range Flocks

25	50	100	500	1000
S.C.W. & Br. Leghorns.....	\$3.50	\$6.00	\$12	\$57.50
S.C.B. and Wh. Rocks.....	4.00	7.50	14	67.50
Buff Orpingtons & Reds.....	4.00	7.50	14	67.50
White Wyandottes.....	4.00	7.50	14	67.50
Assorted Chicks.....	3.00	5.00	9	42.50

100% prepaid safe delivery guaranteed.

Order from this ad. or write for circular
J. N. Nace Poultry Farm, Box 161, RICHFIELD, Pa.

BABY CHICKS

Delivery After February 15th. Full count and quality guaranteed

25	50	100	500	1000
White and Brown Leghorns.....	\$3.25	\$6.25	\$12	\$58.75
Anconas and Black Leghorns.....	3.25	6.25	12	58.75
White and Barred Rocks.....	3.75	7.25	14	68.75
Rhode Island Reds.....	3.75	7.25	14	68.75
Mixed chicks all breeds.....	2.75	5.25	10	48.50

Write for catalog and special discount on early orders

Hatchery Chicks for Greater Profit
Ulsh Poultry Farm and Hatchery
Port Trevorton, Pa. Box 12

BABY CHICKS

25	50	100
Tancred Strain W. Leg. \$12 per 100		
Common Wh. Leghorns.....	11	per 100
Barred Rocks.....	14	per 100
S. C. Red.....	14	per 100
Heavy Mixed.....	12	per 100
Light Mixed.....	9	per 100

100% live delivery guaranteed. Order from this ad. or write for free circular.
C. P. Leister, McAlisterville, Pa.

BABY CHICKS

25	50	100	25	50	100	
Barred Rocks.....	4.00	7.50	14	S.C.W. Leg.	3.50	6.50
S.C.R.I. Reds.....	4.00	7.50	14	Heavy Mixed.....	3.50	6.50
500 Lots 1/2c less.				1000 Lots 1c less.		

Free Range Flocks. Live Delivery.
B. N. LAUVER, McAlisterville, Pa.

HEAVY BROILER CHICKS—\$14.00 PER 100

Consisting of Rocks, Reds, Wyandottes, Orpingtons. Sent C.O.D. Pay after arrival. Postage prepaid. Live delivery. Immediate shipment. We hatch all year. Send for folder. **SCHOENBORN HATCHERY**, 355 Main St., Hackensack, N. J. Phone 1603 or 1604.

FERRIS STRAIN WHITE LEGHORN CHICKS

Send orders now for March and April.
\$12 per 100--\$57.50, 500--\$110, 1000
Juniata Poultry Farm, Richfield, Pa.

200,000 CHICKS 1929

Goodling's Super Quality. Healthy, Strong and Vigorous

50	100	500	1000
Single Comb, White Leghorns.....	\$6.50	\$12.00	\$57.50
Barred Plymouth Rocks.....	7.00	13.00	62.50
S.C. Rhode Island Reds.....	8.00	15.00	75.00
S.C. R. I. Reds, Heavy Breed.....	5.50	11.00	52.50
Broiler Chicks, Light Breed.....	5.00	10.00	47.50

Order direct. Prepaid 100% live delivery guaranteed.
Circular Free.
THE VALLEY HATCHERY, Box A, R. No. 1, RICHFIELD, PA.

CHICKS! Breeders on Our Farm

WYCKOFF LEGHORNS

5000 Chicks Weekly

Bargain price \$18.00 per hundred. Ten per cent with order, balance C.O.D. Refund if ordering dates are filled. SPECIAL—200 chicks weekly from pedigreed matings, price on request.

Hatchery Chicks For Greater Profits

MAPLEWOOD POULTRY FARM,
OFFICE 196 LARK STREET, ALBANY, N. Y.

New England Bred Leghorns

The Largest Specialty White Leghorn Farms in the eastern states distribute a 64-page illustrated Yearbook—free—to poultry keepers east of the Mississippi.

Gives housing, trapping, pedigreeing, breeding and feeding plans, our 35 years' experience has proved successful, and reasons why we can sell Chicks guaranteed to be more profitable than any others you can buy.
LORD FARMS, 85 FOREST ST., METHUEN, MASS.

Wyckoff Tancred White Leghorns CHIX

Book your order now for March and April Chicks.
\$12.00 per 100 \$57.50, 500 \$110, 1000

100% prepaid safe delivery guaranteed.
J. N. NACE POULTRY FARM, Box No. 50, Richfield, Pa.

BABY CHICKS

Hatched from our own strain of S.C.R.I. Reds, famous throughout the country for high production, vigor and size. Our 4000 layers were producing 50% Dec. 1st. We own and operate one of the largest S.C.R.I. Red plants in New England. Each year our entire flock is state tested for Bacillary White Diarrhoea. Let us introduce our blood line, trapnested, disease free, 260 egg strain, which is sure to satisfy, into your flock. Catalog free.
REDBIRD FARM, WRENTHAM, MASS.



With the A. A Poultry Farmer



An Electric Water Heater for Poultry

"Could you give me information as to how I could use electric power for heating water in a poultry house? I have two fountains which have been heated with oil lamps, but would like to use electric heat. Any information gladly received."—A. H. S.

THE immersion type of heater is convenient and efficient and one of the proper sizes for the temperature and amount of water should give very satisfactory service. It should be just large enough to keep the water gently warmed, but not large enough to make it hot as this is a waste of energy and if the water boils dry the heater element will burn out. Water proof electric soldering irons or hair curlers, percolator heaters soldered permanently in the bottom of the drinking vessel, and small-sized tumbler heaters all have been used for this purpose.

Another method which has also given satisfactory service is to make a flat galvanized box with good fireproof insulation on bottom and sides and set the water container on top so as to make practically an airtight joint. A small 20-watt electric light put down in the box should keep the water warm enough so there will be no danger from freezing. No matter what method of heating is used, the water vessel itself should be well insulated and if possible should be covered except where the fowls reach in to drink. We should be glad to hear from any readers who have satisfactorily solved this problem.—I. W. D.

Electrical Incubator Satisfactory

CAREFUL tests were carried out in the spring of 1927 on the Michigan Rural Electrical Experimental Line with a small farm-size electric incubator of 620-egg capacity using electricity for heating and a small motor for forced circulation of the heated air.

The machine was operated by a family who had had previous experience with kerosene-heated incubators and who were asked to keep careful records of the time required to care for the machine as compared with other incubators they had used. The time actually required during the three hatches run was so small that it was practically negligible. With the exception of the time spent in testing eggs and caring for the chicks, which would be the same for any type of machine, about two or three minutes a day was all that was required. The fertility of the eggs used was rather low, but the percentage of fertile eggs hatched was very satisfactory. The following table gives the cost of current at 3c per kilowatt hour and the results of the hatches:

Date	No. of set	No. of eggs	% of fertile eggs	% of fertile hatched	Current consumption K.W.H.	Cost at 3c per K.W.H.
1927						
April	600	479	427	89	119	\$3.57
May	585	465	420	90.3	108	3.24
June	620	544	482	88.8	118	3.54

Cleaning Dirty Eggs

THERE is no doubt but that eggs keep better where it is unnecessary to wash them, but it is equally true that a clean egg sells better than a dirty egg even though it is necessary to wash it to get it clean.

There are several methods that give good results. One reader reports that spots can be removed with a damp rag and bon ami. Another recommends fine steel wool which can be purchased at any good hardware store. Where eggs are very dirty it is probably best

to put them directly into a pan of water. Where electricity is available an electric fan is a big help in drying them so they can be packed.

Prevention is always better than treatment and it pays to keep eggs as clean as possible by screening the dropping boards, keeping the nests clean and by locating the house on well drained soil so the yards will be dry.

Livestock Parasites Cause Staggering Losses

(Continued from Page 3)

against internal parasites. However, this immunity from attack does not remove the danger from worm infestation in the young stock. The little pig born of a parasite infested mother, living in a pen or yard where worm eggs make up a good percentage of the dust or filth on the floor, has not a chance in the world of escaping infestation. The first time the young pig seeks nourishment while nosing around the teats of its mother, it will get a mouth-

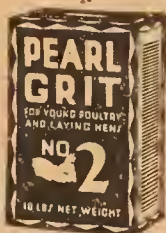
(Continued on Opposite Page)

Beware of Thin-Shelled EGGS!

WHEN hens lay thin-shelled eggs, it's a danger signal. To create eggs, the birds are exhausting the stored-up calcium in their bodies. Unless the calcium supply is renewed, they're likely to break down with leg weakness or rickets. And egg production is sure to be reduced.

PEARL GRIT Pays a BIG Profit!

Feed PEARL GRIT. It provides the lime that's absolutely necessary for maximum egg production. The cost is a mere trifle. Nothing else you can feed your poultry pays such a big profit.



Build Up the Earning Power of Your Flock

Keep PEARL GRIT in your breeding pens. Put the birds in condition to produce eggs of high fertility. PEARL GRIT supplies the calcium which makes virile chick germs and furnishes the foetus with the material required for bone formation. It insures a higher percentage of hatchable eggs. It provides bigger, stronger, baby chicks. That's the very foundation of poultry profits.

If your feed dealer doesn't handle PEARL GRIT, write us at once. And ask for our valuable PEARL GRIT book. It contains information worth real money to you.



MAIL THE COUPON TODAY!

Pearl Grit Corporation,
3812 Wayne St., Piqua, Ohio
Send me your free book, "The Poultry Raiser's Pay Envelope," and give me the names of dealers who handle PEARL GRIT.

Name.....

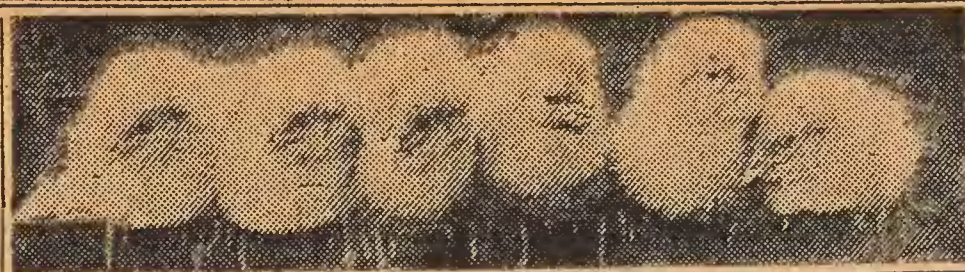
Address.....

P. O. State.....

Chicks, Barron Eng. White Leghorns

Common Leghorns, Barred Rocks, Light & Heavy Mixed, as low as 8c each. 100% guaranteed.
"New Circular Free." Prepaid.
TWIN HATCHERY McAlisterville, Pa.

BABY



CHICKS

May We Send You

A COPY OF THE
**1929
EAGLE
NEST
CATALOG
FREE?**

THE EAGLE NEST HATCHERY COMPANY,
BOX 70 UPPER SANDUSKY, OHIO

5 Lb. Leghorns

The old reliable Heavyweight stock. Produced High Up on Pennsylvania's healthy mountain top. Get your chicks from certified record strains above 300 eggs. R.O.P. Hollywood, Tancred, Barron Matings. Hatch weekly pure white eggs up to 24 ounces per dozen. Beautiful Color Plate Leghorn Catalogue Free.

FARM SERVICE

ROUTE A10 TYRONE, PENNA.

CHICKS OF QUALITY

In lots of...	25	50	100	500	1000
Wh. Wyandottes	\$4.50	\$8.50	\$16.00	\$77.50	\$150
Rocks or Reds	4.00	7.50	14.00	67.50	130
Wh. Leghorns	3.50	6.50	12.00	57.50	110
Heavy Mixed	3.50	6.50	12.00	57.50	110
Light Mixed	3.00	5.50	10.00	47.50	90

From carefully selected free-range flocks. 100% arrival. Postpaid. Valuable illustrated 96-page booklet FREE. Telling all about poultry.

The Commercial Hatchery,
Box 75-A (The dependable plant) Richfield, Penna.

HIGH GRADE CHICKS

Blood Tested and Utility Stock

Leghorns, Rocks, Reds, Wyandottes. Anconas, Black Minorcas and Mixed. Pekin Ducklings.

Write for circular and prices.

TAYLOR'S HATCHERY, BOX 12, LIBERTY, N. Y.

PENNA. CHICKS



"State Supervised"
Flocks inspected by officials from the Penna. Dept. of Agriculture. Our 19th year. Get our low prices on Reds, Rocks, Leghorns and Minorcas. Member I.B.C.A.

Catalogue free.

THE KEYSTONE HATCHERY,
(The old reliable plant) RICHFIELD, PA.

CHICKS	Will ship C. O. D.	25	50	100
S. C. Reds	\$4.00	\$7.50	\$14.00	
Barred Rocks	4.00	7.50	14.00	
White Leghorns	3.50	6.50	12.00	
Heavy Mixed	3.50	6.50	12.00	
Light Mixed	2.75	5.00	9.00	

500 lots 1/2c less, 1000 lots 1c less.
Free range. 100% Delivery. Circular.
W. A. LAUVER, McAlisterville, Pa.

LANCASTER QUALITY CHICKS

Our chicks come from flocks culled for Egg Production and Standard Quality by poultrymen trained at Ohio State University. OUR CATALOG is chicken from cover to cover. Write for it.
Lancaster Farms Hatchery R. 26 Lancaster, O.

CHICKS

Pure bred. Blood tested free range breeders. Leghorns, Anconas, 126. Rocks, Reds, 146. Wyandottes, Orpingtons, Minorcas, 156. Black Giants, 206. 100% live delivery. Valuable Chick Manual Free. **Seidelson Farms,** Washingtonville, Pa.

DUCKLINGS

\$33; EGGS \$14.100
"Duck News" Free.
ROY PARDEE,
Islip, L. I., N. Y.

Hampton's Black Leghorn Day Old Chicks. The Kind that lay. Circular free. **A. E. HAMPTON,** Box A, Pittstown, N. J.

SPECIAL FALL prices for breeding Turkeys, Geese, Ducks, and Guinea. Write your wants and for mailing list. **PIONEER STOCK FARM, TELFORD, PA.**

(Continued from Opposite Page)

ful of worm eggs, in this way starting the parasite handicap the day he is born. With high priced feed, buildings, equipment and labor to be balanced against the sale price of the product, the part that we call labor income or profit in our pig feeding activities is too frequently taken by parasites.

Fifty Eight Parasites Attack Sheep

The toll taken by parasites in sheep has been so great that some farmers have become discouraged and have quit the business. All the advantages of good breeding and good feeding are lost by parasitic infection.

The thin skin and woolly covering of the young lamb offer a protected and bountiful feeding ground to such parasites as keds, ticks, lice and mange mites that attack the sheep. The digestive tract with its warmth, wealth of food, juicy and easily penetrated membranes, offers a feeding ground that no stomach worm would refuse. For the worms that like a little more air than is available in the lamb's stomach or intestine, the lungs offer a home that is not to be sneezed at. Food, warmth, shelter and an egg depository are all factors favoring the lung worms.

In the struggle for existence parasites persist where conditions favor them most. The sheep has so much to offer, that no less than fifty-eight different parasites consider the sheep their home. The susceptibility of the sheep is so great and the parasitic menace so widespread that few lambs escape and must pay the price in terms of lost food, lost blood, intense irritation and toxemia.

Turkeys Can Be Grown in the East

It was once believed that the death knell of the eastern turkey industry was sounded when the Caecum worm made its appearance. The lack of information on the parasite problem has led thousands of our farm owners to abandon this one profitable branch of poultry husbandry. Only in recent years have we learned that the Caecum worm in the barnyard fowl has been responsible for the spread of blackhead in the turkey. Today it is universally acknowledged and unanimously recommended that all chickens must be kept from the farm where turkeys are to be grown. With this idea in mind there are visible signs that the turkey will return to thousands of our farms and once more regain its former prominence as a profitable side line.

Signs of an awakening are seen on every hand. Many of the manufacturers of live stock remedies are doing their part to make the industry safe from parasite infection. Results secured from a proper regard for sanitation show an increased production of eggs that equals 20 to 30 per cent of the output. Producers of the meat types of poultry are able to grow a much finer broiler and a more tender roasting chicken where these recommendations are followed. Hog raisers are able to save a much larger share of the pigs in their baby stage and the sheep raiser is able to increase the weight of his lambs and secure a better price per pound where the worm and parasite evil is reduced to a minimum.

The parasite now appears to be the chief limiting factor of eggs, pork and veal production on our farms. The solution of this problem is now the biggest thing facing agriculture today. Is there not a possibility that the elimination or control of the parasite may solve some of the economic problems of the farmers in this country? If parasites are cutting into your profits get in touch with your county agent or write to American Agriculturist for information.

**KERR'S
1929
CHICKS**

Bred to lay from high record contest stock

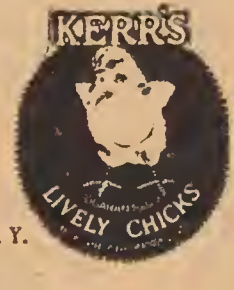
KERR'S Quality Chicks are from high-scoring stock selected for breed type, constitutional vigor and freedom from disease. These factors are combined with four and five generations of known laying inheritance based upon public records of up to 294 eggs in White Leghorns, 280 eggs in Rhode Island Reds, and 277 eggs in Barred Rocks. The poultryman who buys his 1929 baby chicks from the Kerr Chickeries is assured of good chicks that will live, grow and lay. They are bred to return a profit on money and time invested.

Write for booklet giving an illustrated account of the Kerr way of producing livable, profitable chicks. It shows our attractive 1929 prices. Liberal discounts on all orders placed before February 1st.

KERR CHICKERIES, Inc.

Department 10

Frenchtown, N. J. Trenton, N. J. Binghamton, N. Y. E. Syracuse, N. Y.
Lancaster, Pa. Danbury, Conn. W. Springfield, Mass.
Camden, N. J. Paterson, N. J.



EIGENRAUCH FARMS

RED BANK,

NEW JERSEY

18TH YEAR

breeding White Leghorns for size, vigor and heavy production of large White EGGS. 8,000 LAYERS are housed on our farm.

Our Chick Guarantee

100% satisfactory arrival on the exact date we promise shipment. Every chick sold by us is hatched from eggs laid by breeders on our own farm.

Write for Free Folder and Prices

EIGENRAUCH FARMS Dept. G, Red Bank, N. J.

Hall's Chicks

Leghorns-Reds-Rocks-Wyandottes

"WELL BRED FROM WELL BREEDERS"

Not just a hatchery, but a real Breeding Farm of 100 acres. Careful management, finest possible equipment, and years of experience guarantee you a better, more profitable chick. State tested annually for B.W.D. Free Circular.

Hall Bros. Poplar Hill Farm, Box 59 Wallingford, Conn.

HERE: NEARLY EVERYONE RAISES FULL BLOODED "AMERICAN" QUALITY CHICKS

	50	100	500	1000
American or Eng. SC. Wh. Leghorns	\$6.75	\$13.00	\$62.00	\$120.00
Hollywood Wh. or Brown or Buff Legs	7.25	14.00	67.00	130.00
Tancred Wh. Leg. Anconas-Barred Rocks	7.75	15.00	72.00	140.00
RC or SC Reds, Wh. Rocks, Parks Rocks	8.25	16.00	77.00	150.00
Wh. Wyandottes, Buff Orp., Blk. Minorcas	9.25	18.00	87.00	170.00
Brahmas, Col. Rocks, Blue Andalusians	11.25	22.00	105.00	200.00
Light Mixed \$9.00 a hundred. Mixed any breeds our selection \$10.00. Heavy Mixed \$12.00 a hundred.				

Get our NEW CATALOGUE—It proves to you the SUCCESS our Customers have with our chicks—Breeders culled and Bred for High EGG PRODUCTION in Winter when eggs are demanding large premiums. Reference, Curwensville National Bank—100% Live Arrival—Dependable Service. Order Early.

AMERICAN CHICKERIES, BOX 214, GRAMPIAN, PA.

Fairport Quality Chicks

are bred to make money for you. Strong, healthy, vigorous from the world's best and heaviest laying strains such as—Tancred, Ferris, Owen Farms, Daniels, Thompson, Martin, Shepard, Fisher and others. Free range flocks, scientifically culled and supervised. Smith Hatched. 100% live delivery guaranteed. 16 breeds 9c and up. Postpaid. Members International Baby Chick Association. Send now for free poultry book and prices. Buy Hatchery Chicks for Greater Profits.
FAIRPORT HATCHERIES Box 44 Fairport, N. Y.

Schwegler's "THOR-O-BRED" BABY CHICKS

THEY LIVE because they are bred from healthy, free range breeders that have thrived and gained in vigor for generations. They LAY because they are from selected and tested high egg power stock. White, Brown and Buff Leghorns, Barred and White Rocks, R. I. Reds, Anconas, Black Minorcas, Buff Orpingtons, White Wyandottes, 12c and up. 100% live delivery guaranteed. Postpaid. Member International Chick Assn. Write today for FREE Chick Book.
SCHWEGLER'S HATCHERY, 204 Northampton, BUFFALO, N. Y.

When writing Advertisers

Mention American Agriculturist



Why Some Women make an easy job of cooking

Have you ever noticed how much harder it is for some women to prepare a meal than it is for others? You will find that as a rule those who do it the easiest are the ones who have just the right kind of cooking utensils, a few extra sharp knives and many of the little mechanical kitchen helps that are so very convenient. It doesn't take many of these things to properly equip a kitchen for the greatest convenience, and the cost is really very small in comparison to the time and effort that is saved.

Do you get along with kettles that are too large, frying pans that are too small, and not enough long handled pans, covers and such things? Are you using old kitchenware that is difficult to clean and that is unattractive to the eye and the appetite? Have you a food grinder, a beater for whipping cream and salad dressings, a modern can opener, a knife sharpener and other specialties that save time and make things taste better? Why not come to this "Farm Service" Hardware Store and let us help you thoroughly equip your kitchen?

Your "Farm Service" Hardware Men.

Your
Farm Service
HARDWARE
STORES



Have Your Winter Program

Some Things a Reader Has Learned from Years of Experience

WHEN I was younger I used to hate to see winter time come, but as I have grown older I have outgrown part of my hatred of winter. I have so many responsibilities thrust upon me in spring and summer and autumn that I doubt if I would ever get time even to fix up my clothes so as to have the bare necessities in my wardrobe if it wasn't for the winter time. I plan each autumn as near as I can, the winter work I am going to do if I can manage it. The first thing I plan on is doing all my mending, getting the family's clothes "rigged" up. Then I lead

And we shouldn't forget a few house plants. I have found that a geranium that is at least one year old will do fine as far as blossoms go. My year old plants bloomed just wonderfully last winter. They seem to need lots of water. I must not forget to mention the winter birds. I hang out a piece of suet as soon as the ground freezes much and the woodpeckers seem to know the time, for they very soon find it and come in quite large numbers on stormy days. At least I have seen as many as nine here at once and I have never seen them fight over their food; each one waits his turn to eat.

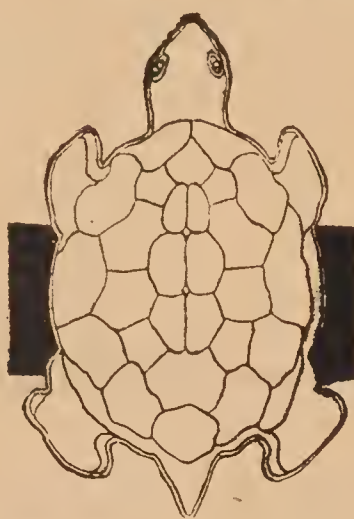
We have barn doves here and they cheer us up in the winter time. They are very cute and the little nodding as they walk is so cute; we would be lost without them. We have quite a bit of our winter time taken up with our Christmas preparations. I can never give expensive gifts but I try to remember at least a few relatives. I believe simple little gifts are enjoyed more than elaborate ones are. The two most appreciated gifts I ever received were four dozen clothes pins from a

have one of these little wonders of all inventions.

We should by all means have enough duties and pleasures to keep us busy and I mean pleasures that will give us lasting enjoyment, not any so-called pleasure that will in any way blight our lives.

If any farm family is in the least musical they will find great winter enjoyment in learning to play some sort of musical instrument. We enjoy this musical sport in winter more than summer when we are so busy and tired out, but in winter many a long evening is passed away right quickly with our music. We never get all our winter program worked out to suit us and when spring comes we wonder where all the time has gone so soon.—Mrs. O. C., New York.

Cunning Quilted Pillow



THIS cunning little quilted pillow is quickly and easily made and would make an ideal gift for any friend. It is about 14 by 22 inches in size when finished and may be obtained in col-

ors, green, maize, blue, lavender and coral. Stamped on fast color Venetian, the pillow (top and back) is 35 cents each. If you desire the wadding lining, the pillow is 70 cents each. The same pattern in same colors on silk rayon with wadding is \$1.40 each. Order from Embroidery Department, American Agriculturist, 461-4th Avenue, New York City.

in on the making or making over of our clothes. This is a long, tedious job, but I always have some time left to make a wool quilt. I seldom make a cotton quilt; wool is more satisfactory here in this climate where there is frost five or six months out of the year. I make these quilts out of any good second hand wool material that I happen to have. I also use cast-off wool or cotton material for braided or crocheted rugs and usually one can sell a nice rug to some friend, if she happens to get too many for her own home.

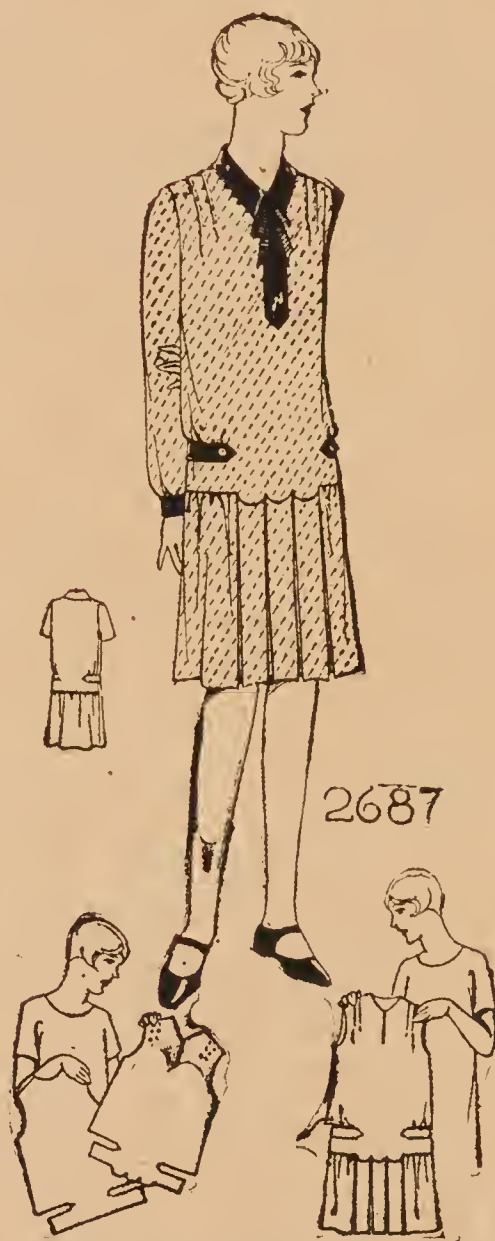
I always plan on some good reading for the winter time and I never let other things crowd out my reading. I figured out long ago that good reading was good for the blues and a great cure for ignorance.

It is a good plan to do a bit of embroidery or crochet work. It is all well and good to make our couch pillow covers and window drapes, but this work has to be done every so often, so it is a very good plan to do something that we want to do instead of doing what we are obliged to do all the time.

When a nice snow comes, so as to make good coasting, I am right there along with my children. I wish some of the overworked, tired-out mothers would try this nice winter sport. I love to help my children build Mr. and Mrs. Snow Man. You may say what will the neighbors say if they see me out doing this sort of "kid" stuff. Never mind what they say, and as for me, I know that a good neighbor who has our interest for good in his heart, will do no talking and it matters little what the other kind says.

Winter time is the only time I get a chance to teach my little girl how to sew. She will be five years old soon now and I am planning on teaching her part of the first grade school work this winter.

Smart Hipline



GIRLS' DRESS PATTERN 2687 has the newest fashion note in its snug hipline. The skirt with front box pleats and the scalloped finish of the bodice make a very attractive front. Wool challis, printed wool jersey, cashmere, wool crepe or velveteen would be admirably suited to such styling. The pattern cuts in sizes 6, 8, 10, 12 and 14 years. Size 8 requires 1½ yards of 36-inch material with ¾ yard of 32-inch contrasting. PRICE 13c.

sister and an artificial bouquet for my coat from a friend. I have heard some town folk say they should think farmers would die living out among the snow banks all winter. Well, some do die, but I guess not any more than city people die. Surely we will all die some day whether among the snow banks or in a city apartment. Our Heavenly Father seems to favor no one when it comes to the place we leave this world.

We have a little radio and I would advise anyone who possibly can, to

Paint for Bureau Drawers

IT is a great improvement over the old method of lining bureau drawers with paper, to paint or varnish them. They are more easily cleaned since dust and dirt cannot then penetrate the wood. They are better looking when open to view and an incentive to keep in order. Paint color, too, has been found to keep linen white. By coating the insides of drawers where linen is kept with blue paint or enamel, this is achieved. It has long been the habit of fastidious housewives to keep their best linen wrapped in blue paper, but this method, while effective, is often inconvenient. With the painted drawer it is possible to keep every day linen in as good condition as linen that is being treasured.

Slender Lines



PATTERN 2686 is a find for the woman who is looking for slenderizing lines. It offers opportunity to combine plain and small figured wools or heavy silks to get lines which conceal rather than exaggerate the large figure. It cuts in sizes 16, 18 years, 36, 38, 40, 42, 44, 46 and 48 inches bust. Size 36 requires 2½ yards of 40-inch material with 3¼ yards of 36-inch contrasting. PRICE 13c.

Aunt Janet's Counsel Corner

Winter Gives Best Opportunity to Get into Step Once More

NOW while Nature sleeps we humans have a wonderful chance to catch up with some of our personal affairs. As long as the rush of the planting and harvest is on, together with gardening, housecleaning, canning and all those seasonal activities, the family sewing has to be reduced to the minimum. Now is a good time to go over all the house linens, underclothing, work clothing for the men and house dresses for one's self. These garments do not change styles rapidly and can be made up months in advance. It saves time and motions if several garments of the same kind are done at once, several work shirts, more than one apron or several pairs of bloomers for the children, for instance.

Materials which are too worn for use, requiring too much mending—there is a point where mending ceases to be a virtue—can be torn into cloths of suitable size for household use or into strips for rugs. Anyhow, old things should not accumulate, but

lungfuls of invigorating fresh air, quick strides and sufficiently clad to prevent chilling, then winter becomes a wonderful season. If we sit inside all day and think how cold it is, cramp our lungs and get insufficient air, then winter is bleak and forbidding.

But with a definite idea in mind of getting the fundamentals of the family wardrobe ready, and the extra little personal things done which one likes, spring comes before we realize what a short, happy season winter can be.—Aunt Janet.

Home-Made Tea Cart

THE Connecticut Extension Service has a bulletin which describes in full the steps necessary to make a double-decker service wagon or tea cart. It is possible for a woman to make it herself—in fact, many have already done so in that state. If the handy man has the time, no doubt he will appreciate having the specifications for the job already laid out for use. This bulletin (No. 122, The Home Made Service Wagon) is free to residents of Connecticut and will be supplied to residents of other states upon request. Address Connecticut Agricultural College, Storrs, Conn.

Tested Recipes

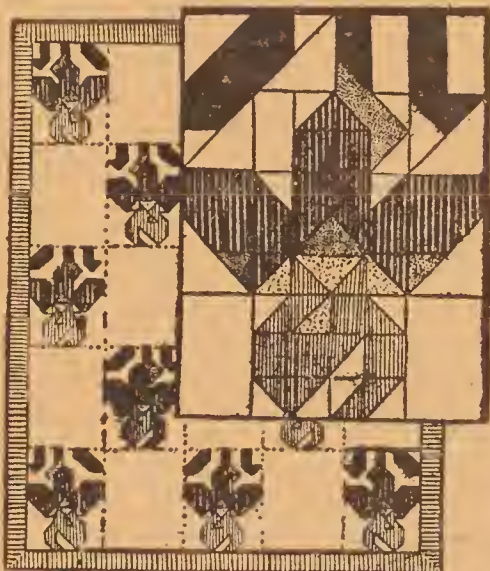
Veal Goulash: Fry a tablespoonful of minced onion until it is brown. Add one pound of lean veal cut in inch pieces and a seasoning of salt and pepper. Sprinkle liberally with flour and cook until the meat is brown. Put in a casserole, pour in one cupful stock and let cook one hour in oven or on back of stove where it will only simmer. Drop in one cupful raw potatoes cut fine, one tablespoonful minced green pepper and cook fifteen minutes. Increase oven heat to brown and serve hot.—L. M. T., New York.

To prevent soupiness follow instructions as to liberal sprinkling with flour.

* * *

"Different" Hamburg Steak: To vary the menu, use one-half pork sausage and one-half beef hamburger. Salt and

An Iris Quilt Is Unique



No. 556, 20 Cents

should be used until done for, and their remains decently disposed of.

I know one woman who allows one week each spring and fall for opening all the boxes and barrels of stuff stored in her attic, going over it all, airing it and storing it again. No wonder she and her family are old before their time and all are miserable for fear of upsetting some of the cleaning plans of the household. It seems a sinful waste of time that might be spent doing something constructive instead of on a job like that.

We all like order—for order is beauty—but life is precious and full of wonderful opportunities and an undue portion of it should not be spent on unnecessary cleaning. It's bad for nerves and for one's outlook on life. Get rid of the useless things and have more time for real living.

We must get outdoors some every day if we want to keep our health and good spirits. Heads up, breathing

ORDER includes cardboard cutting patterns each part and chart of materials and colors. This lovely iris makes up into a block about 14 by 16, so only 13 pieced blocks are used for the quilt. The blocks can be used to make a quilt or for the popular little boxed pillows. Price, 20 cents.

The quilt finishes 68x88 inches without border and requires 6½ yards assorted colors. We can supply: Peter Pan, enough for quilt.....\$3.90 Percale, fast color, assorted.....1.95

Address Embroidery Dept., American Agriculturist, 461 Fourth Ave., New York City.

pepper to taste. Use a little chili sauce. Mix well together and form in thin small cakes. Have the oven quite hot. Place the molded cakes in the roasting pan—uncovered—and place the pan on the top of the grate of the oven. Watch carefully. If the fire is of right temperature five minutes may be plenty to broil the steak most deliciously. Try it and see and if wanted

New Fashion Books



Our new spring fashion catalog shows the best of the season's styles in dresses for women and children. Besides this important feature, the beauty expert of the First National Pictures tells how he achieves results with their stars. This includes valuable beauty hints for you.

Miss Johanna Mathieson, the costume designer of the Universal Pictures, has an interesting article on the influence of the screen on American dress. She includes valuable suggestions about selecting the right lines suitable for individual figures.

Send 12 cents today for your copy of the Spring Fashion Book. Address the Pattern Department, American Agriculturist, 461-4th Avenue, New York City.

cook more. Let it be in a few more minutes but only a few.—Clarice Raymond, New York.

The quality of the pork sausage has much to do with the flavor of this dish. It is a good plan for people who do not easily tolerate the fat of pork sausage.

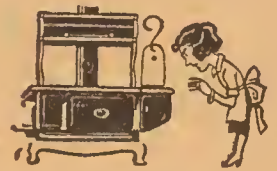
Removing Waterproof Wall Paper

"Would like advice as to how to remove the washable or varnished wall paper from plastered walls. Have our bathroom and kitchen papered with this and would like to remove it and repaper with ordinary paper. Have tried hot water with it but that does not seem to loosen it at all. Please advise me what to do."

THE way to remove this paper is to get some sheets of rough sandpaper, put it on a flat block, and rub the paper with it. This scratches through the varnished surface, so that hot water applied in the usual way will loosen the paper easily enough.

Ordinary wall paper is a very poor covering either for bathrooms or kitchens. It shows grease and dirt and moisture too easily and once soiled cannot be cleaned. Your present varnished paper is far better than ordinary paper. Probably the best thing would be to paint the walls two coats of flat paint of some good color that you will not tire of. This can be washed time and again with soft water and soapsuds from some mild soap, and every two or three years can be given a fresh coat to brighten it up.—I. W. D.

Mattress covers made of unbleached muslin are easy to remove and launder. They protect the mattress and save cleaning the whole thing.—M. F. M.,



"The hot water's gone!" Never mind—Fels-Naptha also washes beautifully in cool or lukewarm water! For Fels-Naptha is good golden soap, blended, by our exclusive process, with plenty of naptha. The naptha and soapy suds working together loosen even stubborn dirt and wash it away, giving you clean, sweet home-washed clothes without hard rubbing. Whether you've oceans of hot water or only enough to take the chill off, remember that...

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The Little Shepherd of Kingdom Come-By John Fox, Jr.

AND Chad? The news reached Major Buford's farm at noon, and Chad went to the woods and came in at dusk, haggard and spent. Miserably now he hold his tongue and tortured his brain. Purposely, he never opened his lips to Harry Dean. He tried to make known to the Major the struggle going on within him, but the iron-willed old man brushed away all argument with an impatient wave of his hand. With Margaret he talked once, and straightway the question was dropped like a living coal. So, Chad withdrew from his fellows. The social life of the town, gayer than ever now, knew him no more. He kept up his college work, but when he was not at his books, he walked the fields, and many a moonlit midnight found him striding along a white turnpike or sitting motionless on top of a fence along the border of some woodland, his chin in both hands, fighting his fight out in the cool stillness alone. He himself little knew the unmeant significance there was in the old Continental uniform he had worn to the dance. Even his old rifle, had he but known it, had been carried with Daniel Morgan from Virginia to Washington's aid in Cambridge. His earliest memories of war were rooted in thrilling stories of King's Mountain. He had heard old men tell of pointing deadly rifles at red-coats at New Orleans, and had absorbed their own love of Old Hickory. The school-master himself, when a mere lad, had been with Scott in Mexico. The spirit of the backwoodsman had been caught in the hills, and was alive and unchanged at that very hour. The boy was practically born in Revolutionary days, and that was why, like all mountaineers, Chad had little love of State and only love of country—was first, last and all time, simply American. It was not reason—it was instinct. The heroes the school-master had taught him to love and some day to emulate, had fought under one flag, and, like them, the mountaineers never dreamed there could be another. And so the boy was an unconscious reincarnation of that spirit, uninfluenced by temporary apostasies in the outside world, untouched absolutely by sectional prejudice or the appeal of the slave. The mountaineer had no hatred of the valley aristocrat because he knew nothing of him, and envied no man what he was, what he had, or the life he led. So, as for slavery, that question, singularly enough, never troubled his soul. To him slaves were hewers of wood and drawers of water. The Lord had made them so, and the Bible said that it was right. That the school-master had taught Chad. He had read "Uncle Tom's Cabin," and the story made him smile. The tragedies of it he had never known and he did not believe. Slaves were sleek, well-fed, well-housed, loved and trusted, rightly inferior and happy; and no aristocrat ever moved among them with a more lordly, righteous air of authority than did this mountain lad who had known them little more than half a dozen years. Unlike the North, the boy had no prejudice, no antagonism, no jealousy, no grievance to help him in his struggle. Unlike Harry, he had no slave sympathy to stir him to the depths, no stubborn, rebellious pride to prod him on. In the days when the school-master thundered at him some speech of the Prince of Kentuckians it was always the national thrill in the fiery utterance that had shaken him even then. So that unconsciously the boy was the embodiment of pure Americanism, and for that reason he and the people among whom he was born stood among the millions on either side, quite alone.

What was he fighting then—ah,

what? If the bed-rock of his character was not loyalty, it was nothing. In the mountains the Turners had taken him from the Wilderness. In the Bluegrass the old Major had taken him from the hills. His very life he owed to the simple, kindly mountaineers, and what he valued more than his life he owed to the simple gentleman who had picked him up from the roadside and, almost without question, had taken him to his heart and to his home. The Turners, he knew, would fight for their slaves as they would have fought Dillon or Devil had either proposed to take from them a cow, a hog, or a sheep. For that Chad could not blame them. And the Major was going to fight, as he believed, for his liberty, his State, his country, his property, his

place to the grim spectre of war—until with each hand Kentucky drew a sword and made ready to plunge both into her own stout heart. When Summer fell, she shook her head resolutely to both North and South. Crittenden, in the name of Union lovers and the dead Clay, pleaded with the State to take no part in the fratricidal crime. From the mothers, wives, sisters and daughters of thirty-one counties came piteously the same appeal. Neutrality, to be held inviolate, was the answer to the cry from both the North and South; but armed neutrality, said Kentucky. The State had not the moral right to secede; the Nation, no constitutional right to coerce: if both the North and the South left their paths of duty and fought—let both keep their

morning brightened at his window, he rose listlessly, dipped his hot head in a bowl of water and stole out to the barn. His little mare whinnied a welcome as he opened the barn door. He patted her on the neck.

"Good-by, little girl," he said. He started to call her by name and stopped. Margaret had named the beautiful creature "Dixie." The servants were waiting.

"Good-mawnin', Mars Chad," said each, and with each he shook hands, saying simply that he was going away that morning. Only old Tom asked him a question.

"Foh Gawd, Mars Chad," said the old fellow, "old Mars Buford can't git along widout you. You gwine to come back soon?"

"I don't know, Uncle Tom," said Chad, sadly.

"Whar you gwine, Mars Chad?"

"Into the army."

"De ahmy?" The old man smiled. "You gwine to fight de Yankees?"

"I'm going to fight with the Yankees."

The old driver looked as though he could not have heard aright.

"You foolin' this ole nigger, Mars Chad, ain't you?"

Chad shook his head, and the old man straightened himself a bit.

"T'se sorry to heah it, suh," he said, with dignity, and he turned to his work.

Miss Lucy was not feeling well that morning and did not come down to breakfast. The boy was so pale and haggard that the Major looked at him anxiously.

"What's the matter with you, Chad? Are you sick?"

"I didn't sleep very well last night, Major."

The Major chuckled. "I reckon you ain't gettin' enough sleep these days. I reckon I wouldn't either, if I were in your place."

Chad did not answer. After breakfast he sat with the Major on the porch in the fresh, sunny air. The major smoked his pipe, taking the stem out of his mouth now and then to shout some order as a servant passed under his eye.

"What's the news, Chad?"

"Mr. Crittenden is back."

"What did old Lincoln say?"

"That Camp Dick Robinson was formed for Kentuckians by Kentuckians, and he did not believe that it was the wish of the State that it should be removed."

"Well, by—! after his promise. What did Davis say?"

"That if Kentucky opened the Northern door for invasion, she must not close the Southern door to entrance for defence."

"And dead right he is," growled the Major with satisfaction.

"Governor Magoffin asked Ohio and Indiana to join in an effort for a peace Congress," Chad added.

"Well?"

"Both governors refused."

"I tell you, boy, the hour has come. The hour had come."

"I'm going away this morning, Major."

The Major did not even turn his head.

"I thought this was coming," he said quietly. Chad's face grew even paler, and he steeled his heart for the revelation.

"I've already spoken to Lieutenant Hunt," the Major went on. "He expects to be a captain, and he says that, maybe, he can make you a lieutenant. You can take that boy Brutus as a body servant." He brought his fist down on the railing of the porch. "God,

(Continued on Page 22)

The Story Thus Far

CHAD leaves "Lonesome" with his dog "Jack." His foster parents are both dead from the plague and plans have been laid to bind Chad out to a hard fisted neighbor. After the funeral, Chad collects a rifle, some powder, and shot and a haversack and with "Jack" by his side, starts out for unknown parts. He meets the sons of Joel Turner from over the mountain who take him home. Chad's cleverness at school gains the admiration of Caleb Hazel, the schoolmaster. They become close friends. Hazel tells Chad of the "Bluegrass Country" beyond the hills. Logging operations take Chad to a distant city where he gets lost and starts home on foot. He is picked up by Major Calvin Buford. It appears that Chad is also a Buford and is believed to be a kinsman of his new found friend, who takes him to his home in Lexington in the heart of the "Bluegrass." Chad accepts the Major's offer of a home and an education. Chad enters into the social life and becomes very popular at school. He falls in love with Margaret Dean, daughter of General Dean, neighbor of the Bufords. Meanwhile feeling grows bitter between North and South and war clouds gather. Chad attends a dance costumed as a Colonial general.

fireside. So in the eyes of both, Chad must be the snake who had warmed his frozen body on their hearthstones and bitten the kindly hands that had warmed him back to life. What would Melissa say? Mentally he shrank from the fire of her eyes and the scorn of her tongue when she should know. And Margaret—the thought of her brought always a voiceless groan. To her he had let his doubts be known, and her white silence closed his own lips then and there. The simple fact that he had doubts was an entering wedge of coldness between them that Chad saw must force them apart; for he knew that the truth must come soon, and what would be the bitter cost of that truth. She could never see him as she saw Harry. Harry was a beloved and erring brother. Hatred of slavery had been cunningly planted in his heart by her father's own brother, upon whose head the blame for Harry's sin was set. The boy had been taunted until his own father's scorn had stirred his proud independence into stubborn resistance and intensified his resolution to do what he pleased and what he thought was right. But Chad—she would never understand him. She would never understand his love for the Government that had once abandoned her people to savages and forced her State and his to seek aid from a foreign land. In her eyes, too, he would be rending the hearts that had been tenderest to him in all the world: and that was all. Of what fate she would deal out to him he dared not think. If he lifted his hand against the South, he must strike at the heart of all he loved best, to which he owed most. If against the Union, at the heart of all that was best in himself. In him the pure spirit that gave birth to the nation was fighting for life. Ah, God! what should he do—what should he do?

XX

OFF TO THE WAR

Throughout that summer Chad fought his fight, daily swaying this way and that—fought it in secret until the phantom of neutrality faded and gave

battles from her soil. Straightway State Guards went into camp and Home Guards were held in reserve, but there was not a fool in the Commonwealth who did not know that, in sympathy, the State Guards were already for the Confederacy and the Home Guards for the Union cause. This was in May.

In June, Federals were enlisting across the Ohio; Confederates, just over the border of Dixie which begins in Tennessee. Within a month Stonewall Jackson sat on his horse, after Bull Run, watching the routed Yankees, praying for fresh men that he might go on and take the Capitol, and, from the Federal dream of a sixty-days' riot, the North woke with a gasp. A week or two later, Camp Dick Robinson squatted down on the edge of the Bluegrass, the first violation of the State's neutrality, and beckoned with both hands for Yankee recruits. Soon an order went round to disarm the State Guards, and on that very day the State Guards made ready for Dixie. On that day the crisis came at the Dean's, and on that day Chad Buford made up his mind. When the Major and Miss Lucy went to bed that night, he slipped out of the house and walked through the yard and across the pike, following the little creek half unconsciously toward the Deans', until he could see the light in Margaret's window, and there he climbed the worm fence and sat leaning his head against one of the forked stakes with his hat in his lap. He would probably not see her again. He would send her word next morning to ask that he might, and he feared what the result of that word would be. Several times his longing eyes saw her shadow pass the curtain, and when her light was out, he closed his eyes and sat motionless—how long he hardly knew; but, when he sprang down, he was stiffened from the midnight chill and his unchanged posture. He went back to his room then, and wrote Margaret a letter and tore it up and went to bed. There was little sleep for him that night, and when the glimmer of



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MAMMOTH WHITE HOLLANDS priced to clear them out quick. D. E. GRAY, Geneseo, N. Y.

BRONZE TOMS, 18-24 lbs. Hens 13-15 lbs. GRACE LEAVITT, South Royalton, Vt.

FOR SALE—Purebred mammoth Giant Bronze toms 15, 25 lbs. Hens 10, 16 lbs. May and June hatched yearlings. MRS. D. J. WASHBURN, Adams, N. Y.

TURKEYS—DUCKS—GEESE

TWO MAMMOTH PEKIN DUCKS, one drake \$11. Five ducks, one drake \$20. Two black giant yearling hens, one cockerel \$12. RUPRACHT BROS., Pulaski, N. Y.

MAMMOTH BRONZE TURKEYS Gold Bank strain, hens \$8. Toms \$12 and \$15. Coops \$1.00 extra if not returned. MRS. A. M. ANSTED, Rodman, N. Y.

MAMMOTH TOULOUSE, Embden, African and Chinese geese, Giant Pekin, Aylesbury, Rouen, Muscovy, Buff Orpington and Indian Runner Ducks. Baby Chicks of leading breeds. Catalog free. CHARLES McCLAVE, Box A, New London, Ohio.

PUREBRED MAMMOTH BRONZE turkey hens, cheap. White Pekin Ducks \$2. MISS MABEL WESCOTT, Lyons, N. Y.

PUREBRED MAMMOTH BRONZE turkeys. Healthy reliable stock, exceptional plumage. Bred from leading prize winners. MRS. SPENCER LANE, Lowville, N. Y.

PUREBRED MAMMOTH BRONZE toms, large, thrifty birds, disease free, money back guarantee. Write. ROBERT LEE, Lowville, N. Y. Route 1.

TURKEYS—LARGE, PUREBRED, Mammoth Bronze. Dark colored. Very beautifully marked. Best strain. Yearlings and young stock. MRS. ARTHUR INGER-SOLL, Lowville, N. Y.

OWING TO ILLNESS in family, must reduce Bourbon Red turkey breeders. Choice toms, sons of First prize Madison Square Garden tom. \$10, \$15, unrelated hens \$8, \$10. MRS. C. J. DOXTATER, Evans Mills, N. Y.

FARMS FOR SALE

LEVEL PRODUCTIVE FARM of fifty six acres, to settle estate, located 11 miles from Syracuse on State road. Electricity available. FRED YOUNG, Pennellville, N. Y.

FARM, 135 acres, 3 houses, good water, 65 miles from New York; good markets; 8c quart for milk; one of the best dairy farms. T. F. HOWELL, Washingtonville, N. Y.

DEL-MAR-VA—THE PENINSULA OF PLENTY. Three to ten hours by motor truck to markets supplying twenty millions of people. Pennsylvania Railroad permeates entire Peninsula. Low-priced farms, town and waterfront homes. Very little snow and freezing. Finest concrete highways. Good schools, low taxes. Hand-some descriptive booklet, FREE. Address 164 Del-Mar-Va Building, Salisbury, Md.

AGENTS WANTED

EVERY HOME A PROSPECT: make big money, employ crew; sell dependable trees, shrubbery; all or part time; landscape service; experience not essential; full cooperation; com. paid weekly; we deliver, collect. Write WILLEMS, SONS' NURSERIES, Desk A, Rochester, N. Y.

RELIABLE MEN WANTED to sell guaranteed trees, shrubs and roses. Steady work. Pay weekly. Start now for Spring business. Wholesale and retail. WEBB NURSERY CO., Rochester, N. Y.

MAKE \$50 to \$75 weekly this winter taking orders for our quality Nursery Stock. Fruits from our trees have won first prize at the Syracuse State Fair for years. Free replacement. No investment. No experience necessary. Free outfit. Pay weekly. KNIGHT & BOSTWICK, Newark, New York State.

AGENTS WANTED

MEN TO SELL our high grade garden and field seed direct to planters. A good position with big income. Experience unnecessary. COBB CO., Franklin, Mass.

WANTED: C. W. Stuart & Co., Newark, New York State (Nurserymen for 75 years) need live wire salesmen. Part or full time. An excellent opportunity. Write for particulars.

LUMBER—BUILDING SUPPLIES

ROOFING PAPER, 3-ply, \$1.35 per roll, 100 sq-ft. Prepaid. Asphalt shingles, roofing, paint. Send for price list. WINKER BROS., Millis, Mass.

SEEDS—NURSERY STOCK

PEACH AND APPLE TREES \$5; \$7.50 per 100 and up. Complete assortment fruits, berries, vines, ornamental trees, vines, shrubs, evergreens. Catalog in colors free. TENNESSEE NURSERY COMPANY, Box 102, Cleveland, Tenn.

PEACH AND APPLE TREES \$5 per 100 and up. Fruits, ornamental trees, vines. TENNESSEE NURSERY CO., Box 202, Cleveland, Tenn.

PEDIGREEED SEED POTATOES, Cobblers, Mountains, Russets, Peachblow. Write for catalogue. ROY HASTINGS, Malone, N. Y.

HIGH GRADE SEED Potatoes—Russets. Green Mountain, Gold Coin, Cobbler, Banner, Walter Raleighs and Carman No. 3. Prices right. Catalog free. THE KEYSTONE POTATO FARMS, Richfield, Pa.

GLADIOLUS BULBS—36-page illustrated Catalog free. 175 varieties. Thirty All Different \$1. postpaid. HOWARD GILLET, Box J, New Lebanon, N. Y.

CLOVER, \$18 PER BUSHEL, IOWA GROWN, double reseeded. Guaranteed to comply state seed law; sweet clover, scarified \$3.00, unhulled \$1.00; new timothy, \$2.40; hardy northwestern alfalfa, \$10.80; state certified Grimm at lowest prices; all guaranteed and sacked. Other farm seeds at lot prices. Write for samples and circular matter. FRANK SINN, Box 480, Clarinda, Iowa.

MISCELLANEOUS

USED CIVIL WAR ENVELOPES with flags, designs, etc., \$1 to \$15 paid. Other stamps on envelopes before 1871 bought. W. RICHMOND, Cold Spring, N. Y.

BARRELS of slightly damaged crockery, hotel china-ware, cookingware, glassware, pottery. Write SWASEY COMPANY, Portland, Maine.

WANTED—HAY, GRAIN, Potatoes, Apples, Cabbage, Carloads. Pay highest market prices. THE HAMILTON CO., New Castle, Pa.

PURE HONEY. Satisfaction guaranteed. 5 lbs. clover, \$1.00; 10 lbs. \$1.90; buckwheat \$1.65. C. N. BALLARD, Valois, N. Y.

CLOVER HONEY—5 lbs. \$1.15; 10-lbs. \$2.00 post paid. 1 60-lb. can \$7.20 here. J. C. ABBOTT, Northampton, Mass.

PEANUTS—Buy direct from growers. Roast them yourself. 10 lbs. \$1.75; 25 lbs. \$3.50; 100 lbs. \$12.00; 500 lbs. \$50.00; 2000 lbs. \$175.00. Now booking orders for "FROSTPROOF" Cabbage Plants. J. P. COUNTELL COMPANY, Franklin, Va.

5000 LBS. BUCKWHEAT—goldenrod honey sold for the best offer. H. S. OSTRANDER, Mellenville, N. Y.

HONEY: 60 lbs. best clover \$6.60. Buckwheat \$5.10. Not prepaid. Satisfaction guaranteed. F. W. LESSER, Fayetteville, N. Y.

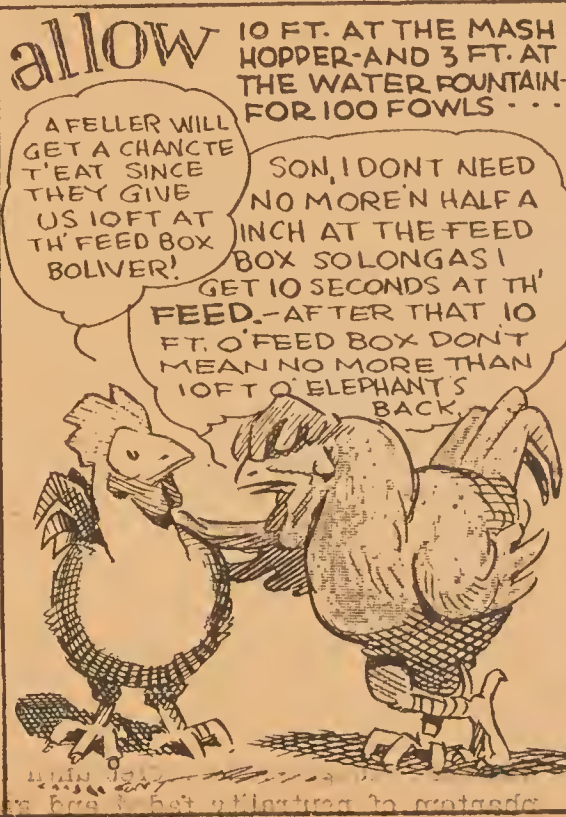
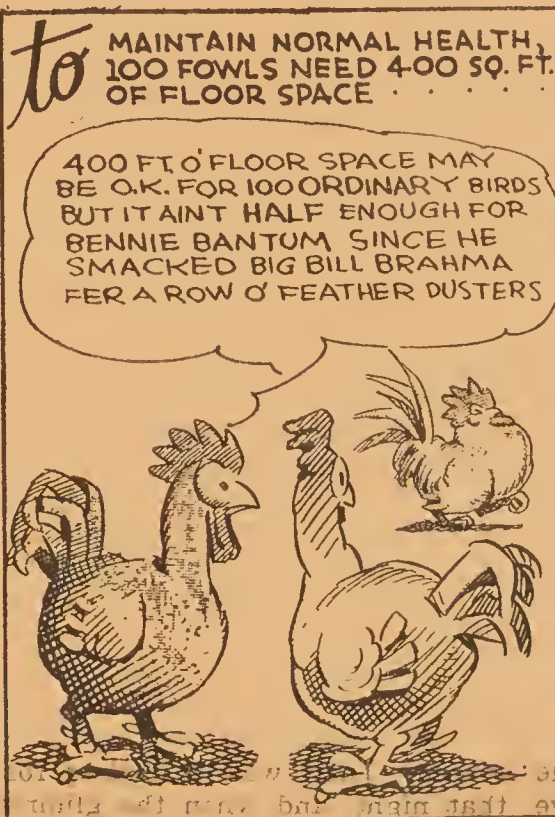
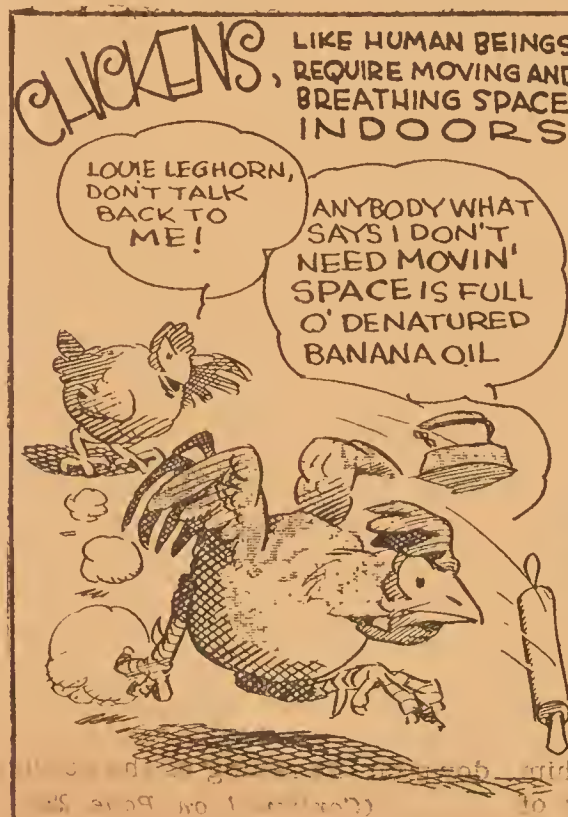
WANTED TO BUY old bags. We pay excellent prices. Write for prices. We pay freight. OWASCO BAG CO., Rochester, N. Y.

Additional Classified Advertising **On Next Page**

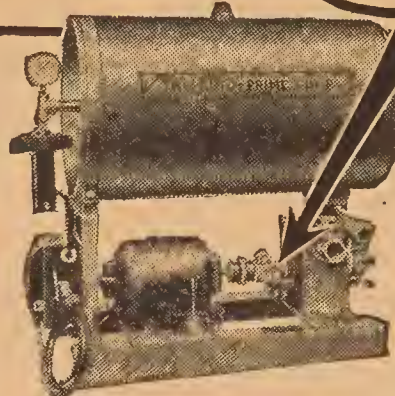
HANDY ANDY Says "Here's How"

To Make the Hens Happy

By Ray Inman

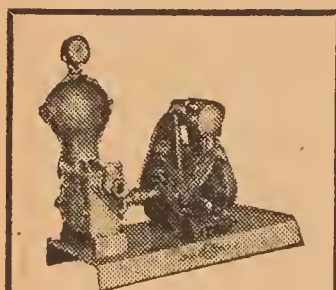


Develop Surprising Pump With Only One Moving Part



At Last A Marvelous Pump Has Been Developed In Which Every Moving Part But One is Eliminated. Auto-Prime Now Enables You To Have Fresh Running Water At Less Than City Cost. Has Already Saved Hundreds of Farmers Thousands of Dollars.

Auto-Prime is Entirely Different



Model GD

Here is the ideal gasoline pump—for use where there is no power available. Has the same improved chamber and impeller system as Model D. Coupon brings full details about this and other types. Mail it now!

YOU'VE never seen anything like the new Auto-Prime pump! It's different—far ahead of any other. Amazingly simple in construction. Automatic. Self priming. Has more suction lift. 25% greater capacity. Yet this astonishing pump has only one moving part. Nothing to wear out.

Think of it—for a few cents a day you can now have fresh water at all times—for every need. Simply install Auto-Prime... then forget it. You'll be amazed at its sheer simplicity—its unmatched efficiency.

Send For Free Book

Take advantage of this wonderful invention and banish water pail drudgery for all time. Our new illustrated book describes the many uses and advantages of an Auto-Prime Water Supply System. Send for it today—it is free, without obligation.

Mail The Coupon NOW!

AUTO-PRIME PUMP COMPANY

Dept. A-130, 850 E. 72nd Street,
Cleveland, Ohio

Auto-Prime Pump Co.,
Dept. A-130, 850 E. 72nd St.,
Cleveland, Ohio.

Please send me without obligation a free copy of your new illustrated book. Also full information about Auto-Prime Pumps.

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Address.....
City.....State.....

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AMERICAN AGRICULTURIST
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Read "HUNTING & FISHING"

A 52-page monthly magazine crammed full of hunting, fishing, camping, trapping stories, pictures, valuable information about guns, rifles, fishing tackle, game law changes, best places to get fish and game, etc. Biggest value ever offered in a sporting magazine. Special Offer—We will send you Hunting & Fishing Magazine for a whole year, 12 big issues and this Remington Sportsman's Knife. The Name is your guarantee of quality. "Remington" on the blade.



Both for \$1
Clip this adv. and enclose \$1 bill. Mail your order today to
Hunting & Fishing Magazine 294 Transit Bldg. Boston, Mass.

Additional Classified Advertising

TOBACCO

LEAF TOBACCO. Good, sweet chewing, 5 lbs. 90c; 5 lbs. \$1.25; 10 lbs. \$2.00. Smoking, 3 lbs. 60c; 5, 90c; 10, \$1.50. UNITED FARMERS, Mayfield, Ky.

HOMESPUN TOBACCO: Chewing 5 lbs. \$1.50. Smoking 5 lbs. \$1.25. Box 50 Cigars \$1.75. Pay when received. Pipe free. FARMERS UNION, A6, Paducah, Ky.

HOMESPUN TOBACCO: Chewing 5 lbs. \$1.50; ten \$2.50; Smoking 10 lbs. \$2.00; pay when received. FARMERS ASSOCIATION, West Paducah, Ky.

WOMEN'S WANTS

SWITCHES—Combing made up. Booklet. Flannellette house dresses \$1.50. EVA MACK, Box 298, Ithaca, New York.

WOOL—HIDES—FURS

WANTED EASTERN STATES Muskrats \$1.40 to \$1.60 average free of poor. Ship immediately. O. FERRIS & CO., Dept. A.A., Chatham, N. Y.

FURS—HIDES will bring the best prices when shipped here. Write for prices, market information, tags. No lot too small or large. S. H. LIVINGSTON, Succ. to Keystone Hide Company, Lancaster, Pa.

AVIATION

AVIATION—Salary while learning, \$18 to \$35 per week, while under instruction in our factory and at our airport. Call or write for information without obligation. WEEKS AIRCRAFT CORPORATION Department S, Plankinton Building, Milwaukee, Wisconsin.

MISCELLANEOUS

VANILLA FLAVOR, \$1 per quart. Direct from manufacturer. Sent C.O.D. Parcel Post prepaid to any address. A. E. SNELL, 34 Scott St., Utica, N. Y.

DELCO LIGHTING SYSTEM. 1250 Watts 160 Amp hour battery charged ready to run. Fine condition. First check received for \$125 gets a bargain. L. E. WINN, West Concord, Mass.

"PHOENIX" LIMESTONE is best made from high grade materials; it's fine and dry, apply on pastures in winter. It pays to use it daily as an absorbent in stables. Lime helps to produce feed that Cows need. Shipment made from Danbury, Conn. Buy a car load with your neighbors. Co-operation pays. Free folder and price list. (A). JAMES A. CASE, Colchester, Conn.

PRINTING—STATIONERY

EVERYTHING PRINTED! FRANKLINPRESS, Milford, New Hampshire.

250 BUSINESS ENVELOPES printed postpaid \$1. Samples free. 50 calling cards 10c. Samples free. WALTER G. COLLINS, Cohocton, N. Y.

NAME CARDS, BUSINESS cards, Letter Heads, Envelopes, Bill leads, etc., or anything to your copy up to 5x7 in. 200 for \$1.50, 500 for \$3.00, 1000 for \$4.00. Sent C.O.D. Church Collection Envelopes 7c up per carton. DUFOLD-TRIFOLD CO., Trenton, N. J.

WANTED TO BUY

WANTED USED BURLAP bags or cotton bags any quantity all year round. HOFFMAN BROS. BAG CO., 39 Gorham St., Rochester, N. Y.

The Little Shepherd of Kingdom Come

(Continued from Page 20)

but I'd give the rest of my life to be ten years younger than I am now."

"Major, I'm going into the Union army."

The Major's pipe almost dropped from between his lips. Catching the arms of his chair with both hands, he turned heavily and with dazed wonder, as though the boy had struck him with his first from behind, and, without a word, stared hard into Chad's tortured face. The keen old eye had not long to look before it saw the truth, and then, silently, the old man turned back. His hands trembled on the chair, and he slowly thrust them into his pockets, breathing hard through his nose. The boy expected an outbreak, but none came. A bee buzzed above them. A yellow butterfly zigzagged by. Blackbirds chattered in the firs. The screech of a peacock shrilled across the yard, and a ploughman's singing wailed across the fields:

Trouble, O Lawd!

Nothin' but trouble in de lan' of Canaan.

The boy knew he had given his old friend a mortal hurt.

"Don't, Major," he pleaded. "You don't know how I have fought against this. I tried to be on your side. I thought I was. I joined the Rifles. I found first that I couldn't fight with the South, and—then—I—found that I had to fight for the North. It almost kills me when I think of all you have done—"

The Major waved his hand imperiously. He was not the man to hear his favors recounted, much less refer to them himself. He straightened and got up from his chair. His manner had grown formal, stately coldly courteous.

"I cannot understand, but you are old enough, sir, to know your own mind. You should have prepared me for this. You will excuse me a moment." Chad rose and the Major walked toward the door, his step not very steady, and his shoulders a bit shrunken—his back, somehow, looked suddenly old.

"Brutus!" he called sharply to a black boy who was training rosebushes in the yard. "Saddle Mr. Chad's horse." Then, without looking again at Chad, he turned into his office, and Chad, standing where he was, with a breaking heart, could hear, through the open window, the rustling of papers and the scratching of a pen.

In a few minutes he heard the Major rise and he turned to meet him. The old man held a roll of bills in one hand and a paper in the other.

"Here is the balance due you on our last trade," he said, quietly. "The mare is yours—Dixie," he added, grimly. "The old mare is in foal. I will keep her and send you your due when the time comes. We are quite even," he went on in a level tone of business.

"Indeed, what you have done about the place more than exceeds any expense that you have ever caused me. If anything, I am still in your debt."

"I can't take it," said Chad, choking back a sob.

"You will have to take it," the Major broke in, curtly, "unless—" the Major held back the bitter speech that was on his lips and Chad understood. The old man did not want to feel under any obligations to him.

"I would offer you Brutus, as was my intention, except that I know you would not take him—" again he added, grimly, "and Brutus would run away from you."

"No, Major," said Chad, sadly, "I would not take Brutus," and he stepped down one step of the porch backward.

"I tried to tell you, Major, but you

wouldn't listen. I don't wonder, for I couldn't explain to you what I couldn't understand myself. I—" the boy choked and tears filled his eyes. He was afraid to hold out his hand.

"Good-by, Major," he said, brokenly.

"Good-by, sir," answered the Major, with a stiff bow, but the old man's lip shook and he turned abruptly within.

Chad did not trust himself to look back, but, as he rode through the pasture to the pike gate, his ears heard, never to forget, the chatter of the blackbirds, the noises around the barn, the cry of the peacock, and the wailing of the ploughman:

Trouble, O Lawd!

Nothin' but trouble—

At the gate the little mare turned her head toward town and started away in the easy swinging lope for which she was famous. From a cornfield Jerome Conners, the overseer, watched horse and rider for a while, and then his lips were lifted over his protruding teeth in one of his ghastly, infrequent smiles. Chad Buford was out of his way at last. At the Deans' gate, Snowball was just going in on Margaret's pony and Chad pulled up.

"Where's Mr. Dan, Snowball?—and Mr. Harry?"

"Mars Dan he gwine to de wah—an' I'se gwine wid him."

"Is Mr. Harry going, too?" Snowball hesitated. He did not like to gossip about family matters, but it was a friend of the family who was questioning him.

"Yessuh! But Mammy say Mars Harry's teched in de haid. He gwine to fight wid de po' white trash."

"Is Miss Margaret at home?"

"Yessuh."

Chad had his note to Margaret, unsealed. He little felt like seeing her now, but he had just as well have it all over at once. He took it out and looked it over once more—irresolute.

"I'm going away to join the Union army, Margaret. May I come to tell you good-by? If not, God bless you always."

"Take this to Miss Margaret, Snowball, and bring me an answer here as soon as you can."

"Yessuh."

The black boy was not gone long. Chad saw him go up the steps, and in a few moments he reappeared and galloped back.

"Ole Mistis say dey ain't no answer."

"Thank you, Snowball." Chad pitched him a coin and loped on toward Lexington with his head bent, his hands folded on the pommel, and the reins flapping loosely. Within one mile of Lexington he turned into a cross-road and set his face toward the mountains.

(To be Continued Next Week)

Pictures Worth Seeing

j—STEAMBOAT BILL, JR.—United Artists—7 rls.—Buster Keaton—Buster Keaton is hilariously funny as the undersized son of a Mississippi steamer captain who gets all mixed up with a hurricane which wrecks his father's rival steamer. (Story by Carl Harbaugh).

j—THE LITTLE SHEPHERD OF KINGDOM COME—First National—8 rls.—Richard Barthelmess—A tale of the Cumberland mountains in the time of the Civil War. An ambitious youth who looks beyond the encircling hills finds a new life but he is true to his mountain sweetheart. Acting excellent. (Novel by John Fox, Jr.)

j—THE BIG KILLING—Paramount—6 rls.—Wallace Beery, Raymond Hatton—Good comedy of mountain people. A life long feud between two families in finally bridged by a marriage. Clever sub-titles. (Story by Grover Jones).

To benefit by our guarantee of ads, say

"I saw your ad in American Agriculturist"



The Service Bureau

A Department Devoted to the Interests, Welfare and Protection of A. A. Readers

Do Not Fall for "Credit Checks"

"I recently received a letter from the L. L. Lindsay Oil Interests, Mineral Wells, Texas. The letter was headed, '\$8.00 check may mean a fortune'. The letter included a check made out to me for \$8.00 and on the back of the check it said that it would be valuable at face value when accompanied by \$2.00 in cash or check for subscription of twenty-five units of L. L. Lindsay Oil Interests."

IN the first place, we recommend that our subscribers have nothing to do with any firm which issues these credit checks. We believe that it is purely and simply a bait and that in general it is a sign of a proposition which it is well to stay away from. Anyone investing money in stocks of any company, whether it be oil wells or any other concern, takes his chances on the profits. The promoters MAY be entirely honest, yet the investment may be lost due to either poor management or to lack of oil on the property. Consult your banker before you invest.

Pays \$30 for Poultry Marker and Detective Service

"Recently we paid \$30 to the Dudley Detective Agency. They were to furnish a tattooing instrument and ink enough for five hundred hens and this mark was to be registered on their records and furnished to the poultry dealers."

"I heard reports that their agents have accepted \$15 where they were unable to get \$30. I also understood that I was getting some protection against poultry thieves in the form of detective service."

WE find on investigation that the Dudley Detective Service has an office in Reading, Pa., consisting, we are informed, of one room, which is run by Mr. Dudley with one assistant. So far as we know, they have a perfect right to canvass in rural districts of Pennsylvania and to sell the poultry marker to anyone who wishes to buy it.

So far as the poultry marker itself is concerned, a similar marker can be bought for less than \$30. As regards the detective service, it is probable that the State Troopers will give equal or better service at no direct cost to our subscribers.

Free Lot Scheme Unlawful in New York

THE back-bone of the "free-lot" practice has been broken. Publicity against it has destroyed its effectiveness and enforcement officers have become aware of its destructive character. On August 7, 1928, the Attorney General of New York State advised the Department of State that "free lot" vendors conduct their business in violation of Section 421 of the penal law; this being the statute against deceptive advertising. The Department has ordered at least six companies to quit using the scheme.

During the past three months, the Department of State has held six hearings on complaints forwarded to it by the Bureau. Restitutions were made and constructive action was taken in every case. One large company, about which the Bureau's Real Estate Section has received many complaints, appeared at a hearing, made restitution to five persons and announced that it would no longer continue actively in the business.—BETTER BUSINESS BUREAU.

Post Office Closes Home Work Schemes

THE Post Office Department has issued fraud orders against a large number of so-called home work schemes recently. Such schemers advertised for home workers holding out the lure that they would furnish easy profitable work in the home. This work was supposed to consist of sewing dresses or aprons, addressing envelopes,

gilding cards, etc., but such business could not be conducted profitably if the advertisers were to pay the home workers the prices quoted for work done. The advertisers' purpose was not to supply work, but to obtain advance deposits on various pretexts from those who need or desire employment. This deposit once acquired, the advertisers lost interest in the home-worker.—BETTER BUSINESS BUREAU.

For Those Interested in Fur Farming

THERE is much interest at the present time in fur farming. The U. S. Department of Agriculture has recently issued a bulletin, Leaflet No. 27-L, entitled "Recommendations to Beginners in Fur Farming". The Department states that fur farming is not a "get-rich-quick" business and any one

who contemplates starting in it should first familiarize themselves thoroughly with the principles involved.

A Subscriber Says "Thanks"

"On September 13, I sent the Co. a check for \$17 in payment for a tractor hitch. They acknowledged the order and said it would be shipped at once from their factory. I waited about two weeks and wrote them again. To date the goods have not arrived, neither have I received my \$17 back. I should appreciate your help."

WE immediately took this case up with this concern and within a very short time were gratified to receive the following letter of thanks from our subscriber:

"After placing the matter in your hands I received a letter from them dated November 12, asking if the hitch had been received, etc. I replied that it had not and informed them that I had placed the matter in your hands, although I know they were aware of that or they would never have written me again. On November 16, the express agent notified me that the tractor hitch had arrived. I refused it and within a few days received a refund check. I wish to thank you for securing the prompt payment of this claim as I am sure I would never have received the goods or money if I had not placed it in your hands."

Money Paid to A. A. Subscribers During Dec., 1928

Insurance Indemnities

Paid to December 1st.....\$116,113.31
Paid during December.....3,657.84

\$119,771.15

Frank S. Ingalsbe, Basom, N. Y.....\$ 130.00	Ada M. Moore Est., McGraw, N. Y.....1,000.00
Auto overturned—fractures	Train struck auto—mortuary
Ward A. Burghart, Hastings, N. Y.....30.00	Homer G. Beecher, Brooklyn, N. Y.....30.00
Struck by auto—crushed collarbone	Auto collision—fractured nose, cut face
Madeline King, Monticello, N. Y.....80.00	Delia Deyear, Sodus, N. Y.....100.00
Auto turned over—finger cut	Thrown from load of grain—fractured ankle
Dawson E. Harris, Port Byron, N. Y.....30.00	Willie B. Burdette, Gaithersburg, Md.....20.00
Auto overturned—foot cut	Struck by auto—brain concussion
Andrew Hall, Gouverneur, N. Y.....80.00	Marion McDonald, Canton, N. Y.....10.00
Thrown from wagon—fractured head	Auto collision—fractured ribs
Verne E. DeLong, W. Chazy, N. Y.....30.00	Harold Edsall, Falconer, N. Y.....20.00
Thrown from wagon—fractured rib	Auto collision—cut head and leg
Louise M. Joehinsin, Port Murray, N. J.....60.00	Edward Snide, Moores Forks, N. Y.....34.28
Auto accident—fractures	Auto accident—head cut
Clarence Kinney, E. Greenbush, N. Y.....30.00	Ellas Fink, Fallston, Md.....14.28
Auto struck wagon—brain concussion, cuts	Auto overturned—fractured hand, arm, face
Duane Gilmore, New Berlin, N. Y.....20.00	Ernest W. English, Poughkeepsie, N. Y.....30.00
Auto hit telephone pole—contusions, fractures	Struck by auto—fractured leg
Dallas Johnson, Bridgeton, N. J.....40.00	Mrs. Edna Evans, Holland Patent, N. Y.....55.71
Car hit bridge—cut scalp	Auto accident—fractured collarbone
Asa M. Seeley, Port Jervis, N. Y.....30.00	Wm. Metzger, Strykersville, N. Y.....100.00
Struck by auto—fractured skull	Auto accident—compound fracture
Emma A. Brown, Hillsdale, N. Y.....130.00	Geo. D. Walt, Owego, N. Y.....30.00
Auto accident—broken arm	Struck by auto—injury to hip
J. Milton Welder, Malden, Mass.....20.00	Robert A. Wilson, Knowlesville, N. Y.....40.00
Auto collision—fractured knee, cuts	Thrown from wagon—injury to chest
Josephine McLaughlin, Flanders, N. J.....35.71	Floyd R. Harris Est., Meshoppen, Pa.....1,000.00
Auto collision—fractured rib	Auto accident—mortuary
Elizabeth McLaughlin, Flanders, N. J.....10.00	Emmet Eckert, New Kingston, N. Y.....40.00
Auto collision—contusions	Thrown from wagon—broken leg
Anna McLaughlin, Flanders, N. J.....10.00	Rose Pescitelle, West Haven, Conn.....50.00
Auto collision—contusions	Thrown from wagon—contusions
Leon Begham, Rochester, N. Y.....80.00	Ralph Simons, Smyrna, N. Y.....90.00
Auto collision—cut face and mouth	Train struck auto—bruised ankle and ribs
Anna M. Menges, Livingston Manor, N. Y.....5.00	John Joiner, Dryden, N. Y.....30.00
Struck by auto—contused elbow, bruises	Auto accident—bruises and contusions
J. Arnold, Guiderland, N. Y.....42.85	Stella Joiner, Dryden, N. Y.....40.00
Auto collision—fractured ribs	Auto accident—fractured leg
August Mittelstedt, Troy, N. Y., R.3.....30.00	
Thrown from load of hay—contusions	
	\$3,657.84

Service Bureau Claims Settled

Mrs. E. Ellis, Lodi, N. Y.....\$ 33.70	Mr. I. Walawender, Utica, N. Y.....7.00
(Returns on furs sold)	(Adjustment for live stock)
James Staekhouse, Delaware, N. J.....8.00	Earl C. Rumsey, Fulton, N. Y.....5.92
(Refund on unsatisfactory goods)	(Returns on beans sold)
A. B. Morris, Savona, N. Y.....200.00	Mr. C. D. Hay, West Chazy, N. Y.....16.17
(Settlement from railroad company)	(Balance due on produce)
M. J. Cohen, Kerhonkson, N. Y.....10.79	Mrs. Rosella Haight, Waterloo, N. Y.....28.81
(Express claim settled)	(Refund from express company)
Glenn Logue, Candor, N. Y.....55.00	H. M. Goudry, Himrod, N. Y.....5.00
(Refund on separator)	(Refund on unsatisfactory merchandise)
Gilbert Miner, Walton, N. Y.....3.28	Edgar C. Rogers, Stillwater, N. Y.....10.00
(Adjustment from commission merchant)	(Deposit refunded)
Fred M. Giar, Orchard Park, N. Y.....22.00	Charles Spencer, Maryland, N. Y.....8.82
(Returns for produce sold)	(Protected check made good)
L. Richards, West Falls, N. Y.....23.45	Mrs. G. H. Craven, Guilford, N. Y.....9.50
(Refund on unsatisfactory merchandise)	(Refund on returned goods)
Mrs. John Roberts, Stillwater, Pa.....10.15	Cole W. Griggs, Newburgh, N. Y.....29.00
(Settlement from mail order house)	(Refund on pet stock)
Donald LaQuay, Silver Creek, N. Y.....79.00	Jesse Hathaway, Rock Stream, N. Y.....32.50
(Refund on separator)	(Refund on pet stock)
Mrs. Jessie E. Bishop, Seneca Falls, N. Y.....10.00	
(Adjustment on merchandise order)	
Mrs. A. A. Crandall, Norwich, N. Y.....17.19	
(Refund on rug)	
	Total.....\$605.21

General Claims Adjusted Where No Money is Involved

Mrs. S. Betts, Cranbury, N. J.	Orval Ribble, Penn Yan, N. Y.
(Order of plants delivered)	(Merchandise order filled)
Mrs. I. J. Taft, Fulton, N. Y.	Mrs. Charles Bartholomew, Cuyler, N. Y.
(Merchandise order filled)	(Premium received for selling goods)
Mrs. E. J. Gordon, Jamestown, N. Y.	Charles Bechtel, Treadwell, N. Y.
(Merchandise order filled)	(Adjustment on Liberty Bonds)

Chicken Thief Rewards Paid During December

(The A. A. Chicken Thief Rewards Were Discontinued Jan. 1, 1929)

Mr. A. G. Maxwell, Canastota, N. Y.....\$25.00	
James W. Neally, Addison, N. Y.....\$25.00	
	\$50.00

Total Paid to Subscribers \$4,313.05



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—and equip it right

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a new 1929 model Walsh No-Buckle harness on 30 days' trial. Use it. Prove to yourself that it is stronger, easier to handle. Outwears buckle harness because it has no buckles to tear straps, no rings to wear them, no buckle holes to weaken them. Eleven years' success—thousands in use.

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Hence costs less. Walsh special steel-tested leather—all particulars of eleven styles explained in big, 1929 catalog. Send me Your Name. My 1929 catalog on request. My appreciation of nation-wide patronage finds expression in the beautiful calendar sent free upon request together with catalog to all harness users. Write today.

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1929 Seed Catalogue and 25 Cent Rebate Slip-- only 10 Cents



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Spencer
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Henderson's
Invincible
Asters



Poppies
Brilliant Mixture

MAIL the coupon with only 10 cents, and we will mail you "Everything for the Garden," Henderson's new seed catalogue, together with the new Henderson 25 cent rebate slip, which will also entitle you, without charge, to the Henderson specialty offer of 6 packets of our tested seeds with your order.

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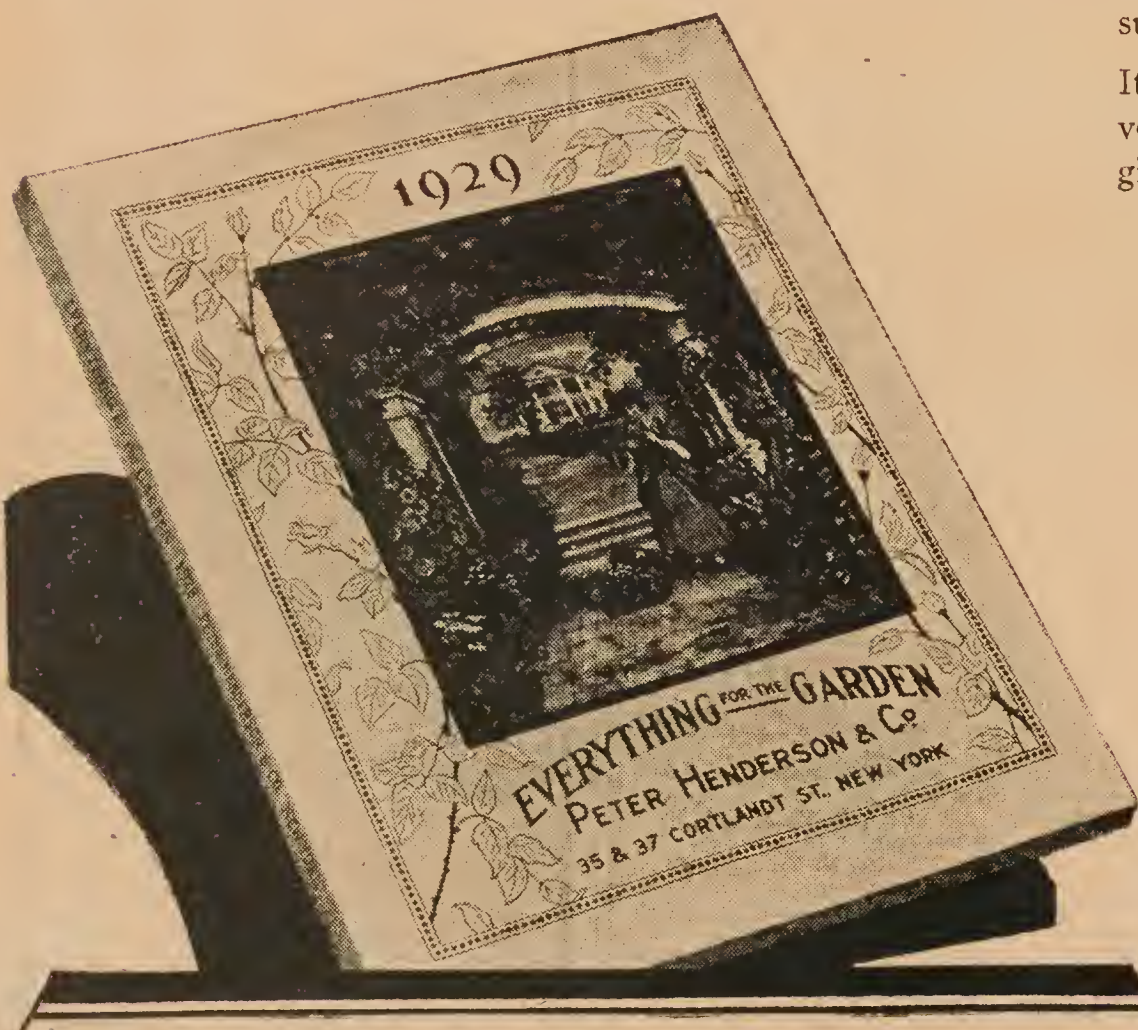
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This is a book of 210 pages, with 16 beautiful color plates, 194 pages of rotogravure in various colors, and over a thousand illustrations direct from actual photographs of the results from Henderson's seeds.

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A. A.



Ponderosa Tomato



Big Boston
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AMERICAN AGRICULTURIST

1929

\$1.00 Per Year

February 2, 1929

Published Weekly

Would Save Counties Thirty Millions

Outline of Roosevelt's Commission Plan For Tax Reduction

IT is probably safe to say that more real progress has been made for the relief of agriculture in New York State in recent weeks than has been made before in a generation. After all of the years of discussion in Congress, which so far has led to nothing in the way of any practical method of helping agriculture, the progress that New York State has made in a few short weeks is certainly interesting and encouraging. I believe that the advance that has been made so far is due to the fact that no attempt was made to "shoot at the stars" but rather to get right down to such a practical form of farm relief as adjusting the farmers' unequal tax burden. Both Republican and Democratic leaders in New York State have recognized the farmers' need and have put aside politics in an effort to find a practicable, workable program.

As soon as Governor Roosevelt was elected, he asked twenty-one representatives of agriculture and those interested in the rural problem to meet with Henry Morgenthau, Jr., our publisher, as chairman, to make recommendations if possible to the Governor and the State for the relief of farmers of New York State. This informal commission, eighteen of whom are Republicans, was later formally appointed by Governor Roosevelt, after his inauguration, as a Farm Relief Commission. This commission has devoted a great deal of time and study during the past few weeks to the problem. In fact, some of its members have worked almost night and day to find suggested remedies that would be based on the facts and could be put into practicable application.

In order to assist in the matter, the leaders of the legislature called a hearing on January 16th in the Assembly Chamber at Albany to obtain all possible information on the farm problem and suggestions for finding some relief. The Governor's Farm Relief Commission was invited to this hearing and reported its findings so far as they had been developed at that time.

Governor Roosevelt spoke at the hearing, and indicated his determination to cooperate in every way possible with the legislature and with farm leaders in the working out of practicable plans.

On our news page last week, we reported the findings of Governor Roosevelt's Farm Commission so far as they

By E. R. EASTMAN
Editor, American Agriculturist

had been worked out at that time. The chief emphasis at first was put on the farmer's tax problem, and as the largest burden of his taxes is caused by the building and maintenance of roads, this subject was given first consideration in the studies and work of the Farm Commission.

The commission will continue its work and will take up many of the other important problems and questions bearing on the farmers' welfare, including that of more State aid for

the rural schools, reforestation, and the very important subject of marketing of farm products.

How Roads Increase Taxes

Let us consider for a moment what your road tax problem is, and the recommendations made by Governor Roosevelt's commission to relieve you as farmers from some of the too heavy burden of road building and maintenance.

In discussing the road and tax problems at the meeting of the Governor's commission in Albany on January 16th, Commissioner Mark Graves, of the New York State Tax Department, said:

"I have before me a sheet which covers a stretch of years from 1915 to 1927. It shows for the group of counties—the five counties of Greater New York and the counties containing large cities like Albany, Schenectady, Syracuse, Rochester, Buffalo—that after you have taken into account the changes in valuation, the change in purchasing power of the dollar, the burden in these wealthier counties has increased 17 and a fraction per cent. Then take a group of poor counties (I call them poor with no reflection on the counties) such as Allegany, Chenango, Madison, Orleans, Schoharie, Wayne, et al, where population has been on the decrease, where wealth has not been increasing very rapidly, and in measuring it the same way, I find that since 1915 the burden has increased 42 per cent. I select another group of counties that so far as population is concerned are just about holding their own, and there I find over the stretch of 12 or 13 years an increase in tax burden (and bear in mind I have adjusted it to the purchase power of the dollar) of 22 per cent.

"That shows that we have a rural tax problem, and may I add that I could take the county of Albany, which I class as a wealthy county, or Erie, which I also class as a wealthy county, and pick them apart by townships and show that within those wealthy counties we have rural towns where the tax burden has increased more rapidly than it has in the wealthy towns. I say that because I do not want you to think this is a question of one county as against another

(Continued on Page 11)

TABLE SHOWING COST TO COUNTIES OF STATE HIGHWAY SYSTEM

County	Miles County Highway Still To Be Built	County Share of Cost in Thousands (000) omitted	Proposed Reduction to Each County (000) omitted	County Share of Cost in Thousands Under Proposed Plan
Albany	21.0	\$404		\$404
Allegany	46.2	892	739	153
Broome	24.9	479	42	437
Cattaraugus	58.8	1134	802	332
Cayuga	72.7	1400	890	510
Chautauqua	52.3	1007	309	698
Chemung	18.4	354	92	262
Chenango	26.2	504	432	72
Clinton	38.3	737	584	153
Columbia	128.1	2466	1726	740
Cortland	38.8	747	598	149
Delaware	63.7	1523	1317	206
Dutchess	73.3	1411	540	871
Erie	46.8	901		901
Essex	44.0	933	733	200
Franklin	79.5	1531	1181	350
Fulton	16.3	314	177	137
Genesee	62.1	1197	607	590
Greene	36.8	759	618	141
Hamilton	23.0	443	348	95
Herkimer	32.0	616	361	255
Jefferson	49.8	959	637	322
Lewis	37.2	716	619	97
Livingston	69.8	1344	1008	336
Madison	19.2	370	291	79
Monroe	34.1	657		657
Montgomery	42.9	827	184	643
Nassau	19.4	376		376
Niagara	33.8	657		657
Oneida	80.1	1545	234	1311
Onondaga	99.0	1906		1906
Ontario	28.5	549	326	223
Orange	31.1	599	137	462
Orleans	37.1	714	469	245
Oswego	61.0	1232	862	370
Otsego	44.5	859	718	141
Putnam	19.5	376	210	166
Rensselaer	32.7	630	203	427
Rockland	24.6	474		474
St. Lawrence	83.5	1608	1275	333
Saratoga	26.6	512	311	201
Schenectady	16.5	318		318
Schoharie	30.8	593	513	80
Schuyler	18.6	233	201	32
Seneca	46.4	893	663	230
Steuben	72.6	1477	1213	264
Suffolk	118.9	2289		2289
Sullivan	117.7	2266	1651	615
Tioga	49.1	945	777	168
Tompkins	21.4	412	265	147
Ulster	66.0	1270	853	417
Warren	51.4	1182	811	371
Washington	72.6	1398	1168	230
Wayne	32.3	622	419	203
Westchester	68.2	1313		1313
Wyoming	58.5	1131	881	250
Yates	62.9	1211	951	260
TOTALS	2,773.5	\$54,215	29,946	\$24,269

You can lick a SORE THROAT

—if you start early

INDOORS one minute outdoors the next—
it's easy to develop a sore throat or a cold
—around a farm.

Don't neglect them. Unchecked they may
prove serious—even dangerous.

At the first symptom of either, gargle with
Listerine, full strength. Keep it up. You'll
be amazed to find how often—and how promptly—it checks the trouble.

That is because Listerine is a powerful
germicide when used full strength. And sore
throat, like a cold, is usually caused by germs.

You can appreciate Listerine's potency
when you realize that even such virulent germs
as the B. Typhosus (typhoid) and M. Aureus
(pus) germs are killed by it in from 10 to 15
seconds. This data is on file in 3 laboratories
of national repute which conducted exhaustive
tests.

Yet Listerine is one of the safest of anti-
septics. Moreover, it is healing in effect.
Don't hesitate to use it full strength at any
time. Lambert Pharmacal Company, St. Louis,
Mo., U. S. A.

LISTERINE

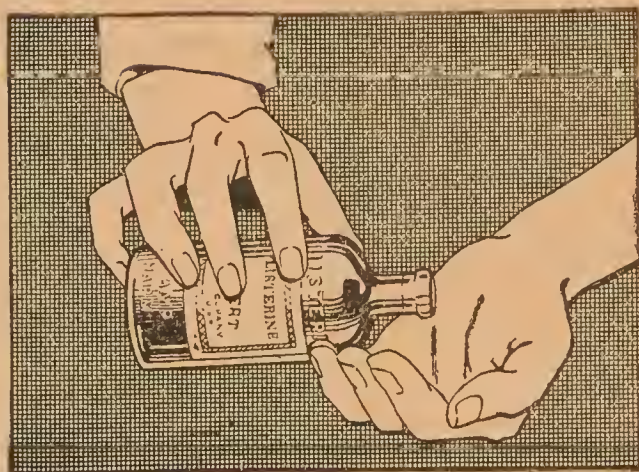
The Safe Antiseptic



JOINED YET?

Get in the circle of
men who've found the
perfect shave—the
cool shave with

**LISTERINE
SHAVING CREAM**



Don't let a cold get started

Physicians tell us that hands carry cold
germs to the mouth where they lodge in
the throat and nose and irritate the
membrane. Why not attack them be-
fore they reach the mouth? Millions
prevent colds by rinsing their hands with
a little full strength Listerine before
every meal. This is a particularly good
suggestion for mothers preparing food
for children.

Potato Prospects for 1929

A Practical Answer to the Question "To Plant or not to Plant"

By DANIEL DEAN

American farming is never the same from one year to another. It is always in a process of adjustment. Whenever any one of its dozen or more principal products—wheat, corn, oats, cotton, beef, pork, milk, eggs or potatoes—pays better than the rest, its production is at once expanded. Expansion goes on till it stops paying and heavy losses take the place of profits. Production is then cut down until profits again appear and the cycle is again repeated.

Every one who has followed potato acreage, production and prices, knows that our 1928 potato troubles are due to nothing more or less than over-production. That in turn was directly caused by the short crops of 325,465,000 and 354,328,000 bushels from small acreages of 1925 and 1926, which made big profits. Naturally, the 1927 acreage jumped nearly 400,000 acres from the 1926 figures. With a yield of 402,741,000 bushels, prices dropped fast. Many growers lost money, but the better growers and the best located growers made enough money in 1927 to encourage them to jump acreage again to 3,842,000 in 1928. As the old saying goes, that was the last straw that broke the camel's back. Few growers got their costs back. With the largest yield on record—462,943,000 bushels—prices in the great wholesale markets were below the five-year pre-war average.

Crop Determined by Acreage and Weather

What will be the planting, the yield per acre, total crop and the price for potatoes in 1929? We can only guess. We know that crop and price depend mainly on two big factors—size of planting and the season's weather. Drought, flood and frost are beyond the farmer's control.

The danger to potato growers in 1929 is that another big planting will make such a yield that very few will make money. It would take a very light yield in a drought or frost season to cut production down even to a medium sized crop. At best, those medium sized crops only just pay expenses to most growers. It is the short crops that bring the profits, and short crops can come only by the combination of both a short acreage and a light acre yield. Such seasons in 1916, 1919 and 1925 resulted in prices of \$2.00 and \$3.00 per bushel.

1917, 1918 and 1922 were years of big planting and low prices. The 3,327,000 acres planted in 1924 was over half a million acres short of 1928, but with favorable weather, the crop of 421,585,000 bushels forced low prices all the shipping season. In both 1922 and 1924 millions of bushels were fed to stock because they would not bring enough at the shipping station to pay the cost of grading and hauling.

The old law of supply and demand is on the job every minute. Many years of experience in the marketing of farm crops show that it takes only a small difference in production to make the difference between a wildly excited sellers' market at high and advancing prices and a dull

buyers' market at low prices. Contrast the crops and prices of 1924 and 1925.

	1924	1925
Acreage planted.....	3,327,000	3,092,000
Yield per Acre, bu.....	126.7	104.6
Total crop, bu.....	421,585,000	323,465,000
Prices, Nov. 1st, 100 lbs.	66 cents	\$4.05
Prices Apr. 1st, 100 lbs.	66 cents	\$4.59

Prices are the average of the Department of Agriculture's daily price reports for carloads of sacked potatoes in the great shipping sections of

400 acres for the whole United States. Other records of acreages, crops and prices going back to 1896, show that it generally takes two or more years of low prices to reduce plantings, though it may take but one high price year to jump them. If past experience is any guide, there will be some reduction in 1929. The big question for every potato grower is whether that reduction will be sufficient to make potatoes pay again.

American potato production falls roughly into three main divisions. The first is that of the southern early crop. This moves to distant city markets by rail—63,000 cars in 1928 and 53,000 cars in 1927. The south was hit harder in 1928 than any other section. Virginia alone broke two records on July 19th, 1928, one by shipping 1,014 carloads, the other by its record low price of \$1.00 down to 90 cents per barrel of 165 pounds. An inquiry by the Department of Agriculture shows that southern growers have planned a reduction of 29 per cent for 1929.

The Trucking Section

Outside of the early southern crop the rest of the potato producing area is made up of two main divisions. What might be called the trucking section covers a long and rather narrow belt on the map of the United

States. Its markets extend from Boston, New York and Philadelphia on the east to Omaha and Kansas City on the west, and from Washington, Cincinnati and St. Louis on the south to Buffalo, Detroit, Milwaukee and the Twin Cities on the north. The largest cities and heaviest consumption are located towards the east end of this belt.

It includes the southern New England states, most of New York outside of Suffolk County, and a few counties in the west and northeast, part of New Jersey, all of Pennsylvania's crop but the one-eighth that is shipped by rail, practically the whole of Ohio, West Virginia, Indiana, Illinois, Missouri and Iowa with parts of southern Michigan, Wisconsin and Minnesota. This trucking section grows about one-third of the potato crop of the United States.

The Carlot Section

With the exception of small areas located within the trucking belt, the carlot section lays to the north and west. It includes Maine, most of Michigan, Wisconsin and the states from the Missouri and Red Rivers through to the Pacific coast. In the 1927-28 shipping season this section shipped practically all of the carlot movement of 270,000 cars but the 53,000 of the early crop, or roughly about 125,000,000 bushels by rail out of a total crop of 402,741,000.

It is easy to see why potato prices are higher practically all the time, to growers in the trucking section than in the carlot section. So long as the growers within trucking distance of such cities as Hartford, Binghamton, Scranton, or Columbus grow fewer potatoes than those cities (Continued on Page 12)

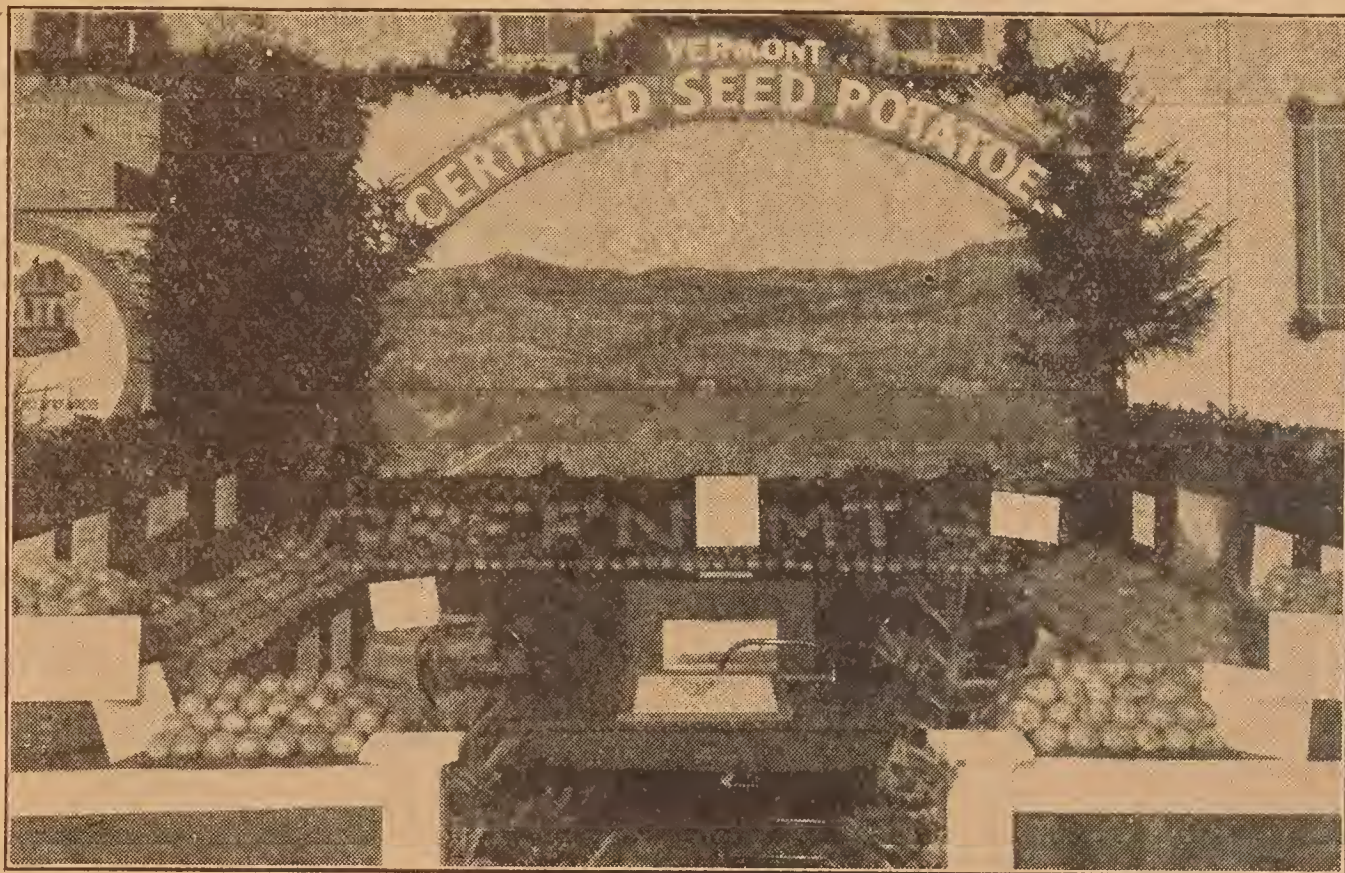
Important to Potato Growers

If you are really interested in getting the best available information on the potato situation for the coming season, you will want to study the article on this page by Mr. Dean. We think that without question Daniel Dean is one of the best experts on potato growing and marketing in the United States. He has a combination hard to beat, which comes from long years of practical experience as a large grower of potatoes, supported by almost constant study of the markets, and conferences and contacts with other men throughout the nation who make potato growing and marketing their chief business.

This article is another illustration of the practical help that we are trying to give our readers who really want accurate information on the different phases of their business.—*The Editors.*

Maine, western New York, Michigan, Wisconsin and Minnesota. A drop of less than 25 per cent in the total production from 1924 (a medium acreage year) to 1925 (a short acreage year) multiplied the price of carloads in the five principal shipping sections six to seven times. Now we potato growers all want to know how long it will be before the record crop and low prices of 1928 will be followed by another crop short enough to make potatoes pay. Will it be in 1929?

The Department of Farm Management at Cornell has studied the records of potato plantings and prices for the last thirty years. Normally the increase in population each year should add about 40,000 acres to the planting. In ten seasons of the thirty when potatoes were highest in price, plantings the following spring increased in nine of the ten and decreased once for an average gain of 133,100 acres. For the ten seasons when potatoes were lowest there were five increases and five decreases in the acreage the following spring for a net average decrease of only



One cause of increased production of potatoes per acre is the more general use of certified seed. The illustration shows the booth of the Vermont Certified Seed Growers at the Eastern States Exposition last fall.

Editorial Page of the American Agriculturist

AMERICAN AGRICULTURIST

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Vol. 123 February 2, 1929 No. 5

A Letter From Secretary Jardine

I doubt if any other factor has been of more importance in the upbuilding of technical phases of American agriculture and in improving the social aspects of rural life than the farm press. The influence of the farm magazines and papers, of college, state agricultural department, and federal publications today reaches into every home of this vast country. At the beginning of another year, I take pleasure in renewing the assurance of appreciation of what you have done to spread better farming practices and greater enjoyment in country living. I am sure all persons in the department join me in extending good wishes and an expression of our desire to cooperate with you at any time. Sincerely yours, W. M. JARDINE, Secretary, U. S. Department of Agriculture.

WE are very appreciative of the above unsolicited letter from Secretary Jardine of the United States Department of Agriculture. We work to the limit of our ability to make farm and rural life as profitable, pleasant and happy as possible, and it is good to know that what we are trying to do is appreciated by men in high places as well as by our farmer readers.

The More We Raise the Less We Get

IN 1928, the American farmers harvested crops with a value officially estimated at \$8,456,000,000. In the preceding year of 1927, the value of the crops was \$8,522,000,000, so there was a decline last year amounting to about 1 per cent, which was due to a lower average price, resulting from an increase of about 3 per cent in the aggregate yield.

In other words, here we have another demonstration of the hard old truth that every farmer knows, that the larger the crop the smaller the price.

Liquor Violators Can Be Prosecuted

A RECENT decision handed down by the New York State Court of Appeals is destined to have a far-reaching effect in the better enforcement of prohibition in New York State. The decision, written by Justice Irving Lehman in connection with the case of Albert Vandewater of Long Island, maintains that a speakeasy, or place where liquor is sold, is a "public nuisance" and therefore subject to prosecution under the State Penal Law.

Since the repeal of the Mullan-Gage Act, district attorneys and county judges have pretty generally left the enforcement of prohibition to the federal authorities. These local officers

claimed that they had no authority under the state law. This new decision removes this alibi and gives the police and county officers a real weapon to cooperate with the federal authorities in the enforcement of the Eighteenth Amendment.

The State Penal Law defines a public nuisance as "one which annoys, injures or endangers the comfort, repose, health or safety of any considerable number of persons, or offends public decency, or in any way renders a considerable number of persons insecure in life or use of property."

Here is hoping that the local authorities will now show more activity in enforcing the law.

A Gambling Business

"We do not know what we will get for milk until we get our check, and then it is too late to make plans."—J.D.M.

THE above letter is a sample of many we get along this line, especially lately when there has been so much discussion about increasing the milk supply in our own New York milk shed. The older dairymen will remember that the old plan of announcing prices six months ahead had its advantages as well as its disadvantages. If you know in September what your November and December milk is going to bring, you can plan accordingly. Of course, the trouble with the old plan was that under the old system of marketing, whereby the dealers had all to say about the price, the prices were always less than what they should have been.

We do not know that there is any way of changing the present system, whereby a farmer does not know what he is going to get for his milk until a long time after he has delivered it, but there is certainly something unfair in asking dairymen to make fundamental changes in their milk production plans when they have no way of knowing whether those changes are going to pay or not. One great trouble with the whole farm business is its uncertainty. It is a constant gamble.

For Fairer Tax Assessments

IN a recent discussion on tax assessments, John A. Zangerle, a tax expert in Ohio, said:

"Real estate constitutes the base of from two-thirds to four-fifths of all local and state revenues in the United States. It constitutes directly and indirectly a very large part of the base under the federal inheritance, federal income and state inheritance taxes. The taxation of real estate is by all odds the most important feature of our American tax system.

"And yet the assessing of real estate has been given less consideration, is more bungled and more perfunctorily administered, I believe, than any other function of state. The elected assessor is generally regarded the least important officer on the ticket. * * *

"The unconcern of the taxpayer with the general problem permits the assessor generally to assess in a haphazard, hit-and-miss, guess method of assessment. * * * The steadily mounting tax rates and tax burden are awakening taxpayers to the need for closer attention to this most vital function of government."

All of which the farmer knows from hard experience. The greater part of his property is real estate and much of it is assessed unequally and unfairly. It will continue to be, until an aroused public opinion forces tax and government officials to assess property on a more equitable basis.

For Better Rural Fire Fighting

"It has occurred to me that you might render a service to your rural subscribers by publishing in your paper something about protection from fire in farming communities.

"Some time ago, in conversation with a well posted fire insurance agent, he said that rural communities could form a fire district, purchase some inexpensive fire fighting apparatus and thereby get some measure of protection.

"Such a company with apparatus would reduce the rate of insurance enough to pay for the entire cost in a few years, and in the meantime enjoy some measure of protection.

"These days with motor cars it looks practical and

I believe there are hundreds of communities where it might be. A small company could be formed, if they only knew how to go about it. Of course, we all would like to know what kinds of apparatus are available and the cost of same."—H.R.T., New York.

WE believe that the above correspondent has made a very valuable and practical suggestion. Every resident of rural districts knows that farm fires are increasing and that almost every rural community has one or more great losses from fire every year. Once started, the buildings are doomed; and once burned, they cannot be replaced because of high costs of modern building.

Why not, therefore, take some steps to organize some kind of fire protection in every farm neighborhood? The first step would be to call a meeting and possibly have some representative or representatives from fire apparatus companies address the meeting and explain their apparatus. The fire chief from the nearby village would, we are sure, be willing to come out to your neighborhood and talk things over in such a meeting.

An Unnecessary Expense

AT the last meeting of Governor Roosevelt's Commission on Farm Relief in Albany on January 16th, a very interesting situation was brought before the commission, having to do with building a state highway up White Face Mountain in the Adirondacks. A bill was pushed through the legislature against the wishes of the Highway Department, appropriating \$15,000 for a survey of this state road through a mountainous region where it will do very few persons any good.

When the road is completed, it will cost the State two million dollars, and can be used only from June 1 until Labor Day. It is purely a luxury proposition and can only be used by those people wealthy enough to own an automobile and be able to afford a trip into the Adirondacks. It is said that of the hundred days that this road can be used, there are only fifty days when the view can be seen, due to the haze. So the people of the State are asked to pay two million dollars to build a road that a small group of people may use for fifty days in the year.

We understand that the proposition was put across by owners of summer hotels in the Adirondacks. There ought to be some way to put a stop to propositions of this kind which cost the taxpayers of the State millions of dollars when they are already laboring under a tax burden beyond their ability to bear.

Eastman's Chestnut

SOME medical students needed a corpse for dissection so they plotted to go to a nearby cemetery on a certain night and get one that had just been buried. Some other students overheard the plot.

The first boys went to the graveyard at midnight as planned, and after a great deal of labor they succeeded in raising the coffin and taking the inmate out, putting it in a great gunny sack which they had brought along for the purpose. Then they laid it aside while they put the empty coffin back and filled up the grave.

In the meantime, the other boys sneaked up, took the "stiff" out of the gunny sack, and one of them crawled in himself. When the students finished their labors, four of them picked up the gunny sack and with many a grunt and groan, set off across the lots toward the laboratory of the college.

All went well for a while, except that their burden got heavier and heavier, and their complaints became more frequent. As they toiled up the hill with their burden, they filled the air more and more with their complaints and moans, until finally a deep, sepulchral voice came from the gunny sack, saying:

"Well, put me down and I'll walk!"

Whereupon they did put him down and went away from there, stopping not on the order of their going!

Some Problems of the Apple Grower

Address of Horticultural Society President Looks to the Future

EDITOR'S NOTE—On this page we are printing part of the talk given by President M. C. Burritt before the 74th annual State Horticultural Society meeting at Rochester. Lack of space will not permit us to print the entire address but we have tried to include those parts which we feel will be of most interest and value to our readers. A report of the business transacted at the meeting will be found on page six of this issue.

By M. C. BURRITT

is supporting the Council through associate membership. In addition the Council should have not less than one hundred individual members in this state. I recommend it for your cordial and vigorous support.

Our Problems Are Seen More Clearly

Gradually the fruit grower is seeing his problem more clearly as thought and discussion together with the course of events bring it more definitely into focus. During the last few years it has been obscure and many of us have been confused. Some have clung to apple growing in a sort of blind faith. Others have given it up and turned to new enterprises. Many have pursued a half-way course, waiting for a turn of events. A few have blamed the weather and looked for a favorable turn. Most of us have kept our faith in the future of the industry but we have lost more or less of our enthusiasm as we have finally realized that we were in a period of intense competition for the consumer's fruit dollar.

The consumer now has such ability to buy and so wide a choice of fruits that she is able to buy very nearly what she desires. She naturally chooses quality and attractiveness. Therefore fruit growers who do not produce quality and aggressively present its merits, e. g., advertising the superior flavor of eastern apples in attractive packages, are at a decided disadvantage in this intensive competition. As sellers of apples this is our major problem. It cannot be solved without cooperation in some form.

As producers of apples our problems are many but fall mainly in three groups.

1. More careful selection of soils and sites.
2. Larger yields per tree.
3. Quality at lower costs.

All are individual problems which no legislation, no organization can solve for us. We must solve them for ourselves.

We must recognize that the soil is as important to the production of good apples as the stable to the production of clean milk. New York is dotted with examples of where not to plant apples. It is estimated that 25 per cent of our orchards are on unadapted land.

Professor G. P. Scoville has driven the point home with his record of yields on the two principal soil types of Newfane township, Niagara County, in which he shows that the net returns

are from 2½ to 5½ times as great on Dunkirk as on Clyde soils.

Larger Yields Per Tree

Any study of average yields of apples per tree and per acre in New York will reveal the fact that one cause of low returns in the industry is low yields. In the Newfane area, for example, the average yield of all varieties 30 years and older was only a little more than five bushels per tree and 172 bushels per acre. All varieties over 5 and under 30 years of age averaged to yield 1.65 bushels per tree or 66 bushels per acre. Such yields are unsatisfactory and unprofitable. Unless these average yields can be raised, New York will find successful competition with other areas increasingly difficult.

Increased yields involve primarily the questions of the best adapted varieties, proper pollination and the culture and feeding of the trees. On all these matters we ought to have more and better information. Studies in comparative adaptabilities, yields and profitableness of old and new varieties ought to be carried on continuously. The problem of adequate pollination, especially under unfavorable conditions, is of vital importance to profitable apple growing. We are now learning things about pollination which had we known and practised a generation ago would have made profitable, orchards now unprofitable. Our cultural practises are in a state of flux. We are changing from intensive cultivation to a semi-sod culture and the use of commercial nitrates but we are not all sure that we are right. These practises need to be scientifically checked.

Quality at Lower Costs

Another outstanding need of the region is better quality and pack and at lower cost. But how are these to be obtained? They involve the elimination of poor varieties and too high trees, the lowering and wise pruning of old trees that are left, a thorough but a less costly spraying program and perhaps sod culture in some form in order to get color as well as to reduce costs.

Concentrate on Vital Problems

To the solution of many of these problems of fruit growers, the Geneva and Cornell Experiment Stations and the State Extension Service have contributed much. I yield to none in my respect for and appreciation of their services to the industry. However, many vitally important and very practical problems which we cannot well solve for ourselves remain to be solved and are urgent. We are not yet satisfactorily controlling certain insect pests and diseases. We have not yet frankly settled the relative merits of dusts and sprays. The involved question of pollination, its processes under unfavorable conditions and the relation of bees to it if it is scientifically determined, is not practically applied. We have been convinced that intensive cultivation of our orchards was the thing; now we are almost convinced that it is not. Under what conditions is sod culture satisfactory and best? Is the use of commercial nitrates profitable under average New York conditions? (Continued on Page 14)

ASIDE from the usual necessary and important activities of the Society, which are mostly carried on by the Secretary, two events of the year stand out in my own mind as significant of the year's interests and trends and which are helping to focus attention on the problems which all fruit growers are facing. These events are the contact with and observation of the fruit industry of our principal apple competitor, Virginia, and the organization of the National Horticultural Council.

Studying Virginia

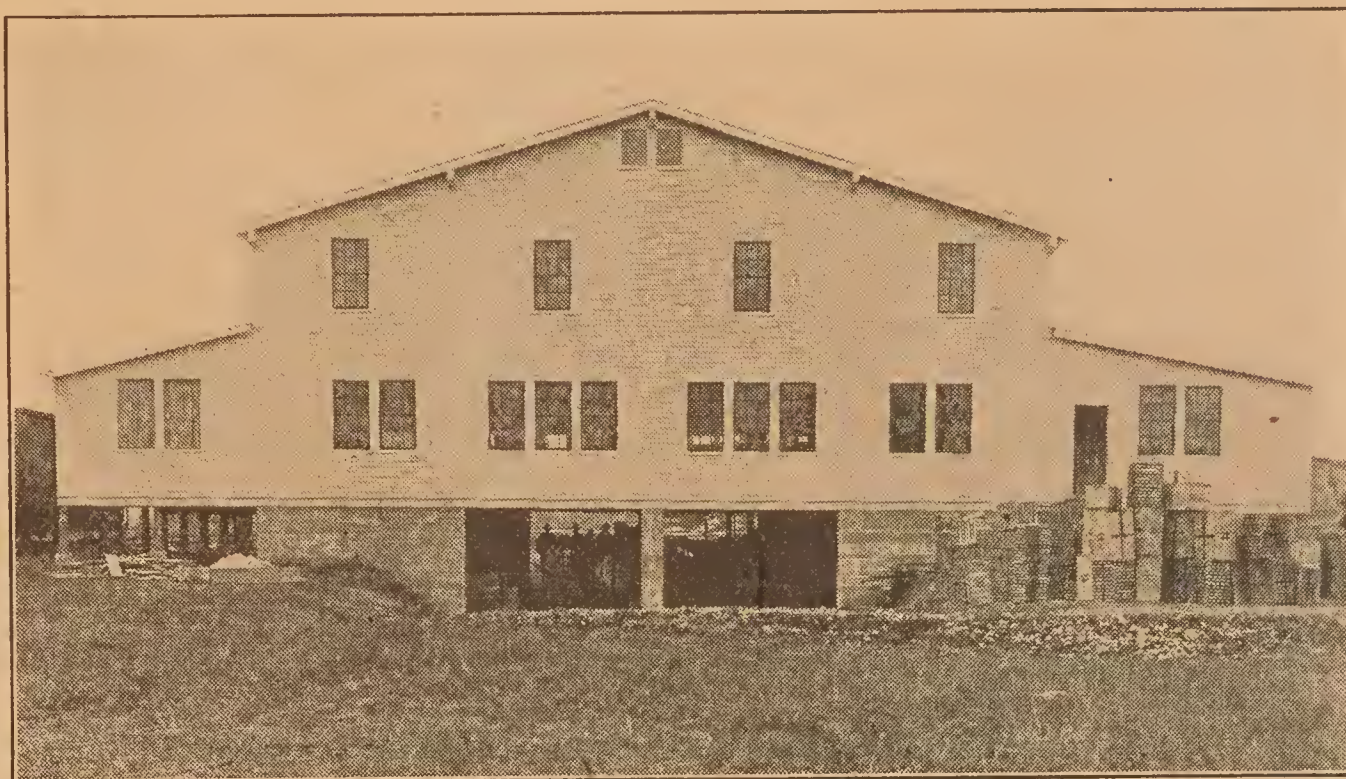
Through the courtesy of Thomas F. Byrd, extensive apple grower near Winchester, and brother of the governor of Virginia, in coming to and addressing our annual summer meeting at Geneva, and the subsequent acceptance of his kind invitation to visit the Byrd orchards at the annual summer meeting there, by some 25 of our members, we have come to have a much better appreciation not only of the great actual and potential competition of that region but of the progressive character of its apple growers. Your president also addressed the December meeting of the Virginia Society by invitation. Dean Price of Virginia is here today to tell us more of Virginia's apple industry and its future. These contacts have been a stimulus, an inspiration and a challenge to us.

National Horticultural Council Organized

A second event of the year which I hope is destined to have an important influence on the fruit industry is the organization of the National Horticultural Council "to protect and promote the national interests of producers of horticultural products." With the approval of our executive committee I had the honor to participate, as your representative, in the organization of this Council in two national meetings held in Chicago in June and October.

In taking this step to set up a national protective and promotional agency, fruit and vegetable growers are only doing what practically every business and industrial group in the country has already done. Such groups are constantly taking steps to advance the interests of their members and to oppose movements which adversely affect their interests. Unorganized we must expect the continued encroachments of other organized groups. It is of the utmost importance that we be prepared at all times to present our case effectively. Especially is such preparedness important right now when economic readjustments, notably the tariff, are being worked out. We must see to it that our industry is equitably treated.

This Society has already endorsed the movement through its executive committee and



There are many important problems before New York fruit growers which can never be solved without cooperative organization in some form. The above illustration shows the first community apple packing house ever built in Virginia. It is located near Harrisonburgh in Rockingham County, cost \$10,000 and has a daily capacity of 15,000 barrels.

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15-30-15

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centration, the plant-food in Nitrophoska costs less per pound. One bag goes as far as several bags of regular fertilizer. There is less weight to haul; fewer bags to lift; less bulk to apply. Nitrophoska is the most economical fertilizer ever known. And it is safe.



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A.A.'s Western New York Farm and Home Talk

Fruit Growers Meet at Rochester

THE seventy-fourth annual meeting of the New York State Horticultural Society has come and gone again. It was noteworthy in several respects.

By M. C. BURRITT

kets must be voluntarily above it. The

Increasing optimism and renewed confidence in the industry is felt by

most growers, based chiefly on a better understanding of the present situation and the remedies. Improvement in the pack of New York apples was evidenced by the commercial exhibits. The largest and most complete exhibits of machinery, equipment, supplies and fruits ever assembled were made at this winter meeting.

A strong, interesting and varied program was presented, which supplied detailed information, facts for general guidance and inspiration. The attendance was better than usual, with some increase in membership.

Dr. Warren on Fruit Outlook

The basis for increasing optimism was perhaps best stated by Dr. Warren who spoke in part as follows on "The Outlook for Western New York Fruit Growers".

"So far as competition with other eastern states is concerned, I do not see that Western New York has anything to fear. Our yields are better than the yields of these states," he said.

"Competition with the West is primarily a question of size, color and uniformity of yield in successive years. The first two factors are well understood. The last has been given less consideration. To a very considerable extent, the profits of the western areas are made in years when we do not have crops."

Dr. Warren outlined four major factors as contributing to the depression in the fruit industry in Western New York. These are: Competition with western apples; competition with other fruits; over-planting of apples in the previous period of prosperity; the general agricultural depression.

"The agricultural depression has caused increased costs, increased taxes, increased competition between types of farming, low farm prices compared with retail prices because of increased costs of distribution.

"All these unfavorable factors happened to occur at the same time. Any one of them would have caused difficulty. The outlook for the fruit grower is dependent on the probability that these conditions will cease to exist, and on the ability of growers to make adjustments to meet the situation."

Apple Pack Improving

The commercial exhibit of barrels and baskets was larger than ever before. These exhibits are drawn from storage by state inspectors, without opening and without any selection either by the grower or the inspector. They are opened, graded and placed on a table with half the contents turned out. The per cent of defects for the grade, but not the owner's name, is then placed on the package.

This year more than 70 per cent of the packs exhibited were in grade as compared with more than 70 per cent out of grade in the 1928 exhibit. This speaks for itself and it was noted by every one. Apparently all the agitation of the past two years and the new law have had their effect. But much remains to be done yet before New York's apple pack is all it ought to be. Commissioner Pycke pointed out, as he has done before, that the law is only a minimum standard and that apple grades that will recapture our old mar-

liveliest discussion of the meeting was the apple pack, Mr. Samuel Fraser of Geneseo, arguing that a man who couldn't grow apples to meet the present low legal standard had no business growing them at all. L. S. Cotton, a Pittsburg receiver of apples, told of the effect of unclassified pack on the markets and advised us to leave the junk at home.

The Exhibits and Program

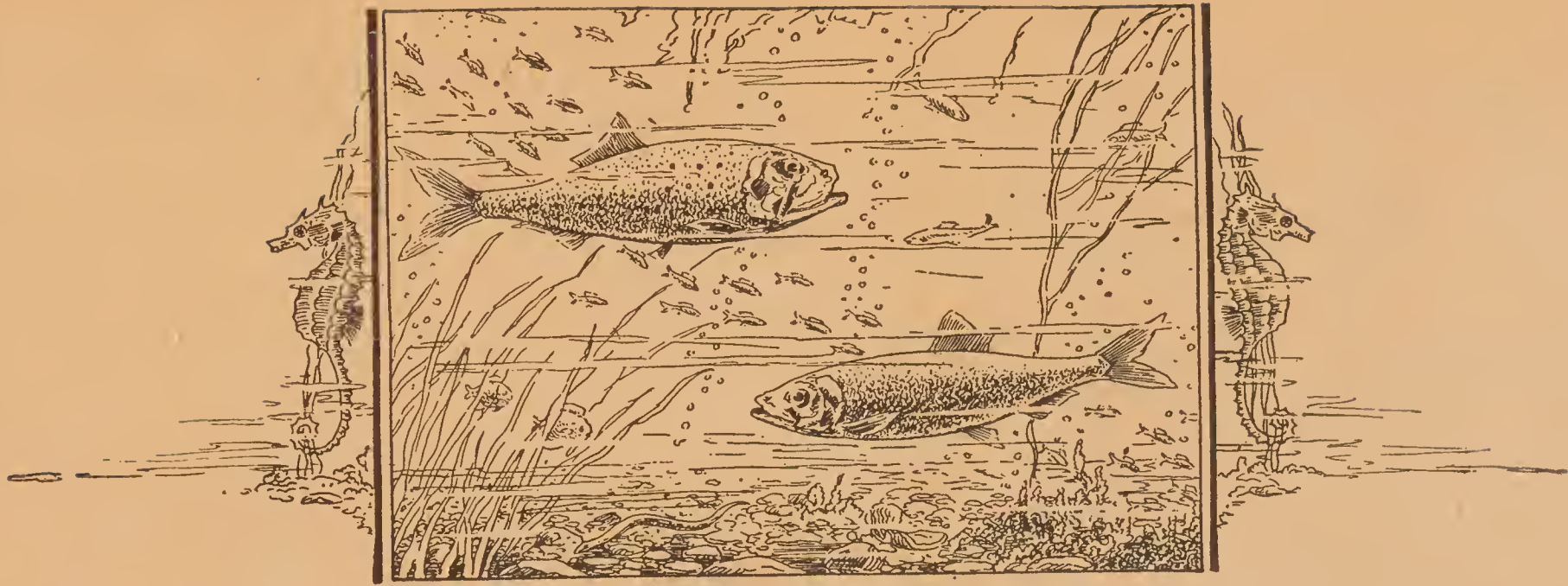
In spite of an increase in the rent of floor space made necessary by the increased activities of the society—which is now a \$10,000 enterprise—practically every foot of floor space was sold and filled. The opportunity to select and to buy trees, machinery and supplies is unexcelled and hundreds of growers take advantage of it. Since access to these exhibits is free while membership is necessary for attendance at meeting sessions in Assembly Hall, many growers who come do not take out membership. I maintain that growers who use the exhibits as a meeting place and who select and buy here are perhaps getting as much benefit as those who attend the meetings, and that they are as much under obligation to support the society which makes the exhibit possible as those who attend the meetings.

The discussions by station and college men on fruit, insects and diseases and the question box were as popular and helpful as ever. Bud moth, leaf roller, cherry leaf spot, Oriental Peach moth and apple scab were on the program for special treatment. The subject of pollination and good varieties for pollinators was of outstanding interest and some new information was made available by Dr. McDaniels. The demand for more of this work and more information is insistent. Pruning, sod and fertilizers came in for a good discussion on Thursday. Dean Price of Virginia, brought to the society a clear account of Virginia fruit growing and its problems and progress with them. I hope to have more to say of this later. Space does not permit of a further discussion of the program nor of an account of the fine horticultural speaking contest put on by four Cornell students or of the exhibits and prizes won by boys.

Resolutions Adopted

The society adopted a number of resolutions presented by Bruce P. Jones of Hall, chairman of the Resolutions Committee. These included opposition to increasing the tariff on field seeds and favoring a reduction on alsike clover; asking protection for farmers from petty thieves, even if it is necessary to increase the personnel of the state police; endorsing moves for agricultural relief upon the part of the Governor and the Legislature; endorsing the National Horticultural Council; urging the society to begin plans through a special committee for the observance of its 75th anniversary next year; recommending to the officers of the society that they accept the invitation of Virginia growers to New York growers to visit the former state next Summer; and commending the Democrat and Chronicle for its interest in the affairs of the growers.

M. C. Burritt of Hilton, retired as president and was succeeded by Paul Judson of Kinderhook. Other officers elected included: First vice-president, William J. Hall of Lockport; second vice-president, Charles Kenyon of Morton; third vice-president, Walter Clark of Hilton; fourth vice-president, E. G. Cowper of Newfane. New members of the Executive Committee are Mr. Burritt and Herbert Kind of Trumansburg. Members who carry over are: Thomas E. Cross of Lagrangeville, Harry E. Wellman of Kendall, H. H. Brown of Monsey and Bruce P. Jones of Hall.



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These experiments have proven that Iodol is replete with the minerals necessary for balance—calcium, phosphorus, sodium, iron and iodine. It is also rich in certain valuable proteins.

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In the first place, the kind of proteins supplied by Iodol Fish Meal are of a type not found among the vegetable proteins, and they in-

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Iodol is specially prepared from algae-eating fish. These fish are rich in iodine, which they get from their food and also absorb from the sea. That is why Iodol has such a high iodine content—so high that it stimulates growth and increases production.

Only Park and Pollard can mix Iodol Fish Meal in their feeds. Its use is protected by patent.

crease the nutritive value of all of the other proteins found in the feed. The calcium, phosphorus and other mineral materials found in abundance in Iodol are not only in correct proportion for maximum efficiency, but their form is such that they are more easily soluble, easily digested and easily assimilated by the animal. Then too, there are definite deficiencies in the usual grains and grain products which Iodol supplies. Of these, Iodine is of extreme importance, and we have found this method of administering it to livestock the most efficient and effective yet discovered. It is not the quantity of these various elements which is important so much as the quality, or the form, in which they are consumed. That is the reason for the inclusion

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STOP OFF-YEARS!

Chilean Nitrate of Soda will help offset the "off-year" tendency and help the trees to set a fine crop every season. A famous Apple Authority says:

"Regularity of bearing—Many varieties of apple trees that ordinarily bear good crops every year sometimes develop a tendency to bear a full crop every other year or at irregular intervals. This is usually associated with a deficiency of nitrogen and is most likely to occur sooner or later in old orchards. Treatment with a nitrogen fertilizer usually corrects this tendency and is an aid in bringing trees back to regular bearing."

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We are situated near Lake Ontario where the seasons are short, and have specialized for many years in growing tomato seed from carefully selected Pedigree Stocks.

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With the A. A. Crop and Vegetable Grower



Onion Tariff Increased

THE efforts of
New York onion

By PAUL WORK

Abbott & Cobb's

growers and the New York State Vegetable Growers' Association, as well as groups in other states, resulted in the presidential announcement of a

50 per cent increase in the tariff for onions effective December 21. This changes the tariff from 1c to 1½c per pound.



Paul Work

The New York Packer reported immediate cancellation of orders for some 220,000 packages of onions which were to have been imported. This was in accordance with a proviso within the contracts. In a season of short crop, such as this, the elimination of 400 or 500 cars of onions will make a material difference in the price. Presumably no time could have been chosen when the change in the tariff could have meant more money to onion owners. Note that we did not say growers, for the bulk of the crop is already out of grower hands.

What Protection Should Vegetables Have?

The Ways and Means Committee of the House of Representatives is holding hearings preparatory to framing a new tariff bill. This will not likely be acted upon at the present session of Congress, but now is the time to operate before the committee.

What tariff protection ought vegetable growers to have? Ought we ask for a general tariff of, say, 2c a pound on all fresh vegetables and 4c per pound on all dried, canned or preserved vegetables? Imports have become fairly heavy the past few years and are cutting quite a figure in our markets.

Many think that in the long run tariff protection is of doubtful value. We are certainly not yet ready for free trade and presumably our industries ought to secure every advantage that they can. The time will come when we will be more interested in developing South American and Asiatic markets for vegetables than in excluding outside products. Refrigerator ships are fast drawing remote regions nearer to our shores.

4-H Contest On Permanent Footing

Thru the generosity of a seed company, the 4-H Vegetable Contest which is held at State Fair has now been placed on a permanent basis. The fund contributed provides for medals to be awarded to the best judges of vegetables as determined at the State Fair contest. It also provides for the Syracuse winner a trip to the meeting of the Vegetable Growers' Association of America where he will take part in the national judging contest and will probably represent the state in judging demonstrations.

Catalogue Time

Seed catalogues are coming around and we always look for them as eagerly as we grasp the evening paper or the latest magazine.

The wise grower watches for new things of special merit. He examines the claims of the sellers, doing his best to discriminate between extravagant selling talk and substantial claims that seem to have reasonable foundation.

The following list includes items that are more or less new. Some of them have been on the market a few years but are just coming into general acceptance. Those who are not acquainted with them might well try them out:

Sunshine sweet corn; California Wonder pepper; Sprouting Broccoli; Long Standing Bloomsdale spinach;

Controlling the Squash Vine Borer

THE squash vine borer is and has been a difficult and nearly impossible pest to get rid of or even to subdue. We used to "operate" on the vine and felt like a murderer when we cut into the apparently healthy and just as apparently doomed stalk.

These operations seemed like operations in general in that they are the last and only resort and it is quite true that an incision and the removal of the grub or borer has in many cases saved the life of the vine, though they never again seemed real thrifty nor to produce as much nor as fine fruit.

One summer an uncle of mine was visiting at our farm and there was the borer even more busy than usual. Uncle asked what we did to stop the ravages of the pest which it was very evident just then had not been stopped very noticeably. We told him an incision and the removal of the grub seemed to be about the only method we knew of.

Preventatives Beat Cures

"I am rather old fashioned," said Uncle "and I do not believe much in operations. Why don't you use preventatives. They are better than cures, most always. When you plant squash, pumpkin and cucumber next year, in each hill plant or sow plenty of radish seed, preferably the winter variety and you will be killing two birds with one stone—a crop of radishes and a crop of squash, cucumber or pumpkin. Any way my experience has been that the borer or grub will never come near the spot where radishes are growing."

The next year we made a practical try out of the tip Uncle had given us. The radishes grew as radishes do, the squash, pumpkin and cucumbers grew too, undisturbed by the borer. I am passing this along perhaps you would like to try it.—M. E. D.

Radish Maggot Destroys Crop

Last year we had trouble with our radishes. Apparently they were damaged by some insect and the entire crop was practically worthless.—B. W., New Jersey.

THIS damage was probably done by the radish maggot. One of the most effective methods is to plant the crop early in the season. Later plantings can be protected by screening the radish bed which prevents the adult flies from laying eggs on the young plants.

Another effective method is to treat the young plants with a solution of corrosive sublimate dissolved in water at the rate of one ounce to 10 gallons of water. This solution is applied within a week after the plants appear and should be repeated once or twice within intervals of once a week. This solution is extremely poisonous and care should be taken in its use. The material should be dissolved in earthen ware or wooden containers as it attacks and destroys metals.—H. L. C.

Many people mulch their strawberries too early. The ground should be well frozen first, the idea of the mulch being to keep it frozen and prevent heaving.

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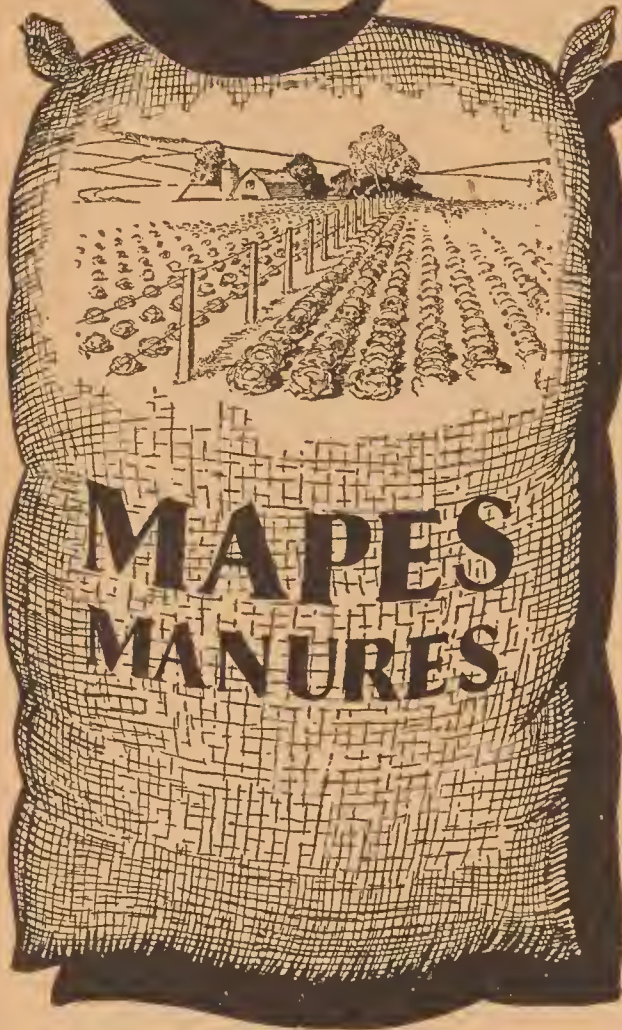
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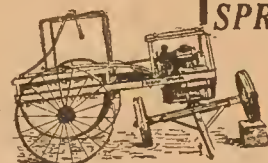
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Box A

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FEEDING The LAND

Fertilizer for Tobacco

What fertilizer is commonly recommended for growing tobacco?—H. W., Connecticut.

IN the Connecticut Valley a 5-4-5 has been the standard tobacco fertilizer for many years. This was applied at the rate of 1½ to 2 tons per acre. Recently experiments have been performed at the Connecticut and Massachusetts stations to determine results from the use of other and higher analysis fertilizers. A 10-3-8 and 9-3-7 were used and good results were secured.

This is put on at about the rate of a ton per acre.—H. L. C.

Cleaning Fertilizer from Drill Prolongs Its Life

NO piece of farm machinery is more susceptible to rust than a fertilizer distributor. The fertilizer unit, if not thoroughly cleaned, can, in the course of a few weeks, be badly damaged by rust.

Hoppers that can be inverted and dumped facilitate cleaning. If this cannot be done, drill out all loose fertilizer by rattling and shaking the machine, and then flush with water. Use hot water in cold weather. If possible, the flushing should take place while the machine is running.

To remove water from the distributor drench with kerosene. Then follow with a thorough coating of oil over all moving and other metal parts in and about the hopper.

During the season when the fertilizer distributor is in constant use there is not so much danger of rusting, for the reason that the machine is usually cleared of fertilizer and hastily cleaned. This will often suffice because the machine is again put into use before the rusting process knits the parts into a solid mass. The danger lies in leaving the machine in this condition after the last use of the season. Two or three hours spent on a machine at the end of each season will increase its life two or three times.

Fertilizer for Muck

What fertilizer is usually recommended for applying to muck soil?—F. W., New York.

MUCK soils are high in nitrogen (although in some cases it is not in a readily available form) and low in phosphorous and potash. Consequently as a general rule fertilizers for muck soils are low in nitrogen. A 4-8-12 is commonly recommended for celery and a 5-10-5 for lettuce and a 3-12-18 or a 0-12-18 for onions.—H. L. C.

Plowing Under Straw May Damage Crop

"We are often advised to add to the humus supply of the soil. Yet, I have a neighbor who plowed under a good application of straw and had almost no crop on the land that year. How do you explain this?"

FOR a long time it has been realized that too much straw might damage a crop. One explanation often given was that the straw stopped the rise of moisture through the soil, so that the crop suffered from drought.

Recently it has been discovered that the bacteria that cause decay need large amounts of nitrogen. Consequently when there is a large amount of straw or any non-legume material in the soil, these bacteria really rob the crop of the nitrogen it might otherwise get. A heavy application of a nitrogen carrying fertilizer will help the straw to decay and prevent the damage.—H. L. C.

Put grease instead of oil on the farm machines when you store them. It is better because it stays put.



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Forrest's Gold Standard No. 100—For planting in practically all localities with an elevation under 1,000 feet. Growth is vigorous, ears well, and produces a large green tonnage to the acre.

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Try Forrest's Vegetable Seeds in your truck garden, this year. In addition to our own special strains we handle everything recommended by the New York State Department of Agriculture, Cornell University, Ithaca, N. Y.

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AMERICAN AGRICULTURIST

And they all said : Clark "Cutaways" Are Better

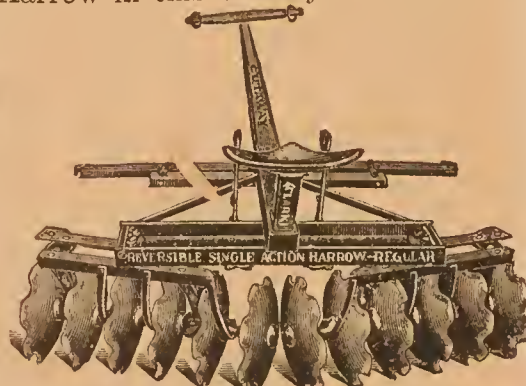
Before Mr. Ernest J. Downing, owner of the "Downing" Fruit Farm, at New Madison, Ohio, bought a disk harrow, he wrote to several farmers who own Clark "Cutaways." Mr. Downing told us in the following letter what these farmers said about them:

"We have looked over all the literature you have sent us on 'Cutaway' Harrows (disc). It looks good.

"We have written to several owners of 'Cutaway' Harrows. Without exception the answers have shown the owners to be well pleased and two of them seem to have three or more of these tools. Nearly all of them compare them with other makes of disk harrows and all claim the 'Cutaway' much better.

"We are fruit growers. We sell practically all our products direct to the consumer, we advertise and they come here to buy it, thus we get to see and talk with a large number of people every year.

"We are wondering if you would wish to give us the agency for this 'Cutaway' Harrow in this vicinity or district?"



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Single Action Harrow fitted with cutout or solid disks of heat treated steel, and forged sharp for better work and longer wear. Reversible gangs. Light draft. Disks carry weight of machine. Made with extension heads for orchard work. Mail coupon for free catalog and book, "The Soil and Its Tillage."

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Name

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Would Save Counties Thirty Millions

(Continued from Page 1)

county. It is also one of tax districts within counties.

Sixty-Six Percent Caused By Roads and Schools

"Now an analysis of the reason why the cost of government has increased in our rural communities discloses that on the average at least 66 per cent in the increase has been due to two causes only—schools and highways. So that brings us to the highway tax problem in these poor communities where, because of little property valuation and extensive mileage of highway, the tax burden has been increasing more rapidly than in the wealthier counties. Now the highway finance is a sort of complicated thing we have to pick apart and consider in its various aspects.

"We first come to this item: The State has a highway system of approximately thirteen thousand miles made up of two kinds of highways—state highways, which are built wholly at the expense of the State, and county highways which are built at the joint expense of State and counties. The State pays 65 per cent and the counties 35. Commissioner Brandt projected the probable cost to the counties of building our state highway system and after he had projected it I had the statistician of the Tax Department reduce it down to the common denominator as to its relative burden by counties. I reduced it to the basis of what it would cost per thousand dollars of taxable valuation because the counties will either have to raise a county tax and pay their share of the cost, or issue bonds. That would not be only the real property of farmers but of all other taxpayers, and I found that the burden per thousand dollars ranged from a low of 57 cents in the County of Erie (a wealthy county) to a high of \$46.45 in the County of Yates (a poor county).

More Than Eighty Times Greater

"Perhaps I can make this clearer. Assume that one of you owns a ten thousand dollar farm in Erie County. He could pay \$5.70 once and he would have completed his payment of the cost of completing the state highway system; whereas, if he owned the same farm in Yates County it would cost him \$464.50.

"Therefore, I have concluded, and I think that many agree with me that the cost of completing the state highway system under existing conditions is not equitable and just, and that the State should and can without any injustice or any unfairness to other groups of taxpayers more equitably distribute that burden."

State Should Help More

In trying to understand this tax problem as it applies to roads, it is necessary to remember that there are many different kinds of roads to consider. There are the town dirt roads, the county roads, and the State highways. Involved in the problem also is the building of bridges on these different roads. Under the present system, the State assists to a limited extent in the building and maintenance of the roads and bridges. The chief remedy which the Governor's commission is concentrating on is to get the State to assume more of the burden of road and bridge building, thus relieving the localities.

On the county and state highways, there still remains to be built under present plans about 2,800 miles, of which 65 per cent is to be contributed by the State and 35 per cent by the counties. To complete this 2,800 miles, which will probably require ten years, will cost the counties \$54,215,000, or an average annual cost of \$5,400,000. The great bulk of these roads yet to be built are in the rural counties, for the counties in the metropolitan area have finished their roads years ago. It is not difficult to see that if this system continues, local taxes are going to continue to mount higher and higher.

The Cost of Bridges

As stated above, added to the difficulty also is the problem of building bridges.

Get bigger, better crops



Superior Black Hawk Spreader pays for itself in one year's use

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A SPREADER that doubles the crop-producing value of manure. That's what farm experts say about the Superior Black Hawk Spreader. And no wonder. It has a record of increasing crops and profits wherever it goes to work. It gives results that farmers have never been able to obtain before. It pulverizes finer. It spreads more evenly. It makes manure go farther. It does the job as no other spreader can do it—a job that means earlier, bigger, better crops—a job that puts extra money in your pocket.

No other spreader like it!

Talk to owners about the Superior Black Hawk. Examine one. Compare it with other spreaders. You'll see at once that the Superior Black Hawk offers new improvements and features found in no other spreader. It's built low to save time and work. The safety seat can't

tip or tilt, but can be turned out of the way when loading. It has automobile type mounting that gives a right angle turning radius. And because of closer hitch, shorter wheel base, more even load distribution and most efficient power transmission, it's the easiest hauling spreader ever built.

Amazing new features

An exclusive eight bar beater with shredding teeth which cut the manure every $\frac{3}{4}$ of an inch across the entire width of the bed, beats the manure into fine particles. These particles are tossed into the powerful, high-speed, eight blade hammer-mill type pulverizer which still further whips and shreds the manure.

Then the criss-cross action of the blades insures the pulverized manure being laid in an even swath that extends a foot or more beyond the wheel tracks. Every load of manure is deposited in a way that gives maximum fertilization and utmost conservation of moisture.

More for your money

Another thing to consider in buying a spreader is long life—something you're sure of getting if you buy a Superior Black Hawk. Here's why. The Superior Black Hawk has 4-inch wood cushion

shock insulation that absorbs jolts and jars. It has Alemite lubrication that prevents wear. The spreader bed is specially treated to resist the destructive action of acids in manure. There are but few moving parts. Yes, the Superior Black Hawk is designed and built to stand up and deliver care-free service under all conditions.

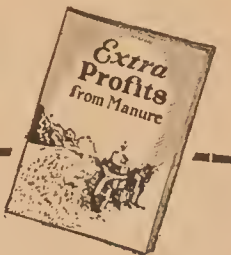
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State

Under the present system, the State pays 65 per cent of the cost of the bridges on the highways forming a part of the highway system, and the counties pay 35 per cent. It will probably require twenty-five years to rebuild all the bridges, at a total cost of \$100,000,000, the counties' share being \$35,000,000.

The State is appropriating \$3,000,000 annually to this purpose, which means that the counties must put up about \$1,550,000 annually. As a majority of these bridges are in the hilly and mountainous rural counties, almost all of these rural counties will be called upon to pay more for bridges in the next twenty-five years than any of the wealthy counties.

Must Tax Gasoline

Therefore, the whole problem comes down to getting legislation passed that

will increase to a very considerable extent State aid to the localities for building bridges and roads. But before the State can take on this much heavier burden of road building, it must find some way to increase its income, and the first suggestion turned to by the Governor's commission was to put a tax of two cents a gallon on gasoline. New York is the only state left in the Union without such a tax. If the money from the gasoline tax is used by the State for road building and maintenance, then it would put the cost of building and maintaining roads on the people who use them; that is, on those who own motor cars. Therefore, a gasoline tax was the first recommendation by the Governor's commission.

The second recommendation provided as follows: "That of the revenue to be derived from the gasoline tax, at

least 40 per cent shall be used and applied to effect an equalization of the burden of constructing county highways and to relieve the towns of their respective shares of the cost of the maintenance thereof; the remainder of this 40 per cent to be apportioned to the counties for the purpose of aiding them in developing a secondary or lateral system of improved highways."

The commission also recommended that "in respect to bridges on highways yet to be constructed the cost shall be in the same proportion as the cost of building that highway."

"As regards bridges on state routes heretofore completed, the State shall bear the entire cost, and as regards bridges on county highways heretofore constructed, the respective counties

(Continued on Page 2i)

A HALF FERTILIZED FIELD

IS LIKE
A ONE-PRONGED FORK

A one-pronged fork can work the stuffings out of you, but it can't deliver the goods—it just can't give results.

Neither can a poorly fertilized field. You can plow and plant and work all you choose, but if there isn't enough of the right kind of plant food in the field, don't look for a full crop. Experiment stations and successful farmers everywhere have proven hundreds of times that it's the properly fertilized fields that bring in the big, early, money-making crops. Ask those near you who

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They will tell you that the best investment they make is the money they put into fertilizer of known high quality, and they prefer Royster's. Farmers have been buying Royster's with assurance for 44 years. Bigger demand now than ever before. It must be right. High quality, easy to put down, always fairly priced. A perfectly blended, perfectly aged, perfectly balanced formula for every crop. You can best afford to use Royster's because Royster's pays you best. See the Royster dealer near you.

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SENSATION—One of the most productive oats in cultivation, 75 bu. and upward per acre are frequent, with large, white, meaty grains weighing 44-46 lbs. per measured bu. of the highest quality. We are making an exceptionally low price in quantities. You should by all means try these oats. Also Early Clarage and White Cap Seed Corn, Bearded and Smooth Barley, Soy Beans and Sweet Clover. Write us for samples and prices.

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25 MASTODON . . . \$ 1.00
50 MASTODON . . . 1.75
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E. W. TOWNSEND & SONS OLD RELIABLE NURSERIES
30 Vine St., Salisbury, Md.

Potato Prospects for 1929

(Continued from Page 3)

consume the grocers can pay growers the same price that it would cost them to buy carloads in Aroostook, Steuben County, or Michigan, pay the freight to their city and then break up the car. Always of course provided that the local potatoes were as good as those imported.

There must be good reasons why these two potato sections exist side by side or one would crowd the other out of business. Each has its advantages. Most of the trucking section has been settled from 75 to 300 years. Land is often high, and labor costs high by reason of city competition. Most of the land in the eastern part is rough or stony. Through the Corn Belt summer heat often forces down yields. The trucking section grows potatoes because of higher prices and in spite of high production costs.

Most of the carlot section is newer and cheaper land. Nine Rocky mountain and Pacific states raised 79,616,000 bushels in 1927 against 32,390,000 in 1907. Most of these were from irrigated land, largely made possible by federal loans for reclamation. The new land is so rich and free from weeds that, under irrigation, Colorado has its 600-bushel club, one member of which raised 1,067 bushels in one acre in 1928. Michigan, Wisconsin and Minnesota have large areas of recently cleared, cut-over lands. Maine is growing six times as many potatoes as it did thirty years ago. These states grow potatoes because of the advantages of cheap, new and rich land, often irrigated, in spite of the cost of railroad freights of 54 cents per 100 pounds from Aroostook to New York and 77 cents per 100 from Idaho to Chicago.

Increasing Yields Per Acre

For the last seven years the average yield per acre has never been under 104.6 bushels which was the yield in 1925. Previous to 1922 that yield was only exceeded six times in records going back to 1866. It is plain that we have either had seven marvelous seasons in succession, or else we must look for similar yields in the future. The first reason for this increase, in point of time, was the rapid expansion of potato growing on newer lands, largely under irrigation. At the same time the rough and hilly state of New York dropped from 441,000 acres in 1907 to 284,000 in 1928. Growers in these new sections specialize in potatoes, using the very best seed, tools and methods.

The next reason is the steady increase in the use of fertilizers from a small beginning along the coast before 1900. The high yields of Maine and Long Island are largely due to heavy fertilization. I was quite surprised last winter when talking on potatoes at the North Dakota Agricultural College, Farmers' Week, to have several questions on the use of fertilizers.

The third great cause of the recent increased yields is the use of certified seed. From a small beginning in 1914, production has expanded by leaps and bounds till in 1928 over 15,000,000 bushels of certified seed were grown in the United States and Canada. It has been said that the gauge of the prosperity of a potato growing section is the amount of the certified seed it uses. Perhaps this statement goes too far, as Virginia showed last summer, but there can be no doubt that the use of low-disease seed has done much to increase yields. Certified seed is very cheap this year and will help to raise the probable 1929 yield per acre.

What Will Be the 1929 Acreage?

What will be the acreage planted? We can only guess. My own guess is based on study of potato yields and prices in different sections, together with letters from many correspondents from all over the United States and Canada.

First, I look for the heaviest decrease in acreage in the southern crop. It was the section hit hardest by low prices. I do not look for a very heavy decrease in the great trucking section. Here and there in it were located spots where too many potatoes were grown

for the local trade and competition among growers forced the price down. Some such spots will cut, but as a rule prices to growers in the trucking section, while not high enough to yield big profits, were at least high enough to keep them from cutting acreage.

Lastly, we have the great carlot area from Maine to Washington. A large number of growers and shippers over all this territory have been so discouraged by the low prices to date that they have held a number of meetings and organized a committee of eighteen to study the potato industry and attempt to find a remedy for the over-production and low prices of the 1928 season. A number have been proposed. One was for compulsory grading of potatoes at the point of origin. Going on from this, a second plan was to have a government board set up with power to prevent interstate movement of any potatoes in over-production seasons except those grading U. S. No. 1. The opponents of this plan point out that when the English government tried this plan to raise the price of rubber, it only made a bad matter worse. Lastly, there is a strong agitation in favor of a general reduction in potato acreage.

Who Will Reduce Acreage?

Will that take place? I am getting letters from all over the northern and western carlot area and one idea seems to prevail in nearly all sections. It is agreed that potatoes are sure to be very low unless a big cut is made, but nearly every section wants the others to do all the reducing and let that one hold its own planting. It is the old, old story of "Let George do it."

Growers nearly everywhere remember the profits of 1925 and 1926, that 1927 was profitable in spots, and that we have had only one year of real disaster—1928. It will be only human nature if most of them hold on. The nine far western states are peculiarly fortunate in that so much of their crop is of the Idaho Russet or Nette Gem variety. This variety is commanding a premium of 50 to 75 cents per 100 pounds over northern round whites in the markets of middle western cities. Perhaps Aroostook will cut acreage, but after the way those boys stuck to their guns through three bad years in succession I do not look for one bad season to scare them.

If there is any real cutting in the main crop acreage I look for it in the carlot shipping section from western New York through Michigan, Wisconsin, Minnesota, the Dakotas and Nebraska. Prices have been the lowest and losses greatest here.

Another class that may cut planting is what the far western growers call "boot-leg" acreage, grown by men of little experience in potatoes but attracted by high prices. Many druggists, doctors, barbers and pool-room keepers will drop their potato speculations in 1929.

I do not look for a total cut of over 10 per cent or down to about 3,500,000 acres. We have every right to expect that it will be bad business judgment to grow potatoes in 1929 unless the grower is absolutely sure that he either has production costs considerably below those of the rest of his section or else a certain local market at prices above most of the United States.

How to Cut Costs

We know that potatoes have been selling all the fall below the five-year pre-war average. We know that city labor receives wages 140 per cent above pre-war, and that the farm labor we get now also costs that much more. The use of 1914 potato production methods may mean ruin. The first thing in 1929 plans is to cut the worst cost, labor, by using every possible labor-saving tool. Hand planting, hand hoeing and hand digging is too expensive to compete with machine tools.

The next is to make sure that the seed used will give as near to 100 per cent of good hills as possible. Land, labor and fertilizer costs just as much for a skip or a diseased hill as for a

(Continued on Page 20)

BUSH and SMALL FRUITS

Pruning Bush Fruits

What system should be followed in pruning blackberries and raspberries?—G. W., Pennsylvania.

BLACK raspberries, purple raspberries and blackberries are usually pinched back the first summer to keep the canes down to reasonable length and to stimulate the development of laterals. This pinching back is done when blackberry and purple raspberry canes are from 24 to 30 inches high and when black raspberry canes are from 18 to 24 inches high. The laterals are sometimes pinched back when they are about a foot long. This summer pinching back of red raspberries is not advised because it develops a lot of new sprouts which are likely to winter kill or at least not to produce heavily. After the crop is harvested, the old canes should be taken out and burned as soon as possible.

A New Variety of "Black Caps"

There seems to be a smaller acreage of black raspberries than formerly. What is the reason for this and are there any varieties you can recommend for planting?—F. A., New York.

THERE are two reasons for the decrease in the acreage of black raspberries grown: first, there are certain diseases which cut down yields; second, there are other varieties which have proven more profitable. The New York Experiment Station states that black caps should increase in popularity. A new variety has been recently developed named the "Dundee" which is recommended by this station.

Renewing the Strawberry Bed

Is it profitable to attempt to grow two crops of strawberries from one planting, or is it best to set a new plantation each year?—F. R., New York.

THIS will depend to a considerable extent on the care that is taken of the crop. Where they are grown commercially, fertilized heavily and kept free of weeds, it is probable that it will pay to grow two crops. Following the first year's harvest, the field is mowed and then the old rows narrowed down to about a foot in width by plowing one or two furrows on each side. Production is often stimulated by a top dressing with stable manure or some fertilizer carrying available nitrogen. If the patch is not well cared for so that it becomes weedy, we believe that better results will be secured by setting out a new patch.

Sheridan a Promising Grape Variety

Is there any variety of grape which is likely to prove equal to the Concord?—W. C., New York.

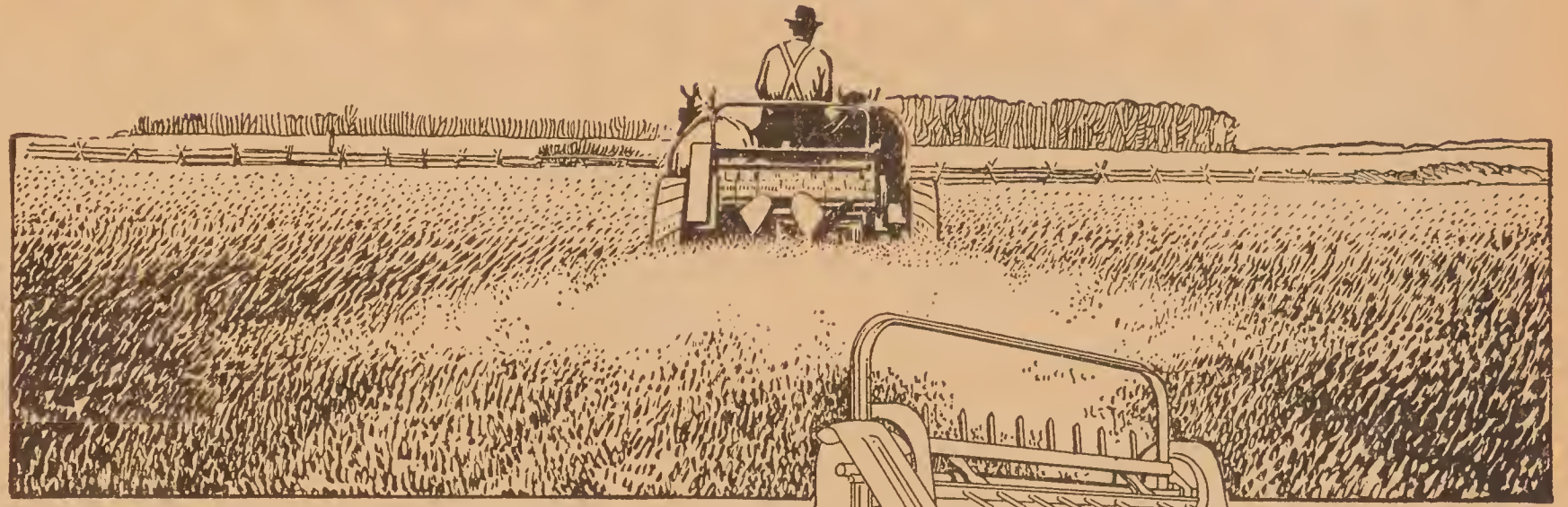
THERE are, of course, a few early varieties which were on the market before the Concord, but up to date the Concord has proven the standard late variety for the eastern territory. There is a late variety which is rather highly recommended. This is called the Sheridan and is a cross between the Worden and the Herbert. This variety is so new that it has not been grown to any great extent commercially but experience indicates that it at least is equal in size, a heavier bearer and that it shells less than the Concord.

Winter Injury to Grapes

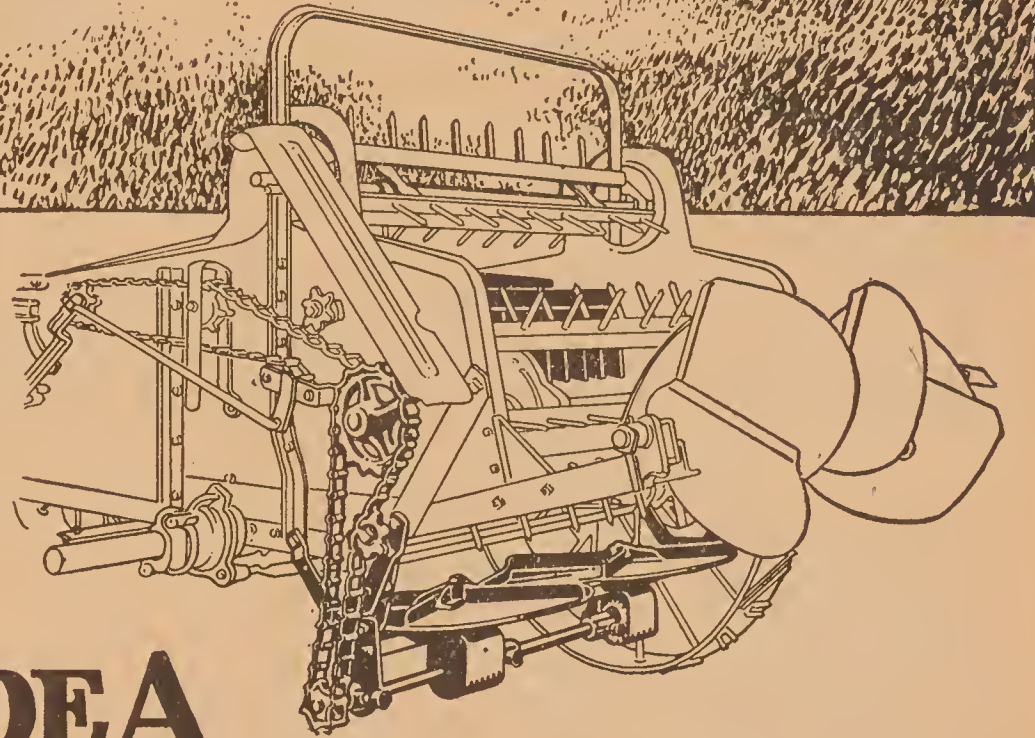
Can you tell us what causes winter injury of grapes and how to prevent it?—W. A., New York.

OF course, some winters are more severe than others. It is believed that it is not so much a low temperature as it is a rapid change of tem-

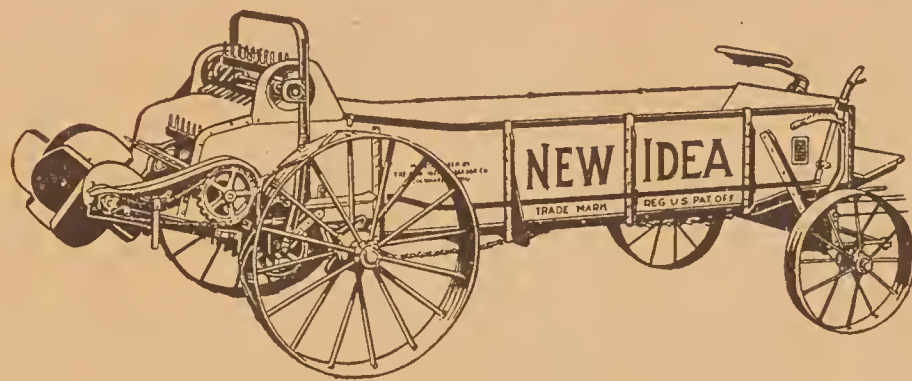
It Had to Come!



MANURE, the great fertility restorer — and LIME, the great fertility releaser! Naturally the inventors of the first and most famous manure spreader again lead in making their machine convertible into the finest one-man, wide-spread lime sower on the market.



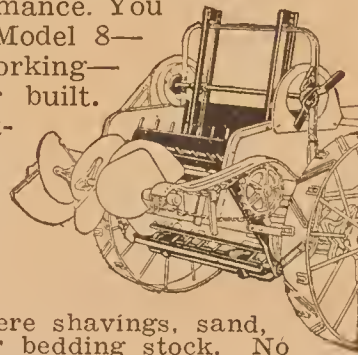
The NEW IDEA Lime Spreading Attachment



NEW IDEA, leader in every spreader improvement, again shows the way with this remarkable Lime Spreading Attachment. Easy to put on and off; perfect in performance. You certainly want the famous New Idea Model 8—light running, easy loading, flawless working—the lowest cost-per-year spreader ever built. And now—since you can get this lime attachment—you want the New Idea more than ever. Every owner of a New Idea Model 8 should write at once for description of the new attachment.

Special Tail Board Attachment

Handles the difficult manure resulting where shavings, sand, sawdust or similar materials are used for bedding stock. No loss; perfect spreading. Furnished as an extra.



A simple, strong, low-cost device that attaches to any New Idea Model 8 Spreader in thirty minutes or less and makes of it an absolutely practical, perfect-acting lime sower. Load the box, set the feed (1½ to 5 tons per acre) and spread—no shoveling back of load, no dusty labor. Handles lime, marl—anything that is finely pulverized. Large capacity. Spreads 15 to 20 feet wide. Built the New Idea way, furnished only for the New Idea Spreader.

Manufacturers of Spreaders, Lime Sowing Attachments, Husker-Shredders, Transplanters and Two Row Corn Pickers. Ask for full descriptions on any of these machines.



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Factory at Coldwater, Ohio, U. S. A.

perature which causes winter injury. Conditions which make this type of injury likely are: first, growth of wood late in the fall which does not have time to harden up properly; second, a soil that is not thoroughly drained; third, a weak vineyard which is not up to the standard due to disease or lack of care. Probably the best measure to take to prevent winter injury is to locate the vineyards on properly drained soil and to manage cultivation so that the canes have plenty of time to become mature before winter sets in.

May Develop Blight Resistant Chestnut

WE recently received an interesting letter from Dr. John Stuart Thomson calling our attention to a letter from the U. S. Department of Agricul-

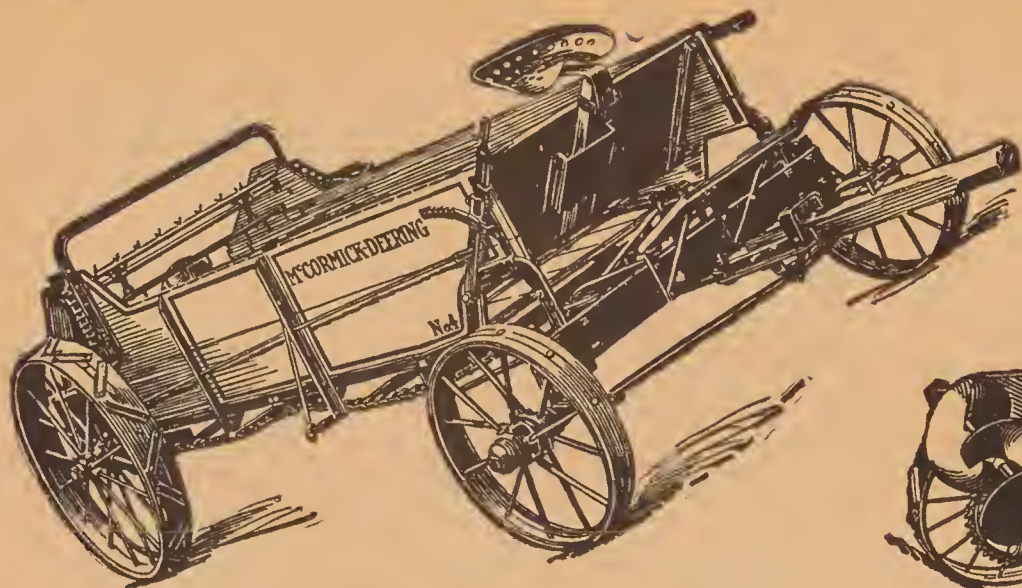
ture with reference to the chestnut tree.

"With reference to your recent letter to this department, the American chestnut tree is not likely to be exterminated, due to the wonderful fact, after many years, that some of the sprouts in some of the older parts of the infected regions are now reaching sufficient size to produce nuts. It is just a sprout here and there that is able to reproduce, but we think that these few will be sufficient to keep this great species of trees in existence for many years. It is not nature that is committing suicide in bowing to this chestnut blight. The blight was brought to this country from Asia and so it is man's interference that has caused the death of the chestnut tree in America.

This office is interested in locating unusually resistant sprouts of the American chestnut tree which are producing seed, and if you or your friends come across any, we would appreciate receiving information regarding the exact location of the sprouts and the name and address of the owner."

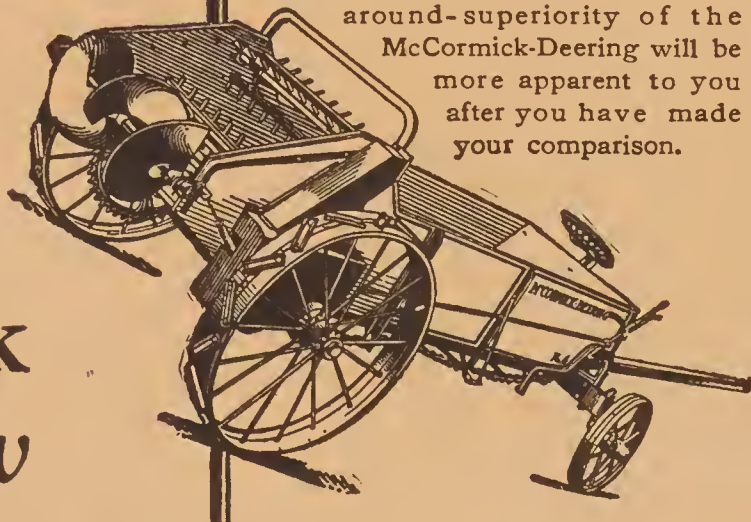
We are passing this along to our readers with the thought that some of them may have observed sprouts such as those mentioned in the letter and that they would be interested in forwarding the information to the U. S. Department of Agriculture.

Oxalic acid crystals dissolved in hot water will bleach discolored wood surfaces that are to be varnished. The solution is poisonous.



Compare it with any other Spreader

PART BY PART, feature by feature, and as a whole, compare this new, perfected McCormick-Deering Manure Spreader with any other. The inbuilt excellence and all-around-superiority of the McCormick-Deering will be more apparent to you after you have made your comparison.



Any way you look at it . . . the new **McCORMICK-DEERING** is better!

EVERY improvement that could possibly be built into a mechanical spreading unit has been embodied in the construction of the new perfected McCormick-Deering Manure Spreader.

Loading is made easier, because the new wedge-shaped, reinforced, 67½-bushel box is built to elbow height. Even a very short man can load this spreader in double-quick time because of the squat, low design. The proper distribution of load and spreader weight on the four heavy-duty wheels, and the correct use of Alemite lubrication and roller bearings at all important points makes a full-capacity load on the new McCormick-Deering an easy pull for two horses.

If you do not own a spreader, or if you are planning to replace the one you now have with a more modern, efficient type, by all means let the McCormick-Deering dealer demonstrate this new, perfected McCormick-Deering No. 4. Examine the many exclusive features that combine to make the job of spreading easier, more thorough, and quickly completed. You will find that any way you look at it, the new McCormick-Deering is a better spreader.

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Mark the date. The latest cost-reducing, labor-saving power and equipment will be displayed. Visit the McCormick-Deering dealer.



Features of the new McCORMICK-DEERING Manure Spreader



NEW pulverizing and shredding mechanism; new wide-spread spiral; positive chain drive; patented feeding mechanism; six conveyor speeds; roller bearings at important points; low, easy-loading box; convenient levers; forward-swinging seat; narrower width; heavy-duty wheels; Alemite lubrication; cold-drawn, steel rear axle; tracking front and rear wheels; short turning radius; protected working parts; greater capacity—57½ to 67½ bushels.

Ask the **McCORMICK-DEERING** dealer in your town for a demonstration

Some Problems of the Apple Grower

(Continued from Page 5)

ditions? I venture to hope that there may be a concentration of our scientific horticultural resources on these practical questions of vital importance to us awaiting solution and practical application.

Co-operation Needed

Aside from the personal problems of production, which are individual, there are many important problems before New York growers which, in my opinion, can never be solved without co-operative organization in some form. The best grading and standardization can only be obtained by voluntary collective action. Adequate advertising certainly calls for co-operation. The efficient and economical marketing and distribution are to be effected through the volume and the control which are secured only by voluntary association of many growers for these purposes. How else shall an orderly sufficient and yet not too great a supply flow to the channels of consumption? Why should we disregard the experience and the conclusions of industry in Europe as well as in America?

Nearly 30 years ago a certain young man in his teens was walking home from the railroad station on a cold winter's night. He had been attending the annual meeting of the Horticultural Society in the City Hall Chambers in this city. When he reached home he was so full of enthusiasm for growing apples and for going to college to learn more of the business of farming, that he stayed in the kitchen for more than an hour telling his mother of the plans and ambitions that had been stirred in him.

Do our horticultural meetings of today affect our boys that way? Are they fired with new enthusiasm to follow their father's business and mode of life? Are our programs furnishing the inspiration to the generation to come who must carry on the industry? I hope so. For scientific facts and practical experiences are but dry inert matter without the inspiration of the will to go. They are like a fine automobile without a guiding brain at the starter and wheel. If we have the future of the industry in our hearts we will look well to the inspiration and encouragement of our youth who must succeed us.

The Future

In conclusion I would leave with you this thought: Is it not time that we stopped feeling sorry for ourselves and to begin a constructive program of modernizing our industry?

The value of our lands and our orchards is at least in part what we think it is. If we do not value them highly, who will? Let us talk our farms up, not down. New York farms are still good places to live and to grow fruit. Tell the world. Talk it up. Boost don't knock.

Let us get ready to celebrate the 75th anniversary of this great society in 1930, with a positive constructive revival of our fruit industry.

A New Book

"MARKETING: A Farmer's Problem", is a new book by Benjamin F. Goldstein, A.B., LL.B., member of the Chicago bar. Mr. Goldstein has made a thorough study of grain shipping and marketing as far back as 1832 and brings the subject up to the present date. He makes three facts plain and prominent. 1—Chicago is the greatest marketing center in the United States. 2—The present marketing machinery is antiquated, cumbersome, inefficient and wasteful. 3—First, last and all the time, marketing is a farmer's problem.

Mr. Goldstein does not attempt to promote some pet cure-all of all marketing ills, but gives historical facts and figures showing the movement of commodities besides furnishing a full index and appendix of special value as reference in marketing studies. In addition to its background of historical facts, it is interesting for the layman to read. The Macmillan Company, \$3.50.

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FARMERS BUY FROM FARMERS

Let us suggest for you as breeders the best ages to breed. Chester White Cross, color white, Berkshire Cross, color black and white. Our prices may be a little more, but you will get good, large, healthy stock from our real type strain. Milk feeders 5 to 6 weeks old, \$3.50 each; 7 weeks old, \$3.75 each; 8 to 10 weeks old, \$4.00 each. Will ship C.O.D. from 2 to 50 at the above prices. These pigs will make large hogs in short time. If in any way dissatisfied with the pigs, return at our expense.

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BEST GRADE Chester, Berkshire and Poland China Pigs. 3 months old, \$12.00 each; 6-8 weeks old, \$7.00 each. (Express Paid). Bred Sows and Boars. C. E. BOSSERMAN, York Springs, Pa.

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7 to 8 weeks old.....\$3.75
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Satisfaction guaranteed, or money refunded. 10 days trial allowed. Crates supplied free. A. M. LUX, 206 Washington St., Woburn, Mass. Tel. Wob. 1415.

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Heavy legged, square backed, Chester and Yorkshire crossed, Poland China and Chester crossed, Barrows, boars or sows—8 to 10 weeks old, \$4.00 each. Fancy Berkshires, also Chester Whites, 2 months old Sows and unrelated Boars, \$5.00 each. 10 days trial or your money back. Shipped C.O.D. Crating free of charge. Yours for quality hogs.

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With the A. A. Dairyman



A Power Machine for Sawing Ice

A VERY cheap and serviceable power

By I. W. DICKERSON

fasten it to the foot) as this makes

ice saw can easily be made by following these suggestions and the information given in the accompanying diagram (D-520). This as made up used an ordinary 3 H. P. hopper cooled engine, which with two men would cut at the rate of about 30 cakes per hour; but for community ice packing, where such an outfit is most often used, an automobile engine would be better and faster. Such an engine could be installed with practically no change in the plan. With the 3 H. P. engine, a 10-inch pulley on the engine and the ordinary 5-inch pulley on the mandrel gives very satisfactory results, while with the automobile engine running about 1000 R. P. M., the engine and mandrel pulleys should be about the same diameter. It is quite important that the mandrel pulley be covered with leather to prevent troublesome slippage due to snow and flying ice dust.

Outfit Mounted on Sled

The diagrams should give most of the details of construction very well. After the frame is constructed it is balanced on a stout hand sled as shown, so that a little pressure on the handles will force the saw into the ice. The sled is pulled by the tongue or pole, the strips being kept of even width by means of the adjustable guide clamped on the sled runner and with a piece off a buggy or car spring to follow the previous cut. One good man can pull the outfit, with the operator shoving on the handles, but two men can handle it much more easily. It is well to have two or three holes in the braces supporting the handles, so they can be adjusted to the most convenient height.

Detail B shows wagon tire braces on which a guard can be built over the saw. This should project at the rear enough so one cannot brush against the saw and this guard must not be omitted, as otherwise a serious accident may result. All operators should wear ice creepers on their boots (which can be bought or can be made of a hardened steel plate with sharp points to go under the foot and with strap to

handling the outfit much easier. This same outfit can be set on a high bobsled or a short coupled low truck and then be used for sawing cordwood. It would only be necessary to add a simple tilting or sliding table to push the logs up to the saw. This would add a great deal to the practicability of the outfit.

Supplying Summer Green Feed

We are convinced of the necessity of feeding cows as soon as pasture becomes short but are undecided as to whether it is more profitable to raise green stuff to feed in the barn or try to raise silage enough to feed both summer and winter.

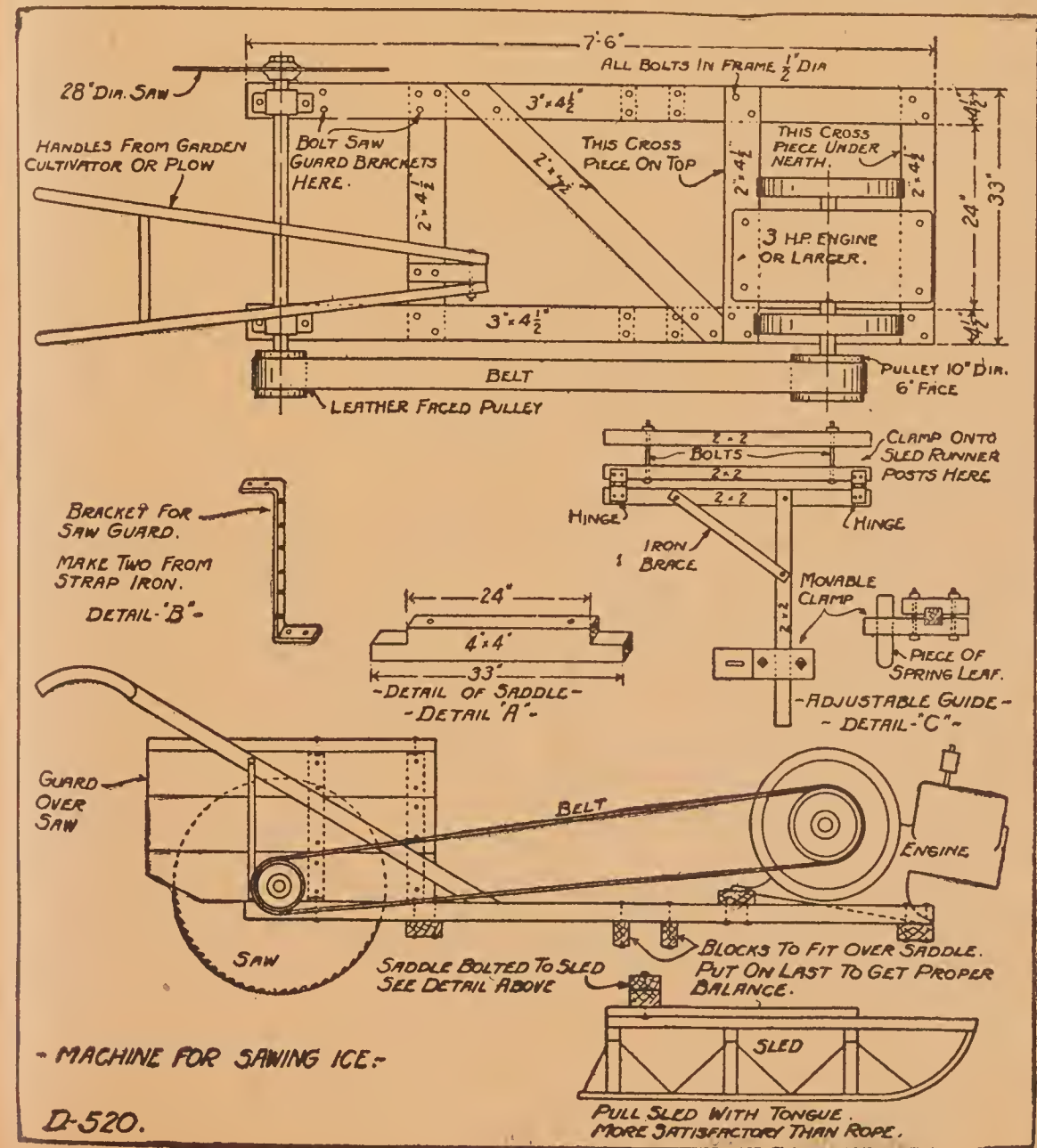
THE best practice will depend to some extent on conditions on the farm but we believe that it takes less labor to put up silage than it does to raise green crops. It is rather difficult to grow crops in succession so that the cows will have a steady supply during the summer and fall. If another silo must be built for summer feeding that of course will add to the investment in buildings. It might pay to grow green stuff on a specialized dairy farm where it would not pay to do it on a farm that grows cash crops at least if it caused the cash crops to be neglected. One thing at least is sure. The cows must be fed heavily to produce heavily.

Dairymen Build Pens for Herd Sires

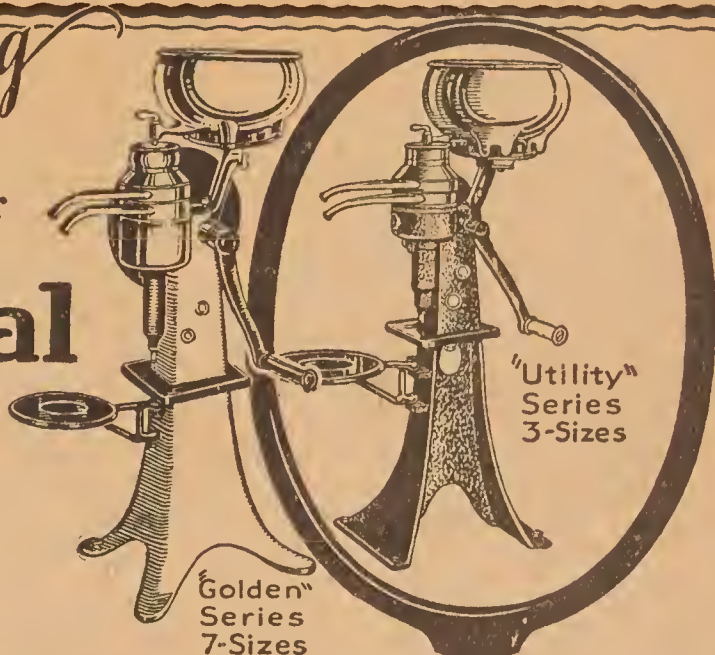
A CONTEST has been conducted during the past year in connection with the New York State Dairy Improvement Association. Each tester has been making special effort to interest members in building bull pens for the herd sire.

The contest was an informal one and no prizes were offered. Mr. R. L. Leonard, tester of Watertown Dairy Improvement Association has reported three pens built in their association as

(Continued on Page 18)



Announcing a NEW Member of the De Laval Separator Family



The De Laval "Utility" Series For a Lower Price Field

THIS new "Utility" Series of De Laval Cream Separators, together with the De Laval "Golden" Series, now makes it possible for more separator users than ever before to secure the advantages of De Laval quality and service.

While the "Utility" Separators enter a lower price field, they are De Laval quality machines in every respect. They differ from the De Laval "Golden" Series, which are everywhere acknowledged as being the world's best, only in color and several features which have nothing to do with their skimming efficiency.

In every other respect, including quality of workmanship and manufacture, they are the same. They will do exactly the same kind of work and give exactly the same kind of service for which all De Laval Separators are famous.

De Laval quality is now within the reach of all cream separator users and the "Utility" Series are ideal for the users who have always wanted De Laval but have thought, perhaps mistakenly, that they were beyond their means.

See and try a De Laval before you buy. Both De Laval "Golden" and "Utility" Series Separators skim cleaner and give better and longer service than any others. They are sold on such easy terms they will soon pay for themselves. Trade allowances made on old separators. See your De Laval dealer or send coupon for full information.

De Laval Milkers

DE LAVAL Milkers are now milking more than one and a quarter million cows every day, in all parts of the world. Why not milk the De Laval Way—the modern way—and get more profit, satisfaction and pleasure? With a De Laval one man can milk from two to three times as many cows as a hand milker, do a better job, produce cleaner milk, and with a fraction of the effort. Outfits for one to 1000 or more cows. Sold on easy terms.

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New York, 165 Broadway Chicago, 600 Jackson Boulevard
San Francisco, 61 Beale Street
Send catalog checked — Separator ☐ Milker ☐
Name _____ Town _____ State _____ No. Cows _____ R.D. _____

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a livestock Doctor Book without cost. Find out why your cows lose calves—why they retain the afterbirth—why they fail to breed—why they have garget—why your calves have scours and goiters—why you have a shortage of milk. Veterinary Advice Free. Write to
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Clipped and Groomed Cows are clean and comfortable and keep dirt out of the milk pail. Clipping and Grooming improve the health of your LIVE STOCK. GILLETTE PORTABLE ELECTRIC CLIPPING AND GROOMING MACHINES OPERATE ON THE LIGHT CIRCUIT furnished by any Electric Power Co. or on any make of Farm Lighting Plant.

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40 Years Making Clipping and Grooming Machines Only.

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EVERY Economy Silo is equipped with Anchoring System that makes it absolutely permanent. It can't blow over. Every convenience. A-1 material. Also silos of Tile and Cement Stave. Catalog and manufacturer's prices on request.
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Reviewing the Latest Eastern Markets



Your Egg Money

While the raising of poultry and eggs is only a sideline for most farmers—you can without turning your farm into a poultry ranch bring a fine extra income from eggs. It is a simple matter, too, requiring only proper housing and poultry equipment and a few minutes' daily care.

Use a correctly designed and built incubator to hatch your eggs and dependable brooders to bring up your chicks—and in no time at all and seemingly without effort, you will have a fine flock that will pay handsome dividends next fall when eggs are the most profitable. The selection of your equipment is of vital importance. That is the reason that our "Farm Service" Hardware Stores are such dependable places to buy poultry equipment. Our close, contact with farmers around you and the knowledge of their results have been our guide to the selection of the best. Get your poultry supplies at your "tag" store as the first step to more "egg money."

Your "Farm Service" Hardware Men.



Your Farm Service HARDWARE STORES

Milk Prices

The following are the January prices for milk in the basic zone of 201-210 miles from New York City.

Dairymen's League prices are based on milk testing 3.5%. Sheffield on the basis of 3%.

Class	Dairymen's League	Sheffield Producers
1 Fluid Milk...	3.42	3.17
2 Fluid Cream		2.30
2A Fluid Cream	2.46	
2B Cond. Milk..		
Soft Cheese..	2.71	
3 Evap. Cond. Milk Powder		2.30
Hard Cheese	3.00	
4 Butter and American cheese. Based on New York City Market quotations on butter and American cheese.		

The Class 1 League price for January 1928 was \$3.37 for 3.5% milk and Sheffield's \$3.27 for 3%.

The above prices in each class are not the final prices the farmer receives. The final price received from the dealer is the result of the weighted average.

Butter Prices Recover

CREAMERY	Jan. 23	Jan. 16	Jan. 25, 1928
SALTED			
Higher than extra	48 -48 1/2	47 1/2-48	47 1/2-48
Extra (92se)		-47 1/2	-46 1/2
84-91 score	43 1/2-47	43 1/2-46	41 1/2-46 1/2
Lower Grades	42 1/2-43	42 1/2-43	40 -41

The butter market has recovered some of the lost ground that we reported last week, buyers having taken hold with more confidence following a close clearance of fresh receipts. Furthermore street stocks have been reduced to a point that there is not the pressure to move goods that was so in evidence last week. Furthermore the consumptive demand seems to have responded in some degree to the reduced retail prices with the result that more stock is entering retail channels.

In spite of the improved position of the market there are many who are still apprehensive. For one thing a large number of shipments have been delayed in the West due to heavy snow storms, and these are arriving all in a bunch so that when all of this delayed stock arrives we may see more butter on hand than the trade will readily use. However, in spite of these delayed shipments which have tended to swell our current receipts, receivers seem to be managing to keep stock moving to a reasonable degree. There is no snap to the demand but at the same time goods seem to keep moving and the undercurrent of sentiment is that prices are on the upward trend.

Fresh Cheese Prices Lower

STATE FLATS	Jan. 23	Jan. 16	Jan. 25, 1928
Fresh Fancy	24 1/2-25 1/2	25 1/2-27	26 -26 1/2
Fresh Average			
Held Fancy	27 1/2-29	27 1/2-29	29 -29 1/2
Held Average			

Fresh cheese has at last been compelled to give way in face of the pressure of the bears. For a long time fresh cheese has not been any too strong. Owing to the fact that receipts were very limited, the market has been able to maintain an unchanged price level. Now, however, we have reached the point where prices can not hold any longer. The easier condition of the market, which first developed in Wisconsin, has carried prices down a full cent. At this writing it is possible to buy fresh fancy specials at 25 1/2c, with cheese that would rate under ordinary conditions as fancy at 24 1/2c. Even short held goods can be had for 25 1/2c. Cured stock on the other hand continues firm with prices fully sustained.

Storage stocks have been reduced considerably although the surplus over a year ago has been cut down but very little. From January 10 to January 17, over 500,000 pounds of cheese came out of storage in the ten cities making daily reports. Those same cities however, still carry over 5 1/2 million pounds more cheese than they did a year ago.

Egg Market Unsettled

	Jan. 23	Jan. 16	Jan. 25, 1928
NEARBY WHITE			
Hen's Sol. Extras...	47-48	47-49	46 -47
Hen's Av'ge Extras...	45-46	44-46	45 -45 1/2
Extra Firsts	42-44	42-43	44 1/2-45
Firsts	41-	41-	44 -
Undergrades	-39		
Pullets	35-36	35-36	43 -
Pewees	30-33	30-33	
NEARBY BROWNS			
Hennery	46-	44-45	49 -
Gathered	38-45	38-43	47 -48

The egg market has not been very settled since our last report. On January 18 top quotations advanced fol-

lowing a good demand for fresh eggs of all descriptions. Eggs from storage were firmer and the market as a whole tightened up. The cold weather in the central and southwest had given added firmness to the market, followed by a more temperate attitude when the weather turned milder. The market continued to hold steady until the 22nd when a little anxiety became apparent. A few receivers shaded prices on the 22nd and that was all that was needed to unsettle the situation. With that show of weakness buyers began to hold off. Buyers for the big chain stores have been inclined to take on round lots of Pacific Coast whites, paying little attention to nearbys, especially of the larger selections.

As we go to press the market is quite unsettled, the weather is going to have a whole lot to do with the development. Top grades of Pacific Coast whites are also a little easier but there seems to be a little better demand for mediums and pullets, both from the West Coast and nearbys.

Live Poultry Prices Lower

	Jan. 23	Jan. 16	Jan. 25, 1928
FOWLS			
Colored	28-30	-37	-26
Leghorn	28-30	-35	25-26
CHICKENS			
Colored	26-28	30-33	32-35
Leghorn	26-28	30-33	-27
BROILERS			
Colored	32-40	36-42	40-48
Leghorn	32-36	32-38	-38
CAPONS	36-38	37-41	35-45
TURKEYS			30-38
DUCKS, Nearby	29-30	30-33	29-33
GEESE	24-28	-28	25-32

The high prices for live poultry that have prevailed for the last two weeks have apparently had the effect of increasing supplies. From all appearances the week ending the 26th is going to see more stock on hand than the trade can absorb at satisfactory prices. At this writing on the 24th live fowls are selling slowly, express stock generally working out at freight values. Broilers are easy, being in liberal supply with more to come. Chickens are in some accumulation. On the whole we would not be greatly surprised to see a general reduction of prices before the end of the week. At times like this when a low market is almost sure to prevail, following a period of high prices, the shipper if he must consign stock in the face of a low market, should pay very close attention to his method of grading. A few inferior fowls of the dunghill type will carry an entire crate of good birds to a low level.

Potato Market About Same

	Jan. 23	Jan. 16	Jan. 25, 1928
STATE			
150 lb. sack	1.85-2.00	1.85-2.00	
Bulk, 180 lbs.	2.00-2.25	2.10-2.35	
MAINE			
150 lb. sack	2.00-2.35	2.10-2.25	3.00-3.35
Bulk, 180 lbs.	2.35-2.65	2.40-2.60	3.60-3.90
PENNA.			
150 lb. sack			
No. 1	2.00-2.25	2.10-2.35	
Bulk, 180 lbs.			
LONG ISLAND			
150 lb. sack			
No. 1	2.50-2.75	2.50-2.75	3.50-3.75
Bulk, 180 lbs.	2.75-3.10	2.85-3.15	4.00-4.35

The potato market is about the same as it was a week ago, here and there we see a few changes. Stock from up-state and Pennsylvania has slipped about 10c per 180 lbs. in bulk. Long Islands in sacks are unchanged, but again bulk goods are a shade off. Maines in sacks have widened in their quotations, both in sacks and bulk. In general the market holds steady although trade is quiet. We expect this condition to exist right along, subject of course to temporary conditions controlled by the weather.

Bermuda is shipping a few potatoes this way, the best generally bringing about \$8.50 with occasionally a few bringing \$9. Poor stock sells as low as \$4. No word yet from Florida, and we hope they keep their potatoes there for some time.

Poor Hay Not Wanted

Shippers of hay who have anything but No. 1 are advised to hold it back until the present market clears a bit. There is plenty of hay on hand with the exception of No. 1 which brings \$26 to \$27. Brooklyn is even a little weaker than New York. Timothy No. 2 has

been bringing from \$23 to \$24 for large bales, while No. 3 is generally from \$19 to \$21, with sample as low as \$14. Timothy containing mixtures of grass or clover, is quoted anywhere from \$17 to \$24.

Pea Beans Higher

Pea beans have again advanced so that they are now bringing \$10 for common stock, while choice goods bring

Market Reports Daily by Radio

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\$10.75 per hundred. Red Kidneys are still at \$8 to \$8.75 with Marrows from \$9.75 to \$12.50 depending on size and quality.

Feeds and Grains

	Jan. 23	Jan. 16	Jan. 25, 1928
FUTURES			
(At Chicago)			
Wheat (Mar.)	1.24 3/4	1.19 3/4	1.29 1/2
Corn (Mar.)	.97 1/2	.96 1/4	.87 3/4
Oats (Mar.)	.53 3/4	.50 1/4	.54 1/4
CASH GRAINS			
(At New York)			
Wheat, No. 2 Red	1.64 3/4	1.58 1/4	1.56
Corn, No. 2 Yel.	1.16	1.15 1/4	1.06 3/4
Oats, No. 2	.63 1/2	.61 1/2	.65 1/2
FEEDS			
(At Buffalo)			
Grade Oats	39.00	38.00	38.00
Spring Bran	34.50	34.00	34.50
Hard Bran	38.00	36.00	37.00
Standard Mids	33.50	33.00	34.00
Soft W. Mids	43.00	41.00	43.00
Flour Mids	39.00	38.00	38.00
Red Dog	41.50	40.50	40.50
Wh. Hominy	40.50	39.00	38.00
Yel. Hominy	40.50	39.00	41.00
Corn Meal	43.00	40.00	38.50
Gluten Feed			47.00
Gluten Meal			55.00
36% C. S. Meal	47.00	46.50	45.50
41% C. S. Meal	51.50	51.00	50.50
43% C. S. Meal	53.50	53.00	53.00
34% O. P. Linseed Meal	57.00	57.50	48.50

The above quotations are those of the local Buffalo market and are F. O. B. They are reported in the weekly letter of the N. Y. State Department of Agriculture and Markets.

Packing Corporation Organizes

A corporation known as the Hammon-ton New Process Packing Com-pany has taken over the patents and process of keeping fruit under nitrogen gas that were developed at Hammon-ton during the past summer. The offi-cers in the new company are: Thomas F. MacGregor, Philadelphia, president; Robert J. Ragan, Philadelphia, vice-president; Thomas B. Delker, Ham-monton, secretary; and Karl Johnson, Hammon-ton, treasurer.

The new company proposes to con-tinue packing fruit during the coming season under the nitrogen gas principle tried out last year. Other products will be packed in addition to peaches and apples. It also intends to license other corporations to use the process in other parts of the United States for the com-ing season's crop.

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Farm News from New York and Pennsylvania

Dairymen's League Buys Model Dairy---New York and Pennsylvania County Notes

THE plants and business of the Model Dairy Company of New York City, were purchased by the Dairymen's League Cooperative Association, Inc., recently. The business was established 28 years ago, and is the largest wholesale distributing concern in New York not buying supplies from the League. The business consists principally of a 2,000 can a day distribution of milk and cream to hotels, restaurants, clubs and steamships.

The country end of the business consists of nine shipping plants. There are located at: East River, Cortland county, New York; Herrickville, Bradford county, Pennsylvania; Heuvelton, St. Lawrence county, New York; Hommet's Ferry, Bradford county, Pennsylvania; Kast Bridge, Herkimer county, New York; New Albany, Bradford county, Pennsylvania; Rummerfield, Bradford county, Pennsylvania; Shurtleff's Crossing, Jefferson county, New York; South Kortright, Delaware county, New York.

New York County Notes

Chautauqua County—We are having our first real winter weather in the middle of January. The roads have not been blocked to auto traffic up to this time. This is the quiet time of the year in a farming community, not much doing but chores and getting wood cut. Prices here are as follows: butter 50c, eggs 34c, potatoes 75c, apples \$1.00, cabbage 2c to 3c, hay \$6.00 a ton at the barn, and cows \$100.00.—A. J. N.

In Northern New York

Franklin County—There is much sickness from grippe and influenza and while it is not so severe as previous epidemics, few families have escaped without one or more cases and there have been a few deaths. The weather has been peculiar. No sleighing for more than two consecutive days this winter. Farmers are worrying about getting ice, as few, if any, have their supply. A couple of times the weather has been so cold as to freeze ice ready for cutting on ponds and rivers but because of the difficulty of drawing on wagons people have waited hoping for sleighing. This week end with ice gone from ponds and rapidly going from the river, most everyone is agreeing that once ice forms again the ice houses will be filled if wheelbarrows have to be used!

Observant buyers predict a hay shortage in the North County this spring and many are already buying to supply their needs. Hay prices vary, some of the hay is of low quality because of the wet hayweather last summer. No very high prices have been reported so far but a rise will soon follow the big demand. Potatoes remain at 50 cents a bushel in most places but the quality is not very good. At a recent potato growers' meeting the question of Franklin County potatoes competing with others was discussed. It was generally admitted that while Franklin County potatoes were of good quality as a rule, the chances for competition were poor at present because of distance from markets, and—most of all—higher production cost and poorer grading. That last is the stumbling block of more than the potato growers it would seem.

An appropriation was recently voted by the board of supervisors for establishing a home bureau unit in this county. Headquarters have been arranged at 21 Webster street, Malone, and the first meeting was attended by over 40 women from all parts of the county. More would have been there but there was so much sickness many were kept at home on that account. Nine units have been formed and several more are expected. A cow testing association has been recently formed by leading dairymen of the county and is considered a big step forward for the industry. A board of directors was named at the first meeting who will have charge of the business of the association and the first testing was to be done January 15th. About 30 cows

a day will be tested it is planned. William Shields of Malone, was elected president of the Association, Charles McGibbon vice president, and Floyd Slum, secretary and treasurer. Harold Hill of Burke, was hired to take charge of the testing. Following this meeting a session of the Holstein Friesian Association of Franklin County was held. Mr. Bartz, of Saranac Lake, a recent delegate from the local branch to the Elmira annual convention, reported the meeting interestingly and also spoke on the benefit of a cow testing association. Clarence Collins, secretary of the club, spoke on "scrub bull elimination". Mr. Seaver, Treasurer and trust officer of the People's Trust Company of Malone, spoke on "Inventory and Credit".—Mrs. W. R.

Along the Southern Tier

Tioga County—Severe cold struck this section January 13th and it was from 6 to 8 degrees below zero on the morning of January 14. On January 16 the mercury was 9 below in Owego and lower farther north. That afternoon the weather became much warmer and a little snow fell during the night and the morning of the 17th rain fell and froze as it fell. Everything was covered with ice and sleet which melted considerably as the day advanced. There is very little snow on the ground.

There is a whole lot of illness with grippe, severe colds, etc., and an occasional case of flu, but as yet no epidemic as with the grippe. The Tioga county Farm Loan Association has 174 members to whom it has loaned \$436,500.00 on farm mortgages, eight new members accruing during 1928 and \$17,500.00 being loaned during the year. There are plenty of funds available for additional loans; the rate of interest is 5 per cent. The granges and various lodges are, or have been, electing officials for the ensuing year.

The "Smooth Tongued Artists" and passers of bogus checks have visited Nichols. They with their wives (so called) made a very favorable impression there with their ensemble of false representations. The party were good mixers and in a few weeks' time "mixed" that community out of several hundred dollars. Every transaction was accompanied by bogus checks large enough to leave them a handful of solid cash. They departed hurriedly on January 8th and although officers are on their trail, nothing as yet has been found of any of the quartette. They were lavish dressers and appeared prosperous and became popular, so much so, that on January 7th a "party" was given at the hotel in their honor.

The Tioga County Holstein Friesian club was awarded the second prize of \$75.00 in the "scrub" bull elimination contest conducted by the New York Holstein Friesian Association. A replica of a model dairy cow was also awarded the Tioga County club. This little piece of statuary was received on Monday, January 13th, and is at the Farm Bureau office in Owego.

The activities of the County nurses have been many and varied. They visit homes where aid is needed, they give medical advice in caring for all those who are ill, give advice against illness and are very busy all the while. Clinics of various sorts are given. Over 1500 have listened to the nearly 300 office interviews with patients and others. Surely these nurses are doing a good and commendable work—a blessing to the county.

Deer are seen on the Nelson Cable farm in the town of Tioga, one buck and three does. They seemed quite tame. About thirty people saw them before they went into the woods nearby. There was a grand turnout to the annual banquet of the Dairymen's League of Tioga County on January 12th in Owego, where 253 people were served. Speakers were: Paul Smith, Newark Valley; Mrs. Hope Minor, of the League's paper, and Fred Sexauer, president of the League. Nichols community orchestra furnished the music

which was delightful as was all the speaking and the banquet.

There has been quite a scarcity of water in many portions of the county all the winter so far, but the heavy rain of the 17th will undoubtedly remedy that situation for a time at least. The hard freeze of the forepart of the week has made fine ice and much ice is being harvested for the coming summer.—Mrs. D. B.

In the Hudson Valley

Sullivan County—Gathering ice is keeping the men folks very busy and all report nice clear ice. Eggs have taken a slide down hill as well as butter. A few days recently were very warm and rainy and all the snow soon vanished. Taxes for Sullivan County are reported lower than last year in most towns. There seems to be a stir again about the big dam New York is planning to build in Sullivan but no one is sure as yet.—P. E.

Columbia County—We had zero weather the first half of the past week. We had snow enough so that a team could haul wood with a sleigh. We had spring-like weather on Friday and Saturday. Flies, wasps and bees ventured out of their winter quarters for a change. Tuesday the Hudson-Athens Ferry Boat tide up for the winter on account of so much ice in the Hudson River. The Columbia County Poultry Association elected W. Wadsworth of Kinderhook for president for this year. Another poultry show is scheduled for 1929. A dog which killed sheep on the R. Rock farm was shot. The Kinderhook mill is closed for the present. Chicken thieves are busy in Columbiaville. Farm Bureau meetings are to be held in different parts of the county. Eggs are from 37c to 40c a dozen, butter 48c a pound, native potatoes, cobbles, \$1.00 a bushel.—Mrs. C. V. H.

Southern Tier News Notes

HARD freezing and no snow are causing our fruit men to wonder how their trees are coming out this winter.

Leo Maxian, living near Hawleytown, has been elected president of the Farm Bureau. The Maxians are comparatively new comers who have settled in Broome county and are very much interested in dairying and fruit growing. They already have some very choice fruit coming on. Berries are also favorites on this farm.

Speaking of the Broome County Farm Bureau leads me to say that under the energetic lead of Thomas Murray the Bureau has reached the highest membership it ever had. At last accounts the list had reached about 500 and was still growing. Mrs. Ann Duncan, manager of the Home Bureau, has also pushed that department to a high degree of excellence.

Testing for bovine tuberculosis is going on in Broome County rapidly. Edward

F. Vincent, of Maine township, head of the Agriculture committee of the Board of Supervisors, has had charge of this work during the past year and considerable money has been saved to the taxpayers through the present arrangement, which is to be continued.

The dog population of this section has been greatly reduced by the men in charge of the law enforcement, and the hopes of sheep men are looking up. This is a fine country for sheep.

Taking advantage of the better prices for milk, some of the Broome county townships are adding a little to their tax rate and clearing up local indebtedness of some time standing.

Real estate changes continue to be slow. Prices are steadily swinging back toward pre-war figures.


The big shoe-making industry at Endicott is said to favor an increase in tariff on hides.—E. L. V.

Pennsylvania County Notes

Potter County—We have below zero weather following the long period of very mild weather that marked the closing weeks of 1928. Very many cases of grippe and of influenza are everywhere in the county. Schools are being closed and public meetings postponed or dropped entirely. The scarcity of doctors in rural districts is more serious during epidemics of this nature and the few doctors remaining are worn out. Some potatoes are being sold at 40 cents per bushel. Very few moving. Butter is 50c, eggs 35c and cheese 24c.—M. C. S.

Northumberland County—The fall was dry and not cold until after New Years and since then it has been very cold without snow until today when we had quite some snow. There is a serious epidemic of poultry diseases, diphtheria, roup and chicken pox all over the state. One well known poultryman lost 400 chickens. I myself have lost about 70 out of my 200 with diphtheria. I have a laboratory for treating them. It started in October and even before with some people's poultry. I have always believed in heating the hen house. Chickens need to be warm and comfortable and clean with no feed thrown in their litter. Eggs are 38 cents, butter 60c, corn \$1.10, wheat \$1.30, oats 80 cents. There does not seem to be much market for hay. Straw is \$14 a ton and scarce at that. There is no cabbage crop.—S. W.

Alfalfa pasture is an excellent source of green feed for the growing chicks during the summer months. An ideal chick range would be an alfalfa field adjoining a corn field.



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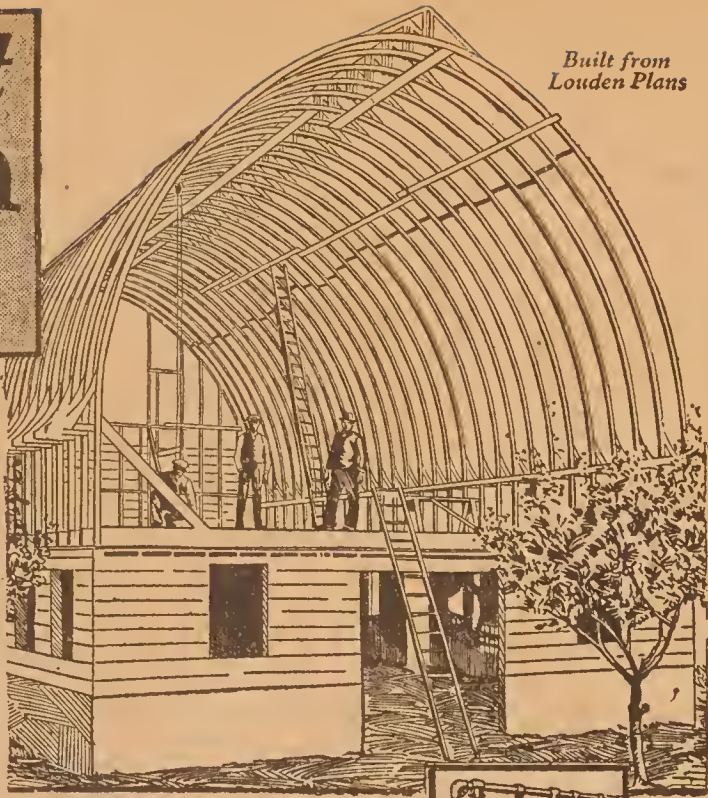
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Chicago Milk Producers Strike for Better Prices

THE dairymen in the New York milk shed are watching the dairymen's strike in the Chicago territory with much interest. On January 16 twenty-three dealers' plants serving patrons of the Pure Milk Association, a producers' organization, refused to take the milk of the members, who had demanded an increase in the price of January milk from \$2.50 to \$2.85. Since that time there has been some violence between producers and distributors and the destruction of a considerable amount of milk. At the time of going to press, no definite solution has been reached.

The situation has been brewing for some time. From the beginning the producers have been willing to arbitrate the controversy. In fact, the officials of the Pure Milk Association were instrumental in organizing last October a committee known as the Chicago Milk Marketing Committee, on which committee various important city organizations were represented. Public hearings were held in the city and country by this committee but the distributing companies who brought about this crisis were not represented on the Milk Marketing Committee, nor did they attend any of the meetings.

Producers Ask Increase of Thirty-Five Cents

The questions involved in the present strike are recognition of the Milk Association by dealers and peaceful arbitration of price questions between producers and dealers. It is the contention of producers that the additional expense of the T B test which is compulsory for the Chicago market, as well as compliance with rigid sanitary regulations, has increased the cost of production enough to justify the price increase which they ask. Dealers offered \$2.50 for 3.5 milk for January while the officials of the Pure Milk Association asked \$2.85. W. C. McQueen, president of the association, said that the increase of 35 cents a hundred-weight would mean about 3/4 of a cent a quart to the distributors. If the consumer should pay one cent more a quart and if this were all passed on to producers, the price to producers would be \$2.96 a hundred.

The city of Chicago consumes about 3,000,000 quarts of milk a day and the Pure Milk Association claims that they control about 60% of it. The dealers, on the other hand, claim that they will be able to get an adequate supply of milk outside of the Association. However, newspaper reports on January 22 stated that the Chicago milk supply of January 21 was 400,000 quarts under normal. Approximately 140 dealers, most of whom handle relatively small amounts and who are members of an

(Continued on Opposite Page)

Dairymen Build Pens for Herd Sires

(Continued from Page 15)

follows: A. J. Foster, Watertown; Dr. George E. Sylvester, Black River and Adirondack Plug and Core Company, Carthage.

Following is a list of other associations together with the testers and the names of members who have built bull pens during the past year:

Monroe Dairy Improvement Association—L. E. Wells, tester. M. H. Eisenhart, Fairport; Williman Bros., Churchville.

Southern Onondaga Assn.—J. E. Vaber, tester. S. D. Wicks, Syracuse; George Strugan, Manlius.

Stockbridge Valley Assn.—I. W. Clark, tester. Wm. H. Kiley, Munsville (2 pens).

Richfield Spa Valley Assn.—S. B. Harris, tester. Glensfoot Farm, Cherry Valley.

Southern Steuben Assn.—E. D. Wilcox, tester. Ames Button, So. Castioe.

Washington Co. Assn.—H. Weed, tester. George McGeoch, Cambridge.



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UNADILLA SILOS

(Continued from Opposite Page)

association called the Milk Dealers' Association, have agreed to pay the price of \$2.85 asked by producers. It is stated that, by organizing two shifts, dealers belonging to this association, could supply the entire city with milk.

Prevent Delivery of Milk

A considerable amount of violence was reported around milk shipping plants. It is stated that producers imported pickets who tried to prevent delivery of milk by dairymen who had not joined the strike, and that over 1,000,000 pounds of milk has been destroyed since the strike started. Additional producers had been joining the strikers' ranks and deliveries to receiving plants of two of the largest distributors, the Bowman and Borden dairy companies, have been decreasing daily. Highway patrolmen have been assigned to guard the largest plants to prevent violence to farmers attempting to deliver milk. The Lake County Circuit Court has issued a temporary injunction against the strikers. It is also reported that kerosene has been discovered in some of the milk delivered in the city and that Dr. Kagle, health commissioner, has asked Mayor Thompson for a \$15,000.00 emergency appropriation to employ chemists for testing all milk to protect the city's health. This pollution of milk was blamed by distributors upon the strikers.

On January 21, city health officials demanded a Grand Jury investigation of the dairymen's strike that menaces Chicago's milk supply. Federal action seems imminent inasmuch as Interstate shipment of milk is involved. George E. Q. Johnson, Federal District Attorney, announced that he was ready to act on any complaints.

* * *

Just as we go to press, word comes that the hostilities in the Chicago Milk strike had been brought to an end by the agreement of both sides to arbitrate. The arbitrators will decide between the dealers' offer of \$2.50 a hundred for 3.5% milk and the Pure Milk Association's demand of \$2.85. In the meantime, the dumping of milk and the picketing of milk stations has stopped and regular deliveries have started.

The sympathy of the American Agriculturist, of course, is with the dealers, although we doubt whether the large amount of violence used in this strike and the actual dumping of milk helped their cause any.

Advertising Milk

EDITORS' NOTE—AMERICAN AGRICULTURIST certainly cries "Amen" to the following editorial taken from the Michigan Farmer on Advertising. Of course, it applies equally as well in the New York milk shed, or anywhere else where milk is produced and consumed.

THE organized dairymen of Ohio are planning on trying to increase the consumption of milk in the city of Cleveland through advertising. They plan to spend approximately \$360,000 within the next three years in Cleveland newspapers and otherwise telling consumers of that city about their product. Two grades of milk will be offered to the public. The best grade will be known as "selected dairies milk" and will be put up in special bottles after it has been subjected to a rigid test. Most of the advertising will deal with this grade which is to be sold through only the most reliable dealers as they want to protect the high reputation they intend to build up for this milk.

Most of us are victims of advertising. It plays a far more important part in the forming of our habits and mode of living than we realize. We eat advertised foods and we wear advertised clothes. If certain interests desire to increase the use or consumption of a product, they tell the world about it through the advertising columns of the newspapers and magazines, on billboards, and by direct mail, and the public does the rest. The one that is advertised the most widely is the most in demand. If the advertising is discontinued on our favorite brands, most of us change over to those that are ad-

vertised. We shout our independence from the house-tops but after all we do pretty much as we are told by law, command, or suggestion.

Buckwheat for Dairy Cows

Is ground buckwheat a good feed for dairy cattle?

BUCKWHEAT is often too high in price to be an economical feed. When it can be fed economically it will replace oats or corn in the ration. It contains 10 per cent less of total digestible nutrients than oats and 22 per cent less than corn.

Books on Dairying

Please give me the names of some good books on dairying and cattle production.

PERHAPS the best books for your needs are: "Feeds and Feeding" by Henry and Morrison, published by the Henry-Morrison Company, Madison, Wisconsin; "Dairy Cattle and Milk Production" by C. H. Eckles and published by McMillan Co. of New York, and "Better Dairy Farming," published by the Savage-Maynard Co., Ithaca, N. Y.

YES

the DREW Line Dealer Offers You—

Better Barn and Poultry Equipment for Less Money

If you are going to equip or ventilate a dairy barn, a hog house or a poultry house—it will pay you to see the DREW Line Dealer and see how much he can save you.

For over a quarter of a century Drew has built only the best quality of good, common-sense, practical Barn and Poultry Equipment—the kind that will give the man who buys it the longest and most dependable service at the lowest cost per dollar invested.

It makes no difference what you need, whether Stalls, Stanchions, Water Bowls, Litter Carriers, Pens, Ventilators, etc., or Poultry Mash Feeders, Waterers, Nests, Brooder Stoves or Baby Chick equipment—the DREW Dealer in your locality can supply you at prices that will save you money.

See Your Drew Dealer See What You Save

If you want the utmost in service and satisfaction at the lowest cost—if you want Barn or Poultry Equipment that is well made—up-to-the-minute in every detail yet low in prices—then see the DREW Dealer in your locality and compare the DREW Line point for point with any other. See what you save.

Send for This New FREE Book Before You Buy

Send the coupon for our new DREW LINE Catalog. We will gladly send it to you FREE and postpaid and also the name of the DREW LINE Dealer nearest you. This book pictures and describes the complete DREW LINE for Dairy Barns, Horse Barns, Hog and Poultry Houses. Send the coupon for your copy of this new DREW Catalog today.

The Drew Line Company

Dept. 2221
Fort Atkinson, Wis.
Elmira, N. Y.
(D-21)







THE DREW LINE CO. Dept. 2221
Ft. Atkinson, Wis.—Elmira, N. Y.
(Mail to the Nearest Office)

Please send your Free Book and Catalog on Barn and Poultry Equipment. I am interested in

☐ Barn Equipment ☐ Poultry Equipment

Name _____

Town _____

R. F. D. _____ State _____

\$50⁰⁰/₁₀₀ OFF in the Chinese Auction

of FISHKILL DEMEER HENGERVELD

Born February 6, 1928

He is a son of a three year old (by the noted Dutchland Colantha Sir Inka) that has made two good long time records first and second calf on twice a day milking. This young bull's sire, and also his dam are son and daughter of Winana Segis May 2d, who made 876.76 lbs.

of butter and close to 20,000 lbs. of milk in ten months as a four year old. Also his sire is a son of Hengerveld Homestead De Kol 4th who has a splendid list of large producing daughters, he being a son of Jenny Linn Colantha, with a record of over 30 lbs. butter in 7 days.

His Price is Now \$350.

This price will be reduced \$50 the first of each month until sold.
Dairymen's League Certificates will be accepted at face value in payment for this animal.

FISHKILL FARMS HENRY MORGENTHAU, Jr., Owner
461 Fourth Avenue New York

6 COWS, 11-2 year old heifers, 6 bulls 3 to 18 months old. 4 calves 3 months old, 2 registered guernsey calves 3 months old TB Tested.
SPOT FARM, TULLY, N. Y.

A MERICAN AGRICULTURIST Classified Ads get results. Try one.

COMPLETE POWER MILKER \$35

PUTS IT TO WORK FOR YOU

Ready to milk when you get it. Send for sensational offer! Milk 18 to 40 cows an hour—easy. Costs nothing to install. Easy to clean. Milks the human way—easy on the cows. 30 Days Trial—10 Year Guarantee—satisfaction guaranteed or money refunded. Write today.

OTTAWA MFG. CO.
621 White St., Ottawa, Kans.





It pays to use genuine RCA RADIOTRONS

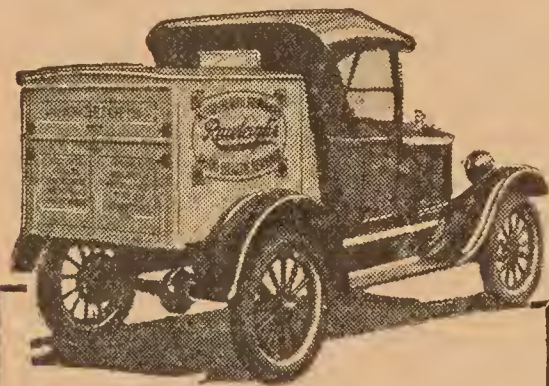
A radio set can be no better than its vacuum tubes. They are the heart of the instrument. Makers of high quality radio sets recommend the use of RCA Radiotrons.

After a year of average use all the tubes of a set should be replaced with a brand new set of RCA Radiotrons. This insures good reception.

RADIO CORPORATION OF AMERICA
NEW YORK CHICAGO ATLANTA DALLAS SAN FRANCISCO

RCA RADIOTRON

MADE BY THE MAKERS OF THE RADIOLA



WANTED AT ONCE!

300 More Good Men in New York and New England

to help introduce and retail Rawleigh's Good Health Products. You will be supplied from our new branch house just opened at Albany. Sell in town or country. Wonderful opportunity. Nothing new—no experimenting. On the market since 1889. 170 necessities needed daily in every home. Annual Sales over 35 million packages. Largest Company—over 15 million dollars capital—10 great factories and branches. Practically no capital, no experience needed. Quick, easy sales, repeat every 30-60 days. Big pay right from start. Stone, Vt., sold \$212.20; Reagan, N. Y., \$184.40 first week. Profits increase monthly. Dupray, Mass., cleared \$6,000 last year; Emery, Me., \$5,000; Stowe, Conn., \$4,000; Sinclair, N. H., Storm, R. I., \$4,200 each. Thousands make more than they ever could before. You should do as well. Simply follow the same old time-tested Rawleigh Methods which have given consumers best values and satisfaction for 40 years. We supply everything—products, outfit, sales and service methods which secure the most business everywhere. Steady year round—no lay-off—no boss—you are sole owner and manager. For particulars write

THE W. T. RAWLEIGH CO., Inc.

DEPT. B-41 AGR ALBANY, N. Y.

THE LARGEST INDUSTRY
OF ITS KIND IN THE WORLD

When writing Advertisers
Mention American Agriculturist

Make \$15 a Day

Demonstrating the HANDYMAN TOOL

This handy combination tool is a quick, easy seller. \$15.00 a day is easy. Some make \$30 a day. Used daily on farm. Does work of ten men. Low price, big profit. No experience needed. Work full time or spare time.

Only Tool of Its Kind

Pulls posts, pipes, roots, small stumps, jacks up trucks, tractors, wagons; lifts buildings; stretches fences; epilecia wire; makes clder press; a dandy rim tool, etc. Money back guarantee. Simple to operate. Lifts, pulls or pushes with 8 TON CAPACITY.

Start Now—Write Us!

K. L. McFarland, Mont., sold eight in afternoon. N. F. Kranz, S. D., made \$15.00 in 6 hours. You can make this money, too. Live now wanted in every county. Get our amazing new sales plan—it's a money-maker for you.

HARRAH MFG. CO.
Dept. S-100 Bloomfield, Ind.

Fully Guaranteed



BROWN FENCE Less than 1/2¢ PER RUNNING FOOT

DIRECT FROM FACTORY—Don't buy Farm and Poultry Fence, Netting, Gates, Steel Posts, Barb Wire, Roofing, Paint, Stoves, Separators, or Tires until you get my FREE BARGAIN CATALOG. See the money my Straight Line Selling Plan Saves you. I pay freight—guarantee quality, 24 hour service.

THE BROWN FENCE & WIRE CO.
Dept. 3025 Cleveland, Ohio

SPRINGFIELD RIFLE, Model 1903

\$19.50



Assembled and Refinished

8 3/4 pounds, 43 inches long, 24 inch barrel. Offered without bayonet, \$19.50. Packing charge 50c extra. Ball cartridges \$3.50 per 100. New catalog, illustrated, 380 pages of Army Navy equipment, pistols, guns, uniforms, saddles, for 50 cents.

Special new circular for 2c stamp. Established 1865.
Francis Bannerman Sons, 501 B'way, N.Y. City



One Speaker for Voice— One for Music

It has been observed that the kind of loud speaker that gives the most pleasing results for the reproduction of music is not always the one which delivers voice in the most understandable fashion.

There is a very basic reason for this that should be explained. In the reproduction of music we are dealing with frequencies of tone that are steady and where the loud speaker permits these tones to "drag out" or continue, the effect is good.

However, where the loud speaker does the same thing with speech the voice has an unpleasant confused sound. With voice, which is a combination of many quickly changing frequencies, it is desirable that the vibrations should stop instantly as they do in the original talking, and not be continued by the loud speaker to confuse the next voice impulses.

Switch to Transfer

Many listeners use two loud speakers—one for music and another one for voice. A simple single pole double throw switch is used to change from one to the other, to suit a musical program or a speech. A large loud speaker of any form—such as a 3 foot cone, aeroplane cloth type, speaker with a large baffle board, etc. is employed for musical numbers, while for speaking, a smaller size speaker like an 18 inch cone is used. With the switch located in a convenient position it is an easy matter to change back and forth as you wish.—BRainerd Foote.

Potato Prospects for 1929

(Continued from Page 12)

good one. Poor seed may look cheap in the spring, but poor hills in the fall are far more expensive than good seed.

Fertilizer is very low in price as compared with most other costs. Its use is increasing fast; many growers are using the combination of fertilizer, good seed and spraying to cut labor costs by growing less acres and larger yields.

Other details are seed disinfection, which is valuable in many sections, and thorough study of soils and of tillage methods. Each section has its best varieties for its soils, climate and markets. Last of all comes marketing, which often tells the difference between profit and loss for the season's labor and risk.

From central Minnesota through to Aroostook and the maritime provinces, thorough spraying with bordeaux mixture is a valuable insurance against poor yields. In the blight years like 1928 spraying pays by keeping the vines growing and preventing rot. In the dry and hot years, in which there is no blight, spraying nearly always pays by holding down the leaf-hoppers and other insect pests. In fact if spraying is really well done it is often free insurance, for either the blight or the insects pay the insurance premiums for the farmer.

If you wish to double the strength of concrete, keep it wet for ten days after laying and setting it.



DISTRACTED FATHER—Is is a boy or a girl?
EXCITED NURSE—It's Trins!

JUDGE.

Before Spring Planting you can make \$600 CASH

You can earn \$300 a month in spare time by acting as our factory appointed representative in your locality to aid us in national fight against farm fires. The man we appoint must be able to make inspections of homes, farm buildings, stores, filling stations and warehouses under our directions. No experience needed—we give you full instructions and training FREE and give you authority to make inspections. Appointment must be made at ONCE. See coupon below.



AMAZING DISCOVERY

Prevents Farm Fires

Most vital achievement of modern chemistry absorbs fire, as a sponge absorbs water. This amazing fluid puts out fire three times quicker than any other known extinguisher—it operates at forty degrees below zero—shoots its fire-absorbing stream 40 to 50 feet—extinguishes Wood and General fires, also Oil, Grease and Paint fires—approved by Underwriters' Laboratories. So great is the discovery and so great is the demand that we must have more representatives at once!

I NEED 100 FARM REPRESENTATIVES AT ONCE

This is a lifetime position for the man we appoint in your locality. This big income may be yours every month, year in and year out.

Louis George, Illinois, makes \$10,000 a year. L. D. Payne, Iowa, earned over \$4,500 his first 200 days. Hundreds of others making \$250 to \$600 extra money every month. Equip the Schools, Filling Stations, Warehouses, Stores, Garages, and Farm Buildings in your district and make from \$200 to \$300 extra money each month.

Biggest Opportunities In Your Neighborhood

Everywhere, FYR-FYTER is recognized as the world's most efficient fire extinguisher—everywhere, Fyr-Fyter men are making from \$300 to \$1,000 a month. But, no territory holds so many possibilities as rural districts.

In your neighborhood there are hundreds of lives, hundreds of thousands of dollars worth of property, machinery, livestock and crops that are absolutely unprotected against fire. Think what desolation a farm fire can cause—then you will see what great possibilities are waiting for you here! Show your neighbors how to be protected against their deadliest enemy, FIRE and earn from \$100 to \$300 extra money in your spare hours.

ACT NOW—

Big Income Before Spring

Never before has such an opportunity been opened for wide-awake farm or small town representatives. Send coupon at once for our generous plan—Mail today to

RAY C. HAHN

FYR-FYTER CO.

64-O Fyr-Fyter Bldg., Dayton, Ohio

CLIP AND MAIL

Ray C. Hahn,
FYR-FYTER COMPANY,
64-O Fyr-Fyter Bldg., Dayton, Ohio
Send at once full details of \$300 a month proposition.

Name

Address

City State

BIG CHICKS
from High Record Matings



300-326 eggs S.C. White Leghorns. Also Special Tancred Matings and 15 other varieties. Buff, Brown, Black Leghorns; Anconas; White, Buff, Black Minorcas; Barred, White, Buff Rocks; White Wyandottes; S.C. and R.C. Reds; Buff Orpingtons; Jersey Black Giants.

Write today for free catalog before you buy. Prices Low and good genuine personal service to each customer. Satisfaction Guaranteed. 28 years shipping chicks to satisfied customers.

FREE! 1000 CHICKS in prizes for best photos of Pioneer Chicks or Flocks.

1900-1929
First to ship Chicks in U. S.

UHL PIONEER HATCHERY & EGG FARMS
New Washington, Ohio Dept. A

**S.C. WH. LEGHORNS
BARRED ROCKS
R.I. REDS**



Send for low price list and booklet, describing our farm, stock, etc. Our Tancred Strain Leghorns are as good as the best. Eighteen years in the Chick and Chicken business.

Brookside Poultry Farms,
Dept. A. E. C. Brown, Prop., Sergeantsville, N. J.

BABY CHICKS

13 Leading Varieties—White Leghorns, Black Minorcas, Rocks, Reds, Wyandottes, Hamburgs, Speckled Sussex, Buff Orpingtons.

\$9.00 per hundred and up.
Free Catalog and Price List

Lantz Hatchery, Tiffin, Ohio

ROSELAWN BABY CHICKS
"Tested from Trap-Nested"

White, Brown, Black Leghorns; Barred and White Rocks; Rhode Island Reds; White Wyandottes. Special prices on orders booked NOW.

Free catalog.
Custom Hatching a Specialty

ROSELAWN POULTRY FARM & HATCHERY,
Box 6 Ottsville, Penna.

Wyckoff Tancred CHIX
White Leghorns

Book your order now for March and April Chicks.
\$12.00 per 100 \$57.50 500 \$110, 1000

100% prepaid safe delivery guaranteed.

J. N. NACE POULTRY FARM, Box No. 50, Richfield, Pa.

PROFIT BRED CHICKS

County Line Chicks are from proven producers. They can be secured in five breeds, S.C. White Leghorns, Reds, Barred and White Rocks and White Wyandottes all from range reared healthy bred to lay parents. Send for folder which gives prices and information every poultry raiser should know.

COUNTY LINE POULTRY YARDS AND HATCHERY,
Box 10 Telford, Penna.

BABY CHICKS

25 50 100	25 50 100
Barred Rocks...4.00 7.50 14	S.C.W. Leg...3.50 6.50 12
S.C.R.I. Reds...4.00 7.50 14	Heavy Mixed...3.50 6.50 12
500 Lots 1/2c less.	1000 Lots 1c less.

Free Range Flocks. Live Delivery.

B. N. LAUVER, McAlisterville, Pa.

Hampton's Black Leghorn Day Old Chicks.
Circular free. A. E. HAMPTON, Box A, Pittstown, N.J.

The Belvedere Hotel

48th St., West of Broadway
Times Square's Finest Hotel

Within convenient walking distance to important business centers and theatres. Ideal transit facilities.


**450 Rooms,
450 Baths.**

Every room an outside room—with two large windows. Large single rooms, size 11'6" by 20' with bath, \$4.00 per day. For two, \$5.00—twin beds, \$6.00. Large double rooms, twin beds, bath, \$6.00 per day. Special weekly rates. Furnished or unfurnished suites with serving pantries, \$95 to \$150 per month. Moderately priced restaurant featuring a peerless cuisine.

Illustrated booklet free on request

CURTIS A. HALE,
Managing Director

**With the A. A.
POULTRY
BREEDER**



Seen and Heard at the Madison Square Poultry Show

THE poultryman who attends the Madison Square Poultry Show with the idea of learning, will always find something new. In the first place, it is generally recognized as the largest fanciers' show, and as such, the birds exhibited have few superiors.

We can imagine no finer place to study breeds and varieties than at this show. In addition to representatives of more breeds and varieties than most of us have ever seen, there were, this year, a number of comparatively new varieties. One of these is the "Lamona", the only general purpose fowl that lays a white egg. This breed was developed several years ago by Harry Lamon, of the United States Department of Agriculture. There are very few of this breed in existence, but it appears that the present owner, who we understand recently bought practically the entire breed, plans to bring its good qualities to the attention of poultrymen, with the idea of popularizing the breed.

New Breeds Exhibited

Another interesting exhibit showed several pens of Jersey White Giants. It is stated that this breed does not contain new blood, but is an albino of the Jersey Black Giants. These birds look very much like any of the larger white varieties with the exception of a very dark eye, and dark shanks. The shanks, however, are not as dark as those of the Jersey Black Giant. Some Jersey Black Giant Capons were shown which averaged 12 pounds in weight.

Perhaps few of our readers have ever seen any hens of a variety known as Buttercups. These hens have red hackle feathers and a dark tail, and the comb, instead of being a single comb, as most of our common varieties, has a comb somewhat the shape of a buttercup blossom, thereby giving the breed its name. There was also a pen of Australorps, a breed which has received considerable comment lately. They are black hens with a white hackle, and back. They come much nearer the size of our general purpose hens than they do of the egg laying breeds. Other unusual varieties included several pens of Black Wyandottes, several pens of Kiwis, a white hen with feathers so fine that they almost resemble hair, and a pen of Reptilians which at first glance looked much like ordinary fowls. A closer examination disclosed legs about half the length of most of our breeds. There were also several pens of the much discussed "Naked necks" or Turkeys, claimed by some to be a cross between turkey and fowls. They look very much like Barred Rocks, except that they have no feathers on the neck, but instead, a very red skin.

These new varieties are interesting but the man who is in the business for egg production wisely decides to stick to one of the older and better established breeds.

A Pen of High Producers

One of the most interesting exhibits was a pen of White Leghorns, owned by George Lowry, West Willmington, Conn., which won last year's Storrs laying contest. A bird which broke a leg during that contest, and received much publicity, was exhibited in a special coop. The leg was broken August 15, and was put into a plaster cast, the first time such a thing has been done, and the hen began laying again on September 15. This hen has laid 363 eggs since October 1, 1927.

In the center of the hall was the exhibit of the Baltimore & Ohio Railroad, consisting of several coops of prize winning poultry owned by Junior Poultry Club members. Prizes were given by the Baltimore & Ohio Railroad. The first prize for second year poultry work went to Harry Coffman, of Keedysville, Md.; second prize to

(Continued on Page 22)



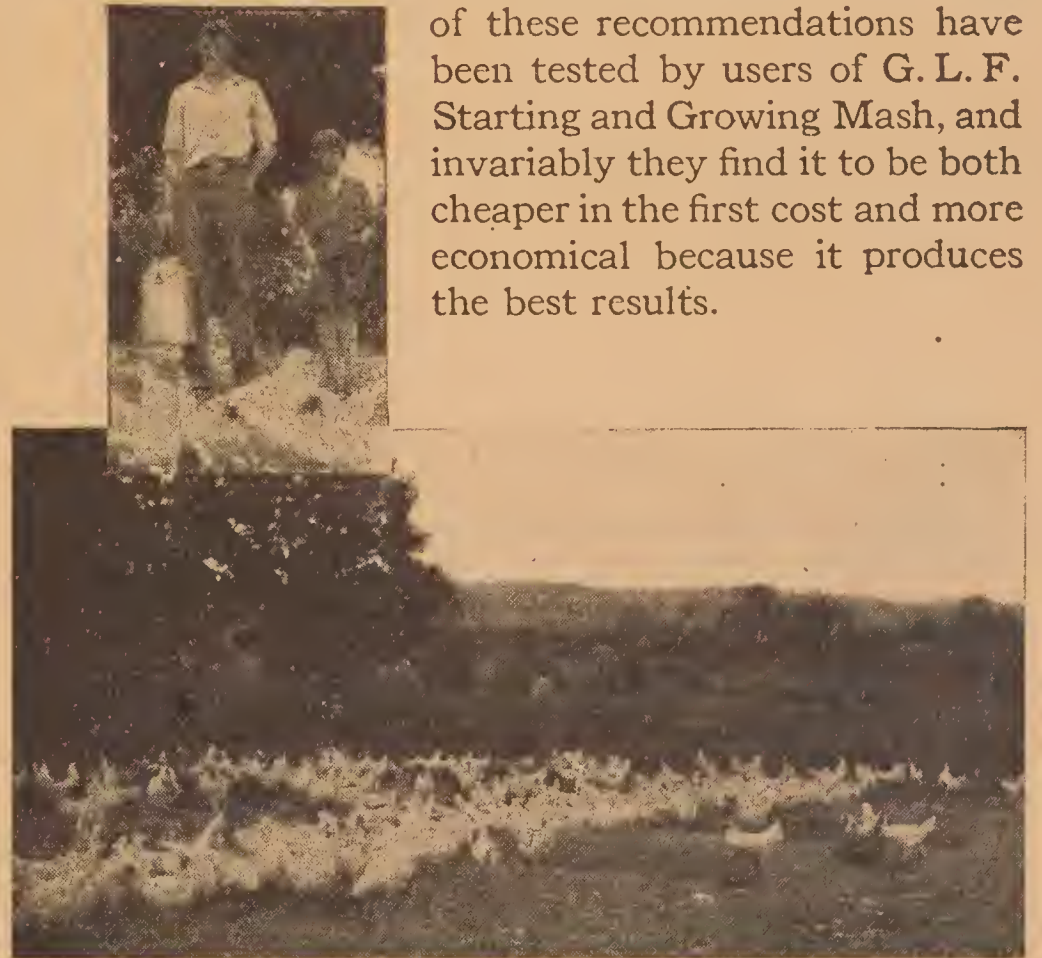
DAY OLD CHICKS

are less than half the investment

MONEY spent in buying day old chicks, or the cost involved in hatching them, is only the beginning of an investment. It will probably cost you, in cash, several times this initial expenditure, before your pullets begin to lay.

G. L. F. Starting and Growing Mash contains in recommended proportions the ingredients which are desirable for the first feeding. Fed alone, it takes the place of a high-priced starter. Then, when the need for growth-giving proteins diminishes, G. L. F. Starting and Growing Mash can be fed with G. L. F. Intermediate Scratch to carry the pullets through to maturity.

College feed specialists recommend this program—the ingredients of the mash, the proportions of each ingredient, and the feeding directions. All three of these recommendations have been tested by users of G. L. F. Starting and Growing Mash, and invariably they find it to be both cheaper in the first cost and more economical because it produces the best results.



Benjamin F. Turner of Horseheads, N. Y., purchased 1000 chicks on March 1, 1928, and sold 490 broilers at 60 cents each in May. On July 15th, he put about 500 pullets in the laying houses. These have averaged 50 per cent production up to Christmas time.

COOPERATIVE G. L. F. EXCHANGE, INC.

The G.L.F.
COOPERATIVE G. L. F. EXCHANGE, INC.
ITHACA, NEW YORK

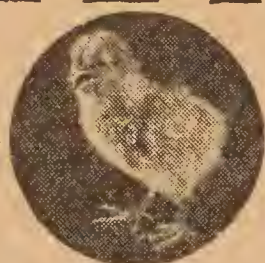
BABY



CHICKS

HILLPOT Quality Chicks

Leghorns Rocks Reds Wyandottes



Hillpot Quality Chicks, because of their splendid health and vigor, actually require less time and attention than average chicks. They mature more quickly with minimum loss, thus cutting down rearing cost. They lay heavily and continuously. It is these vital factors that reduce the egg-cost and give the big profits that have won a national reputation for Hillpot Quality Chicks.

Send for my valuable Chick Book. It is free.
W. F. HILLPOT, Dept. 129, FRENCHTOWN, NEW JERSEY

20th CENTURY "MARVEL" CHICKS



Special Mating Imported Barron S. C. White Leghorns

Our flocks for this very Special Mating consist of 350 YEARLING hens carefully selected by an Expert Poultryman. These hens weigh not less than 4 1/2 pounds, and up to 6 pounds. They produce better than 250 eggs per year, per hen, imported from TOM BARRON, of England.

Standard Bred "MARVEL" Winter Layers

THOUSANDS OF PLEASED CUSTOMERS can tell you about the splendid chicks and wonderful profits made by our Marvelous High Class, Heavy Laying, Standard Bred, American Cert-O-Cult Matings for 29 years; Pure-Bred, carefully culled for size, type, color, vigor and egg laying ability. Look at the low prices—100% Live Delivery Guaranteed—you can safely order from this advertisement. References: Commercial Bank, Dun or Bradstreet.

S. C. Wh., Br., Buff, Blk. Leghorns, Anconas.....	50	100	500	1000
Barred and Wh. Rox. R. C. and S. C. Reds, Blk. Minorcas.....	\$7.00	\$13.00	\$60.00	\$115.00
W. Wyandottes, Buff Orpingtons, Buff Minorcas.....	8.00	15.00	70.00	135.00
Impt. Barron W. Leghorns, W. Minorcas, "Parks" Rox.....	8.50	16.00	75.00	145.00
Heavy Mixed, \$12.50 per 100; Light Mixed, \$9.00 per 100. Wh. Pekin Ducklings, 25c each.	9.50	18.00	85.00	160.00

C. O. D. Shipments: We will ship 20th Century Chicks C. O. D. (pay postman on delivery) if you prefer. Get our FREE illustrated catalog. Tells all about our money-making chicks. C.O.D. plan, imported matings, etc.
20th CENTURY HATCHERY Box R NEW WASHINGTON, OHIO

NATIONAL "SUPERBRED" CHICKS

500,000 SUPERQUALITY CHICKS FOR 1929

Insure your future poultry profits by ordering NATIONAL SUPERBRED CHICKS NOW.	25	50	100	500	1000
S. C. White, Brown and Buff Leghorns.....	\$3.50	\$6.75	\$13	\$62.00	\$120
Tancred and Hollywood W. Leghorns.....	3.75	7.25	14	67.00	130
Barred and White Rocks, R. I. Reds.....	4.25	7.75	15	72.00	140
Black Minorcas and Anconas.....	4.25	7.75	15	72.00	140
White Wyandottes and Buff Orpingtons.....	4.75	9.00	17	82.00	160
White Minorcas and Blue Andalusians.....	5.50	10.25	20	95.00	190
Jersey Black Giants.....	7.00	13.00	25	120.00	230
Mixed or Odds and Ends.....	3.00	5.50	10	50.00	100



Send for our Free Catalog with prices on Chicks from our SPECIAL MATED FLOCKS. All chicks sent prepaid by either Parcel Post or Express. 100% live delivery guaranteed. Bank references furnished on request. Write us. You will save money by ordering Superbred chicks NOW.
NATIONAL CHICK FARMS Box 408 MIFFLINTOWN, PENNA.

WOLF SELECTED CHICKS

10 FREE CHICKS WITH EACH 100 ORDERED BEFORE MARCH 1st.

Don't miss this chance to get a start with Wolf's extra quality pure-bred high producing stock. Every breeder produced on free range and health of chicks is safeguarded. Get Our Catalog and Price List

Tells about prizes won by our birds. Read about Mary Heneel who made over \$1000 profit in one year with birds of our breeding. All leading breeds—prices very attractive. Write today. Chicks shipped C.O.D. Toe picking stopped instantly with Wolf's "No-Pick." Order box today. \$1.00 postpaid. Satisfaction guaranteed or money refunded.

WOLF HATCHING & BREEDING COMPANY, BOX 1, GIBSONBURG, OHIO



HUBER'S RELIABLE CHICKS

10 FREE CHICKS —ON orders booked before March 15th, we give 10 Chicks free with each 100 ordered.

When we say RELIABLE—we mean RELIABLE in every way. Breeding stock of highest quality of 19 years of careful development. Special attention paid to health of flocks and records kept.

CATALOG FREE—CHICKS SENT C. O. D. IF YOU WISH

Write for details—get our illustrated catalog which tells all the story. Our prices reasonable. A book on Raising Chicks worth many dollars given free with each order of \$10.00 or more. Big discount for early orders.

HUBER'S RELIABLE HATCHERY, No. High St., Fostoria, Ohio

Buy C.M.L. Chicks

C.M.L. CHICKS

Cost no more than ordinary chicks from the average hatchery and the quality is far better. We have specialized for years in BARRON LEGHORNS. Imported direct from Barron. Pedigrees 285 to 314. BARRON S.C.W. LEGHORNS, BARRED ROCKS, WHITE ROCKS, REDS, WHITE WYANDOTTES.

Our birds have ample range which insures large, hardy chicks. They are carefully selected and mated. They mature early. Our fine quality chicks can be had at a price that will surprise you. Get our low prices. They will interest you. C. M. Longenecker, Box 40, Elizabethtown, Pa. Write today for FREE catalogue.



Two Free Books

Breed squabs and make money. "Sold by millions at higher prices than chickens. Write at once for two free books telling how to do it. One is 48 pages printed in colors, other 32 pages. Ask for Books 2 and 4. You will be surprised. Plymouth Rock Squab Company, 334 H Street, Melrose Highlands, Massachusetts. Established 28 years. Reference, any bank.

SPECIAL FALL prices for breeding Turkeys, Geese, Ducks, and Guineas. Write your wants and for mailing list. PIONEER STOCK FARM, TELFORD, PA.

CLEAR SPRING QUALITY CHICKS

S. C. White Leghorns.....	per 100	500	1000
Barron and Wyckoff Leghorns.....	\$11.00	\$2.50	\$100.00
Barred Rocks and R. I. Reds.....	12.00	57.50	110.00
Light Mixed, \$9.00 per 100; Heavy Mixed, \$12.00 per 100, for March and April. 100% live delivery. Postpaid.	14.00	67.50	130.00

New circular free giving full details of all breeds. CLEAR SPRING HATCHERY, McAlisterville, Pa. Box 49

HEAVY BROILER CHICKS—\$14.00 PER 100

Consisting of Rocks, Reds, Wyandottes, Orpingtons. Sent C.O.D. Pay after arrival. Postage prepaid. Live delivery. Immediate shipment. We hatch all year. Send for folder. SCHOENBORN HATCHERY, 355 Main St., Hackensack, N. J. Phone 1603 or 1604.

Seen and Heard at the Madison Square Poultry Show

(Continued from Page 21)

Laurence Black of Hebrion, Ohio; and third place to Boyd Beyers, of Arthur, W. Va.

A curiosity which drew considerable attention was a three-legged hen, claimed to be a cross between a Rhode Island Red and a White Leghorn. Two of the legs are placed normally, but the third, which served no useful purpose except to arouse curiosity, is located behind the other two legs.

Commercial Exhibit Interesting

A very interesting part of the show is the commercial exhibit. Last year much interest was aroused by the showing of battery brooders, which were then a comparatively new feature. This exhibit again drew considerable attention, and brooders manufactured by several firms were filled with chicks. A feature which proved of interest this year was the round brooder, which appears very much like a silo. This is constructed so that it can be erected very quickly on the farm, and is so built that it is practically air tight at all joints. There are no corners for the chicks to crowd in, and it is claimed that the losses of chicks will be much lower than in the old style house. Several firms had exhibits of knock-down houses, which, judging from the prices exhibited, compare favorably in cost with houses of the same size built on the farm. Two different firms exhibited a summer shelter for chickens, which consisted of a water tight roof, and sides made of a wire netting. There were the usual number of feed exhibits, mammoth incubators, brooders, stoves, etc.

New York State Wins Judging Contest

The judging contest for state college teams was won by the New York State team with a total score of 2111. With this victory went the Madison Square Garden Sweepstakes cup. Second place in the contest was won by the team from Pennsylvania, with a score of 2022. Third place went to Connecticut, with a score of 1927.

In individual judging, M. C. Babcock, of Cornell, won first prize. A special medal offered for a perfect score in answering a written examination went to J. C. Cathey, of North Carolina.

Judging was done both on the standard of perfection, and production basis. In the standard judging, M. C. Babcock of Cornell, was first; J. C. Cathey of North Carolina, second, and J. C. Laurie of North Carolina, third. The breeds judged in this class were a pen of single comb White Leghorn males, a pen of Rhode Island Red males, a pen of White Wyandotte hens and a pen of Barred Plymouth Rock hens.

In the production class, a gold medal for first place went to M. C. Babcock; second to R. P. Minnigh of Pennsylvania, and third place to J. A. Lattin of Connecticut. In this class four pens of hens were judged.

Ninety-One Indictments for Live Poultry Dealers

FOR some time past, there has been an inquiry going on concerning the alleged violation of the Sherman Anti-Trust Law by a group of live poultry dealers in New York City. It was charged that these dealers joined with gangs in maintaining a monopoly, and that threats of violence were made against butchers, poultry dealers, and their families, by placing bombs and explosives near markets, and homes of poultry dealers, holding up trucks at the point of a gun, and spying on dealers who had not entered whole-heart-

(Continued on Opposite Page)

WENE

Blood-Tested Chicks

S. C. Wh. Leghorn Chicks and 8-10 Weeks-Old Pullets from State Supervised, blood-tested, specialty-bred stock. Every chick is hatched from a Hen Breeder, weighing 4 lbs. or more.

For Quick Profits—Raise a Brood of Broilers

Try our Wh. Wyandotte-Wh. Rock Cross Bred Chicks from blood-tested matings. These chicks grow fast, put on good flesh at an early age and dress out the finest carcasses we have ever seen. We also offer chicks from blood-tested White and Barred Rocks, R. I. Red and Wh. Wyandotte matings. Hatches Every Wednesday. Write for Free Folder and Prices.

Wene Chick Farms Dept. D Vineland, N. J.



CHERRY HILL CHICKS

S. C. W. Leghorns—Wyckoff Strain.....	100	\$12.00
S. C. Everlay Brown Leghorns.....	12.00	
Barred Rocks—Wm. Nace's select.....	14.00	
S. C. Rhode Island Reds.....	15.00	
Mixed or Broiler Chicks.....	9.00	

1/2c less in 500 lots. 1c less in 1,000 lots. 25 chicks add 2c, 50 chicks add 1c. Full count. 100% live arrival guaranteed. Parcel Post prepaid. Bank reference. Order direct from this ad or write for free circular.

CHERRY HILL POULTRY FARM, WM. NACE, Prop. McALISTERVILLE, PA.

300,000 White-Brown Buff Leghorn CHICKS

Shipped C.O.D. Send No Money

PURE STRAINS—Tancred—Hollywood—Barron—American S. C. White Leghorns—Brown and Buff Leghorns—Eggs and Chicks Produced from some of the finest matings in Pennsylvania. Breeders Specializing in High Egg Production—Dependable Chicks for Commercial Poultrymen—100% Live Arrival—Send No Money—Chicks Shipped C.O.D.—Catalogue.

Pennsylvania Co-Operative Leghorn Farms, Box 314 Grampian, Pa.

BABY CHICKS Delivery After February 15th.

Free Range Bred	25	50	100	500	1000
White and Brown Leghorns.....	\$3.25	\$6.25	\$12	\$58.75	\$115
Anconas and Black Leghorns.....	3.25	6.25	12	58.75	115
White and Barred Rocks.....	3.75	7.25	14	68.75	135
Rhode Island Reds.....	3.75	7.25	14	68.75	135
Mixed chicks all breeds.....	2.75	5.25	10	48.50	95

Write for catalog and special discount on early orders. Hatchery Chicks for Greater Profit. Ullsh Poultry Farm and Hatchery Port Trevorton, Pa. Box 42

CHICKS! Breeders on Our Farm WYCKOFF LEGHORNS

5000 Chicks Weekly Bargain price \$18.00 per hundred. Ten per cent with order, balance C.O.D. Refund if ordering dates are filled. SPECIAL—200 chicks weekly from pedigreed matings, price on request.

Hatchery Chicks for Greater Profits. MAPLEWOOD POULTRY FARM, OFFICE 196 LARK STREET, ALBANY, N. Y.

Ruehle's Sunnyside Farm

PLEASANT VALLEY, N. Y.

Single Comb White Leghorns trapnested and pedigreed since 1904. Orders for chicks and eggs booked now. Catalogue on request.

BABY CHICKS

100% live delivery guaranteed. Order from this ad, or write for free circular. C. P. Leister, McAlisterville, Pa.

Tancred Strain W. Leg.	\$12 per 100
Common Wh. Leghorns	11 per 100
Barred Rocks.....	14 per 100
S. C. Red.....	14 per 100
Heavy Mixed.....	12 per 100
Light Mixed.....	9 per 100

KERLIN BARGAINS in White Leghorn Chicks

"Kerlin-Quality" Money-Making Leghorns. Beautiful, Great Winter Layers, White Diarrhoea Free, Egg Contest Winners. Over 60,000 Delighted Customers. BIG DISCOUNT on Chicks ordered Now. Delivery When Wanted. Free Starting Feed! Big Catalog FREE! Kerlin's Grand View Poultry Farm, Box 35, Centre Hall, Pa.

Chicks, Barron Eng. White Leghorns

Common Leghorns, Barred Rocks, Light & Heavy Mixed, as low as 8c each. 100% guaranteed. "New Circular Free." Prepaid. TWIN HATCHERY McAlisterville, Pa.

FERRIS STRAIN WHITE LEGHORN CHICKS

Send orders now for March and April. \$12 per 100--\$57.50, 500--\$110, 1000. JUNIATA Poultry Farm, Richfield, Pa.

BABY

CHICKS



5 Lb. Leghorns

The old reliable Heavyweight stock. Produced High Up on Pennsylvania's healthy mountain top. Get your chicks from certified record strains above 300 eggs. R.O.P. Hollywood, Tancred, Barron Matings. Hatch weekly pure white eggs up to 24 ounces per dozen. *Beautiful Color Plate Leghorn Catalogue Free.*

FARM SERVICE

ROUTE A10 TYRONE, PENNA.

CHICKS OF QUALITY

In lots of...	25	50	100	500	1000
Wh. Wyandottes	\$4.50	\$8.50	\$16.00	\$77.50	\$150
Rocks or Reds	4.00	7.50	14.00	67.50	130
Wh. Leghorns	3.50	6.50	12.00	57.50	110
Heavy Mixed	3.50	6.50	12.00	57.50	110
Light Mixed	3.00	5.50	10.00	47.50	90

From carefully selected free-range flocks. 100% arrival. Postpaid. Valuable illustrated 96-page booklet FREE. Telling all about poultry.

The Commercial Hatchery,
Box 75-A (The dependable plant) Richfield, Penna.

HIGH GRADE CHICKS

Blood Tested and Utility Stock

Leghorns, Rocks, Reds, Wyandottes, Anconas, Black Minorcas and Mixed. Pekin Ducklings.

Write for circular and prices.

TAYLOR'S HATCHERY, BOX 12, LIBERTY, N. Y.

PENNA. CHICKS



"State Supervised"
Flocks inspected by officials from the Penna. Dept. of Agriculture. Our 19th year. Get our low prices on Reds, Rocks, Leghorns and Minorcas. Member I.B.C.A.

Catalogue free.

THE KEYSTONE HATCHERY,
(The old reliable plant) RICHFIELD, PA.

BABY CHICKS

From Heavy Laying Free Range Flocks

	25	50	100	500	1000
S.C.W. & Br. Leghorns	\$3.50	\$6.00	\$12	\$57.50	\$110
S.C.B. and Wh. Rocks	4.00	7.50	14	67.50	130
Buff Orpingtons & Reds	4.00	7.50	14	67.50	130
White Wyandottes	4.00	7.50	14	67.50	130
Assorted Chicks	3.00	5.00	9	42.50	80

100% prepaid safe delivery guaranteed.

Order from this ad. or write for circular
Box 161
J. N. Nace Poultry Farm RICHFIELD, Pa.



MODEL HATCHERY. Box S MONROE, INDIANA
3 Reasons: (1) Breeding, high priced blood lines. Best pure bred, show winning strains, bred for winter eggs, egg-size and number of eggs, from high egg record bred-to-lay females. (2) Cullled for standard of perfection, quality, size, health, color, shape. (3) Actually weigh more when hatched. Perhaps most important poultry undertaking. Scientific incubating, proper moisture, heat, Petersen Electric Incubators. Often weigh pound more a 100. Snappy, peppy, healthy, fluffy, night start, twice value. 15 kinds. Better for the low price can't be had. Big Discounts NOW. Catalog FREE.

200,000 CHICKS 1929

Goodling's Super Quality. Healthy, Strong and Vigorous	50	100	500	1000
Single Comb, White Leghorns	\$6.50	\$12.00	\$57.50	\$110
Barred Plymouth Rocks	7.00	13.00	62.50	120
S.C. Rhode Island Reds	8.00	15.00	75.00	
Broiler Chicks, Heavy Breed	5.50	11.00	52.50	100
Broiler Chicks, Light Breed	5.00	10.00	47.50	90

Order direct. Prepaid 100% live delivery guaranteed. Circular Free.

THE VALLEY HATCHERY Box A, R. No. 1, RICHFIELD, PA.

CHICKS	Will ship C. O. D.	25	50	100
S. C. Reds		\$4.00	\$7.50	14.00
Barred Rocks		4.00	7.50	14.00
White Leghorns		3.50	6.50	12.00
Heavy Mixed		3.50	6.50	12.00
Light Mixed		2.75	5.00	9.00

500 lots 1/2c less, 1000 lots 1c less.
Free range. 100% Delivery. Circular.

W. A. LAUVER, McAlisterville, Pa.

LANCASTER QUALITY CHICKS

Our chicks come from flocks culled for Egg Production and Standard Quality by poultrymen trained at Ohio State University. OUR CATALOG is chicken from cover to cover. Write for it.
Lancaster Farms Hatchery R. 26 Lancaster, O.

CHICKS
Pure bred. Blood tested free range breeders. Leghorns, Anconas, 12c. Rocks, Reds, 14c. Wyandottes, Orpingtons, Minorcas, 15c. Black Giants, 20c. 100% live delivery. Valuable Chick Manual Free. Seidelton Farms, Washingtonville, Pa.

DUCKLINGS \$33; EGGS \$14-100
"Duck News" Free.
ROY PARDEE,
Islip, L. I., N. Y.

(Continued from Opposite Page)

edly into the activities of this gang. The result of the investigation has been indictments in the Federal Court against 91 persons and associations for violation of the Sherman Anti-Trust Act. The indictments as explained by Mr. Houston Kenyon, in charge of the New York Anti-Trust Division, are made on four accounts: conspiracy to restrain trade, conspiracy to monopolize, attempt to monopolize, and monopolizing. Each defendant is liable for a sentence of three years in prison; and a fine of \$15,000. Among the men indicted were three who were recently tried for bombing the home of Joseph Hasenfratz, a poultry dealer. This case was dismissed for lack of evidence. Poultrymen in general who are shipping live poultry to New York will be much interested in the outcome of these indictments.

Dressing Ducks for Market

I wish to ask you if you would please tell me the best method of how to scald white ducks, clean, so as not to leave any feathers on them. I have about 50 ducks to sell but have had no experience yet of how to scald them nice and clean for the market.—T. M., Iowa.

WE agree with you that picking ducks is rather a tedious proposition, particularly to the inexperienced. We have just learned from one of our big duck farmers a very satisfactory way to remove feathers.

Immediately after the duck has been stuck, plunge it in hot water which stands near the boiling point. You can leave it in this water for three or four minutes without injuring the texture of the bird. Just after taking the duck from the hot water, wrap it in a burlap bag until you are ready to remove the feathers. This steaming process has some mysterious power on the feathers and down that makes it very easy to remove. Should you have difficulty in removing the fine fuzz or down from the ducks, we would suggest that you rub your hand over the bird in a forward motion which will remove nearly all of that fine down that is so hard to get. After a little experience you should have very satisfactory results in easily preparing your ducks for market.

Three Aims for Poultry Breeders

PROFESSOR J. E. Rice of the New York State College of Agriculture in a recent talk stressed three aims which poultry breeders in New York State should keep in mind. They are as follows:

First: We must improve the health and quality of poultry so they may produce eggs and meat profitably. Progress is always up and never down and the average quality of our stock must be raised each year. Our aim in improving should first be to improve poultry for our own flock.

Second: New York State poultry flocks should be built up so it will be possible to supply the demand in the state from flocks produced in the state. At the same time New York State buyers should be kept informed as to where they can get poultry within the State.

Third: Good stock well advertised will mean that we will also have a surplus supply for other states and other countries.

Increase the size of your poultry house to keep pace with the size of your flock. Poultry are not city bred and do not like crowded conditions.

**KERR'S
1929
CHICKS**

**Quality better than ever
Prices lower than ever**

KERR'S 1929 Quality Chicks will have one more cross of the blood that is consistently producing our prize winners in the egg laying contests. Among the best ten-hen pens of all breeders having five or more pens in the 1927-28 contests eligible to compete for the coveted Poultry Item trophy, the Kerr pens stood ninth with an average lay of 221.9 eggs per bird. The leading specialty breeders of the United States competed.

Our 1929 Special Matings White Leghorn chicks are sired by males from hens with official records up to 294 eggs per year; our Special Matings Rhode Island Reds by males from hens with official records up to 280 eggs; and our Special Matings Barred Rocks by males from hens with official records up to 250 eggs. These 1929 chicks are out of hens, 80% of whose dams in four generations have contest or R. O. P. records up to 250 eggs in White Leghorns and up to 240 eggs in Rhode Island Reds and Barred Rocks.

We can furnish both utility and special mating chicks from flocks that have passed the blood test for Bacillary White Diarrhea, thus insuring a high degree of livability. Write for booklet with 1929 prices. Liberal discounts on orders placed before February 1st.

KERR CHICKERIES, Inc.

Department 10
Frenchtown, N. J. Camden, N. J. Paterson, N. J. Trenton, N. J.
Binghamton, N. Y. E. Syracuse, N. Y. Lancaster, Pa.
Danbury, Conn. W. Springfield, Mass.



EIGENRAUCH FARMS

RED BANK,

NEW JERSEY

18TH YEAR

breeding White Leghorns for size, vigor and heavy production of large White EGGS. 8,000 LAYERS are housed on our farm.

Our Chick Guarantee

100% satisfactory arrival on the exact date we promise shipment. Every chick sold by us is hatched from eggs laid by breeders on our own farm.

Write for Free Folder and Prices on Pullets and Chicks
EIGENRAUCH FARMS Dept. G, Red Bank, N. J.

Hall's Chicks

Leghorns-Reds-Rocks-Wyandottes

"WELL BRED FROM WELL BREEDERS"

Not just a hatchery, but a real Breeding Farm of 100 acres. Careful management, finest possible equipment, and years of experience guarantee you a better, more profitable chick. State tested annually for B.W.D. Free Circular.

Hall Bros. Poplar Hill Farm, Box 59 Wallingford, Conn.

HERE: NEARLY EVERYONE RAISES FULL BLOODED "AMERICAN" QUALITY CHICKS

	50	100	500	1000
American or Eng. SC. Wh. Leghorns	\$6.75	\$13.00	\$62.00	\$120.00
Hollywood Wh. or Brown or Buff Legs	7.25	14.00	67.00	130.00
Tancred Wh. Leg. Anconas—Barred Rocks	7.75	15.00	72.00	140.00
RG or SC Reds, Wh. Rocks, Parks Rocks	8.25	16.00	77.00	150.00
Wh. Wyandottes, Buff Orp., Blk. Minorcas	9.25	18.00	87.00	170.00
Brahmas, Col. Rocks, Blue Andalusians	11.25	22.00	105.00	200.00

Light Mixed \$9.00 a hundred. Mixed any breeds our selection \$10.00. Heavy Mixed \$12.00 a hundred.

Get our NEW CATALOGUE—It proves to you the SUCCESS our Customers have with our chicks—Breeders culled and Bred for High EGG PRODUCTION in Winter when eggs are demanding large premiums. Reference, Curwensville National Bank—100% Live Arrival—Dependable Service. Order Early.

AMERICAN CHICKERIES, BOX 214, GRAMPIAN, PA.

Fairport Quality Chicks

are bred to make money for you. Strong, healthy, vigorous from the world's best and heaviest laying strains such as—Tancred, Ferris, Owen Farms, Daniels, Thompson, Martin, Shepard, Fishel and others. Free range flocks, scientifically culled and supervised. Smith Hatched. 100% live delivery guaranteed. 16 breeds 9c and up. Postpaid. Members International Baby Chick Association. Send now for free poultry book and prices. Buy Hatchery Chicks for Greater Profits.

FAIRPORT HATCHERIES Box 44 Fairport, N. Y.

Schwegler's "THOR-O-BRED" BABY CHICKS

"LIVE AND LAY"

THEY LIVE because they are bred from healthy, free range breeders that have thrived and gained in vigor for generations. They LAY because they are from selected and tested high egg power stock. White, Brown and Buff Leghorns, Barred and White Rocks, R. I. Reds, Anconas, Black Minorcas, Buff Orpingtons, White Wyandottes. \$2c and up. 100% live delivery guaranteed. Postpaid. Member International Chick Assn. Write today for FREE Chick Book.

SCHWEGLER'S HATCHERY, 204 Northampton, BUFFALO, N. Y.

When writing Advertisers

Mention American Agriculturist

PLYMOUTH

The FULL-SIZE Car
In the Lowest-Priced Field

New Lower Prices

	NEW PRICES	SAVINGS	OLD PRICES
Coupe	\$655	\$30	\$685
Sedan Two-Door	675	25	700
Sedan Four-Door	695	40	735
De Luxe Coupe .	695	40	735

Roadster and Touring Car Prices Unchanged: Roadster \$675; Touring Car \$695

F. O. B. FACTORY

In the past, scores of thousands of buyers seeking the greatest dollar-value, have purchased Plymouth—on the basis of simple comparison and contrast with other cars in its price range.

At these new lower prices, the contrasts that Plymouth presents—in all-round economy of operation and upkeep, combined with full-size, weather-proof hydraulic 4-wheel brakes, modern engineering, impressive power and performance—are even more conclusive, even more emphatic of the Chrysler management's determination

to give quality and value far in advance of anything else in the lowest-priced field.

This most significant reduction in Plymouth prices is thus in keeping with Chrysler ideals, while passing on to purchasers the benefits that accrue from hugely increased production.

See the Plymouth! Drive it—and try to match it in quality and value. We believe you will find these new low prices remove Plymouth further than ever from any other offering in the greatest motor car market.

\$655

AND UPWARDS, F. O. B. FACTORY

Would Save Counties Thirty Millions

(Continued from Page 11)

shall contribute the same share or proportion as is required to be contributed by that county toward highways hereafter to be built."

The commission also recognized the great problem of State aid to towns for the maintenance of dirt roads, and stated: "It is manifest to your commission that the original intent and purpose of the law is no longer effective and that some revision thereof is necessary. It begs leave, however, to subject this to further study and submit a recommendation thereon at its next meeting."

How the Plan Will Help You

Now let us see how the recommendations of this commission will work out and will affect you as a farmer owner of property paying taxes towards the maintenance of different roads. In the center of page one there is a table showing all of the counties of the State, the miles of state and county roads yet to be built, according to present plans, and what it will cost the counties under the present plans to complete this highway system, and what it will cost the counties if the commission's plan is adopted; that is, if the gasoline tax is passed by this session of the legislature and a portion of the proceeds applied for the building of roads and bridges.

You will note from the table that there are ten wealthy counties—Albany, Erie, Monroe, Nassau, Niagara, Onondaga, Rockland, Schenectady, Suffolk and Westchester—that do not appear as receiving help. However, they will be greatly aided by having their allowance more than doubled for the construction and maintenance of a secondary system of improved county roads, and also by being relieved of the maintenance charge of fifty dollars per mile in towns and one and one-half cents per square yard in villages.

In column No. 1, you will see the number of miles of county and state highways yet to be built. Column No. 2 shows the number of thousands of dollars that the county will have to pay under the present plan to complete its highway system. Column No. 3 shows the reduction or saving to each county in thousands of dollars if the commission's plan of relief is adopted by the legislature. Column No. 4 shows the number of thousands of dollars the county would pay under the new plan.

Are These Savings Worth Getting?

In other words, if you subtract the sum in column No. 4 from column No. 2, you will get the saving to each county in column No. 3. For example, take Allegany County. It has 46.2 miles yet to be built. Under the present plan, it will cost this county, just for its own share, \$892,000 to complete this system of highways. Under the plan proposed by the Governor's commission, it will cost Allegany County only \$153,000 to complete its county and state highways, making a saving to the taxpayers of the county of \$739,000. We ask you if this is not worth while.

The fine thing about the recommended plan is that all of the farm organizations of the State were unanimous in their approval of the plans as proposed by the commission, and the hearing called by the legislature on January 16th also seemed to be very much in sympathy and harmony with these plans to adjust the highway taxes more fairly for residents of the rural districts.

The Governor's commission adjourned to meet again in Albany on January 30th, when further plans for giving agriculture of the Empire State a square deal will be taken up. Watch these columns for full and definite reports of the news and the progress made in putting these plans for farm relief into legislation.

Post Your Farm And Keep Trespassers Off

We have had some new signs made up of extra heavy material because severe storms will tear and otherwise make useless a lighter constructed material. We unreservedly advise farmers to post their land and the notices we have prepared comply in all respects with the laws of New York, New Jersey and Pennsylvania. The price to subscribers is 95 cents a dozen, the same rate applying to larger quantities. Remittance must accompany order.

American Agriculturist
461 Fourth Avenue. New York

To benefit by our guarantee of ads, say
"I saw your ad in
American Agriculturist"

READER'S ORDER FOR CLASSIFIED ADVERTISING

Rates Only 7 Cents A Word Per Insertion

American Agriculturist, 461 Fourth Ave., New York City.

Gentlemen: Kindly classify and insert my advertisement of words to appear times in your paper. Enclosed find remittance of \$..... to pay for advertisement, which reads as follows:

.....
.....
.....
.....
.....
.....

NAME

ADDRESS

Bank Reference

For only 7 cents a word you can place your story of your wants or what you have to sell in nearly 150,000 homes.

What About Imagination?

This Needs Wise Guidance in Childhood

BY the time a child is three or four years old he has developed a vivid imagination. Neighbors listen with astonishment to the child's long tales about his home life, and many times parents are much embarrassed when these wrong impressions need to be corrected. This period causes much needless worry if we do not understand this imagination to be a much desired quality and that if rightly directed may become a real asset to the child's life. One has but to observe his delight when he is understood to be telling a story book tale which includes a recital of his own small experiences to realize the joy experienced from these flights of fancy. Should we tell him that these stories were falsehoods, he would be confused as to what that really meant.

Imagination is natural and should be dealt with accordingly. By making a distinction between falsehood and imagination, this trying period, so called, proves to be a constructive one rather than a destructive one. Since a little child in his straightforward sincerity has a capacity for high appeals we are inspired by this fact to the highest

to repress her freedom in telling them, a confidence which I most desire in order to be most helpful to her. She is not left to build upon her own imagination but is told right from wrong. In other words, her imagination is rightly directed. What a privilege we mothers enjoy—the training of little children!—L. T. H., New York.

To Dry-Clean Curtains

HAD you ever thought of dry cleaning your curtains? Washing with soap and water should be a last resort because it often dulls the colors or the texture of the materials. A specialist recommends the following method of cleaning curtains—an equally good way to cleanse clothing which would be spoiled by water:

- "Buy a high test gasoline.
- "Always use gasoline outdoors.
- "Work in the shade.
- "Do not rub the material too vigorously in the hands.
- "Never use a board.
- "Never heat gasoline on the stove. It may explode. Heat water hot, not boiling, and carry it outside the house. Remove the top from the gasoline can and set the can into the water to heat.
- "Do not press the curtains after they are cleaned in gasoline until thoroughly dry."

Following is the procedure recommended in dry cleaning curtains. Take down the curtains, brush them well or hang them in the wind so that all loose dirt is removed. Soak them in the gasoline a half hour. Stir them about and squeeze the gasoline through them but do not rub. Wring the curtains dry and hang them in the sun. Leave them outdoors from three to twelve hours so that they will dry thoroughly and lose most of the gasoline odor. If possible, leave the curtains out over night; then bring them in, dampen and press with a hot iron.

There are special soaps on the market to use with gasoline for cleaning purposes, according to the specialist. It is not necessary to buy the soap unless the curtains are very badly soiled. Even then it is not always necessary because the curtains may be washed in one pan of gasoline and rinsed in a second. The gas removes all grease and the dirt will drop out. Any spot that remains after cleaning with gasoline is probably some substance that will not dissolve in gasoline. A careful sponging in clear water with a cloth of a similar color will clean up everything.

A Refinished Kitchen Floor

MY kitchen floor was showing considerable wear; not wishing to purchase a new linoleum at the time I decided to oil it. First I cleaned the floor thoroughly and then gave it a coat of boiled linseed oil, applied with a paint brush.

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F-134FW9592

A trig little two-piece outfit, equally "at home" on sport occasions or on the street. Small view shows style of dress. May be made in ensemble effect of one material, or dress may be made of one fabric, coat of another, velvet or velveteen being particularly smart for the coat in the latter case. Sizes 14 to 20 years, and 36 to 40 inch bust. Size 36 requires 3 1/2 yds. of 36-inch material for dress, and 2 1/2 yds. of 36-inch material for jacket.



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Enthusiastically accepted by women who desire the most becoming lines. "V" line at front, crushed belt, "kick" pleats, slightly full sleeves with tight cuffs. Silks, wash fabrics, or woollens all work up splendidly in this design. Size 16 to 20 years, and 36 to 44 inch bust. Size 36 requires 3 1/2 yds. of 36-inch material, and 1/2 yd. of 36-in. contrasting.

F-134FW9576

Charming afternoon or street frock. Its shawl collar is one of the newer style notes; raglan shoulder and bell sleeve are unique. Front pleats make movement free. Very good in silks, wool fabrics, or practically any materials. Sizes 16 to 20 yrs., and 36 to 44 inch bust. Size 36 needs 3 1/2 yds. of 36-inch material with 1/2 yard of 36-in. contrasting.

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AN important part of our store program is to bring to your attention each month some *typical value* from one of our departments. Starting in February, we are featuring our new styles in house dresses at \$1.79, a very low price.

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For months we have had several of the best-known makers hard at work for us.

We told the manufacturers, "You must cut every dress to fit perfectly. Each size must be cut individually. All colors, including trimmings, must be fast to washing—you will have to replace

YOUTHFUL SMALL PATTERNED PRINT—in light blue, dark blue and gold. Slenderizing one piece back; interesting basque front, with the very fashionable front skirt fullness shirred flatly onto the basque. Collar and skirt trimmings of white poplin strikingly hand-embroidered in gold and blue and edged with lace. Printed dresses in dozens of other styles, as dainty, as smart as this one—everyone only \$1.79.



ALL SILK NATURAL COLOR PONGEE
(Description at right)

any dress that fades. Every stitch must come up to the high standards that the women of America expect of their local J. C. Penney store."

You will like these dainty new Porch Frocks, we know. They are so much more flattering than the old style of house dress. No longer need you wear a "bungalow apron" that makes you feel dressed for housework only. Here are gay little styles that you will love to wear all day—in the house and out of it. If you do not have a J. C. Penney store in your town, write and we will tell you where you can find these special values nearest you.

Ask for free copy of our latest "Store News," in rotogravure. Address J. C. Penney Company, Inc., 330 West 34th Street, New York, N. Y.

Prettier than you
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40 different styles
160 patterns

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(CENTER) ALL SILK NATURAL COLOR PONGEE trimmed with bands of coral pongee on neck, sleeves and front of skirt. The seamless back gives a smart, flat line. Beautifully cut and finished throughout. Only one of the many different, equally smart frocks amazingly priced for all-silk Pongee at \$1.79. Other models, other materials, at 79c and at \$2.79.

(RIGHT) LOVELY SPRING-LIKE FROCK OF SMALL-FLOWERED print in green and two shades of rose on white. The straight back and the smart front fullness of its skirt give it a crisp, youthful jauntiness. One of a great number of delightfully feminine styles—all at the remarkable price of \$1.79.



J.C. PENNEY CO. INC. DEPT. STORES

Aunt Janet's Corner

KEEP your feet on the ground—but keep 'em dry—is good advice in these days of flu and pneumonia. It applies in more ways than one. Don't get panic-stricken and expect the worst. Being afraid will not help matters any if you should get it, whereas a level head and prompt treatment will work wonders with flu. If you do as the doctors advise, you will go to bed and stay there right from the beginning. It saves a lot of trouble later. Besides that, you would not be distributing flu germs by coughing and sneezing all over the place. It is a kindness to family and friends to keep your "troubles" to yourself in this case.

Prevention is better than cure, of course, and the rules are fairly simple. Keep warm and dry, avoid drafts, late hours or over-eating, wash hands frequently, especially before touching food, use only individual drinking cups, keep rooms ventilated. In short, observe the best rules of personal hygiene given out by departments of health, and do not expect magical results from some "cure-all" somebody happens to recommend. That's where "keeping

Cromwell, "Put your trust in God, my boys, but keep your powder dry."—Aunt Janet.

New Use for Old Feather Beds

NEEDING new comforts for my beds this winter I decided to make them of feathers like the expensive one I saw in the window downtown.

I used the feathers from an old

Smart Morning Dress



2953

Morning dress PATTERN 2953 is both smart and becoming. Winter days offer opportunity to busy farm women for getting ahead with the family sewing and this dress pattern would answer for some very attractive housefrocks for herself. The pattern cuts in sizes 18 years, 36, 38, 40, 42, 44, 46, 48 and 50 inches bust measure. Size 36 requires $3\frac{1}{2}$ yards of 40-inch material with $\frac{1}{4}$ yard of 6 inch material for vestee. PRICE 13c.

feather bed and made the comforts this way: I made a tick of Lonsdale cambric a little larger than I wanted the finished comfort to be, leaving it entirely open across one end. I then stitched it lengthwise on the machine in about ten inch compartments. These can be any width, but the wider ones are more easily stuffed and the feathers do not work up and down in them as you might imagine. Stuff one compartment at a time, then turn the edges together and pin until all are full, then stitch on machine. This pad is "the form". Stitch up the widths of sateen in pretty colors for the comfort, solid color for the bottom and flowered for the top, stretch tight in the quilting frames and quilt in large curves marked off by a dinner plate. Shake and air the comfort and the feathers will fluff up. You cannot guess what a difference it will make in the looks of your bed till you try one. By taste and neatness you can have a duplicate of the down comforts costing sixteen dollars.—Mrs. A. P. T., Ala.

Look Slender



3454

DRESS PATTERN 3454 with its surplice closing vestee and kilted side plaits is nicely adapted to slenderize full figures. Crepe Elizabeth, sheer tweed, angora jersey, silk pique or any of the weightier silks would best suit this design. It cuts in sizes 16, 18 years, 36, 38, 40, 42, 44 and 46 inches bust and is extremely easy to make. Size 36 requires $3\frac{1}{2}$ yards of 40-inch material with $\frac{5}{8}$ yard of 32-inch contrasting. PRICE 13c.

TO ORDER: Write name, address, pattern numbers and sizes clearly and correctly and enclose with correct remittance in stamps or coin (although coin is sent at own risk). Add 12c for one of the new Fashion Catalogs, and send to Pattern Department, American Agriculturist, 461-4th Avenue, New York City.

your feet on the ground" will help.

I am moved to say these things to readers of the Corner because I am hearing constantly of people who work themselves into a perfect hysteria over what might happen. Live in the most normal, natural way, keep the mind busy with things it ought to consider and don't invite trouble by worrying for fear it will come. Then if you do get the germs, follow the good advice given above. In the words of

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SPRING
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Additional Classified Advertising On Page 30

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To Start the Oil Circulating

By Ray Inman

Don't run the automobile engine on bitter cold mornings if the oil won't circulate

Chart showing what lack of oil does to various parts of an automobile.

WE SPENT SO MUCH TIME TRYING TO FIGURE OUT WHAT THIS THING WAS, WE HADN'T TIME TO DISCOVER WHAT LACK OF OIL HAD DONE TO IT

SHOWING WHAT LACK OF OIL CAN DO TO A DRIVE SHAFT (THIS SHAFT, HOWEVER, WAS USED BY ONE OF OUR MECHANICS TO SOCK ANOTHER ONE OVER THE HEAD)

A PEANUT, FOUND UNDER THE REAR SEAT. (THE TASTE INDICATED IT HAD BEEN THERE SINCE THE LAST OIL CHANGE)

MUCH TIME WAS WASTED TRYING TO FIND OUT WHAT OIL HAD TO DO WITH THIS

IT WAS FOUND THAT AN OIL CAN IS NO GOOD WITHOUT OIL.

to start circulation heat bottom of crank case just below the oil pump intake

OTTO, DID YOU HEAT THAT CRANK CASE TO START THE OIL CIRCULATING? LIKE I TOLD YOU TO?

CHOO! I HEET IT! I HEET IT! WIT DEES SLECHT HAMMER, UNT DE OIL BET CIRCULATE ALL, OFER DE GROWN!

Heat an iron bar or wedge and prop it against bottom of crank case

Better still—use your wife's electric iron

OW!

WHAT TH' SAM HILL DOYATHINK YE ARE—A CRANK CASE?

DON'T use a lamp, or a torch, or any sort of flame

GO? GOODNESS! YOU SHOULD HAVE SEEN IT!

SO YOU BUILT AFIRE UNDER YOUR CRANK CASE. —HOW DID IT GO?

The Little Shepherd of Kingdom Come

The Story Thus Far

CHAD leaves "Lonesome" with his dog "Jack." His foster parents are both dead from the plague and plans have been laid to bind Chad out to a hard fisted neighbor. After the funeral, Chad collects a rifle, some powder, and shot and a haversack and with "Jack" by his side, starts out for unknown parts. He meets the sons of Joel Turner from over the mountain who take him home. Chad's cleverness at school gains the admiration of Caleb Hazel, the schoolmaster. They become close friends. Hazel tells Chad of the "Bluegrass Country" beyond the hills. Logging operations take Chad to a distant city where he gets lost and starts home on foot. He is picked up by Major Calvin Buford. It appears that Chad is also a Buford and is believed to be a kinsman of his new found friend, who takes him to his home in Lexington in the heart of the "Bluegrass." Chad accepts the Major's offer of a home and an education. Chad enters into the social life and becomes very popular at school. He falls in love with Margaret Dean, daughter of General Dean, neighbor of the Bufords. Meanwhile feeling grows bitter between North and South and war clouds gather. Chad joins the Union forces.

An hour later, the General and Harry and Dan stood on the big portico. Inside, the mother and Margaret were weeping in each other's arms. Two negro boys were each leading a saddled horse from the stable, while Snowball was blubbing at the corner of the house. At the last moment Dan had decided to leave him behind. If Harry could have no servant, Dan, too, would have none. Dan was crying without shame. Harry's face was as white and stern as his father's. As the horses drew near the General stretched out the sabre in his hand to Dan.

"This should belong to you, Harry."

"It is yours to give, father," said Harry, gently.

"It shall never be drawn against my roof and your mother."

The boy was silent.

"You are going far North?" asked the General, more gently. "You will not fight on Kentucky soil?"

"You taught me that the first duty of a soldier is obedience. I must go where I'm ordered."

"God grant that you two may never meet."

"Father!" It was a cry of horror from both the lads.

The horses were waiting at the stiles. The General took Dan in his arms and the boy broke away and ran down the steps, weeping.

"Father," said Harry, with trembling lips, "I hope you won't be too hard on me. Perhaps the day will come when you won't be so ashamed of me. I hope you and mother will forgive me. I can't do otherwise than I must. Will you shake hands with me, father?"

"Yes, my son. God be with you both."

And then, as he watched the boys ride side by side to the gate, he added: "I could kill my own brother with my own hand for this."

He saw them stop a moment at the gate; saw them clasp hands and turn opposite ways—one with his face set for Tennessee, the other making for the Ohio. Dan waved his cap in a last sad good-by. Harry rode over the hill without turning his head. The General stood rigid, with his hands clasped behind his back, staring across the gray fields between them. Through the window came the low sound of sobbing.

XXI

MELISSA

SHORTLY after dusk, that night, two or three wagons moved quietly out of Lexington, under a little guard with guns loaded and bayonets fixed. Back at the old Armory—the home of the "Rifles"—a dozen youngsters drilled vigorously with faces in a broad grin, as they swept under the motto of the company—"Our laws the commands of our Captain." They were following out those commands most literally. Never did Lieutenant Hunt give his orders more sonorously—he could be heard for blocks away. Never did young soldiers stamp out manoeuvres more lus-

tily—they made more noise than a regiment. Not a man carried a gun, though ringing orders to "Carry arms" and "Present arms" made the windows rattle. It was John Morgan's first ruse. While that mock-drill was going on, and listening Unionists outside were laughing to think how those Rifles were going to be fooled next day, the guns of the company were moving in those wagons toward Dixie—toward mocking-bird-haunted Bowling Green, where the underfed, unclothed, unarmed body of Albert Sydney Johnston's army lay, with one half-feathered wing stretching into the Cumberland hills and the frayed edge of the other touching the Ohio.

Next morning, the Home Guards came gayly around to the Armory to seize those guns, and the wily youngsters left temporarily behind (they, too, fled for Dixie, that night) giped them unmercifully; so that, then and there, a little interchange of powder-and-ball civilities followed; and thus, on the very first day, Daniel Dean smelled the one and heard the other whistle right harmlessly and merrily. Straightway, more guards were called out; cannon were planted to sweep the principal streets, and from that hour the old town was under the rule of a Northern or Southern sword for the four years' reign of the war.

Meanwhile, Chad Buford was giving a strange journey to Dixie. Whenever he dismounted she would turn her head toward the Bluegrass, as though it surely were time they were starting for home. When they reached the end of the turnpike, she lifted her feet daintily along the muddy road, and leaped pools of water like a cat. Climbing the first foot-hills, she turned her beautiful head to right and left, and with pointed ears snorted now and then at the strange dark woods on either side and the tumbling waterfalls. The red of her wide nostrils was showing when she reached the top of the first mountain, and from that high point of vantage, she turned her wondering eyes over the wide rolling stretch that waved homeward, and whinnied with distinct uneasiness when Chad started her down into the wilderness beyond. Distinctly that road was no path for a lady to tread, but Dixie was to know it better in the coming war.

Within ten miles of the Turners', Chad met the first man that he knew—Hence Sturgill from Kingdom Come. He was driving a wagon.

"Howdy, Hence!" said Chad, reining in.

"Whoa!" said Hence, pulling in and staring at Chad's horse and at Chad from hat to spur.

"Don't you know me, Hence?"

"Well, God—I—may—die, if it ain't Chad! How air ye, Chad? Goin' up to ole Joel's?"

"Yes. How are things on Kingdom Come?"

Hence spat on the ground and raised one hand high over his head:

"God—I—may—die, if thar hain't

hell to pay on Kingdom Come. You better keep off o' Kingdom Come," and then he stopped with an expression of quick alarm, looked around him into the bushes and dropped his voice to a whisper:

"But I hain't sayin' a word—rickollect now—not a word!"

Chad laughed aloud. "What's the matter with you, Hence?"

Hence put one finger on one side of his nose—still speaking in a low tone:

"Whut'd I say, Chad? D'I say one word?" He gathered up his reins. "You rickollect Jake and Jerry Dillon?" Chad nodded. "You know Jerry was al'ays a-runnin' over Jake 'cause Jake didn't have good sense. Jake was drapped when he was a baby. Well, Jerry struck Jake over the head with a fence-rail 'bout two months ago, an' when Jake come to, he had just as good sense as anybody, and now he hates Jerry like pizen, an' Jerry's half afeard of him. An' they do say as how them two brothers air a-goin'—!" Again Hence stopped abruptly and clucked to his team. "But I ain't a-sayin' a word, now, mind ye—not a word!"

Chad rode on, amused, and thinking that Hence had gone daft, but he was to learn better. A reign of forty years' terror was starting in those hills.

Not a soul was in sight when he reached the top of the hill from which he could see the Turner home below—about the house or the orchard or in the fields. No one answered his halloo at the Turner gate, though Chad was sure that he saw a woman's figure flit past the door. It was a full minute before Mother Turner cautiously thrust her head outside the door and peered at him.

"Why, Aunt Betsey," called Chad, "don't you know me?"

At the sound of his voice Melissa sprang out the door with a welcoming cry, and ran to him, Mother Turner following with a broad smile on her kind old face. Chad felt the tears almost come—these were friends indeed. How tall Melissa had grown, and how lovely she was, with her tangled hair and flashing eyes and delicately modelled face. She went with him to the stable to help him put up his horse, blushing when he looked at her and talking very little, while the old mother, from the fence, followed him with her dim eyes. At once Chad began to ply both with questions—where was Uncle Joel and the boys and the schoolmaster? And, straightway, Chad felt a reticence in both—a curious reticence even with him. On each side of the fireplace, on each side of the door, and on each side of the window, he saw narrow blocks fixed to the logs. One was turned horizontal, and through the hole under it Chad saw daylight—port-holes they were. At the door were oak-en blocks as catches for a piece of upright wood nearby, which was plainly used to bar the door. The cabin was a fortress. By degrees the story came out. The neighborhood was in a turmoil of bloodshed and terror. Tom and Dolph had gone off to the war—Rebels. Old Joel had been called to the door one night, a few weeks since, and had been shot down without warning. They had fought all night. Melissa herself had handled a rifle at one of the port-holes. Rube was out in the woods now, with Jack guarding and taking care of his wounded father. A Home Guard had been organized, and Daws Dillon was captain. They were driving out of the mountains every man who owned a negro, for nearly every man who owned a negro had taken, or was forced to take, the Rebel side. The Dillons were all Yankees, except Jerry, who had gone off with Tom; and the giant brothers, Rebel Jerry and Yankee Jake—as both were already known

(Continued on Page 30)



"Extra—Extra"

Extra what? *Extra help*, of course! If by some chance you've never tried Fels-Naptha it will be good news to know this golden soap gives *extra help* in washing because it brings two active cleaners. Good golden soap and plenty of naptha, blended together by our exclusive process and working hand-in-hand to loosen the dirt and wash it away. Try it and see for yourself that...

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Any druggist can supply you with 2½ ounces of Pinex. Pour this into a pint bottle, and fill up with plain granulated sugar syrup or strained honey. It's no trouble at all to mix, and when you once use it, you will never be without it. Keeps perfectly and tastes good—children really like it.

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Pinex is a highly concentrated compound of genuine Norway Pine, containing the active agent of creosote, in a refined, palatable form. Nothing known in medicine is more helpful in cases of severe coughs, chest colds and bronchial troubles. Do not accept a substitute for Pinex. It is guaranteed to give prompt relief or money refunded.



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Additional Classified Advertising

WOMEN'S WANTS

SWITCHES—Combing made up. Booklet. Flannelette house dresses \$1.50. EVA MACK, Box 298, Ithaca, New York.

LADIES SILK and WOOL Bloomers, white, grey, tan, 36-44. 2 pair \$1.50. Good openings for agents. A. H. TALBOT SALES COMPANY, Norwood, Mass.

UNUSUAL OFFER 7 pounds patchwork percales Gingham assorted colors \$1. 4 lbs. Blanket remnants \$1. 4 lbs. cretonne sample pieces \$1. 4 lbs. silk and cotton rug strips \$1. Pay postman plus postage. Silk remnants beautiful colors large package 25c. One pound \$1. postpaid. NATIONAL TEXTILE CO., 661 Main Street, Cambridge, Mass.

WOOL—HIDES—FURS

WANTED EASTERN STATES Muskrats \$1.40 to \$1.60 average free of poor. Ship immediately. O. FERRIS & CO., Dept. A.A., Chatham, N. Y.

FURS—HIDES will bring the best prices when shipped here. Write for prices, market information, tags. No lot too small or large. S. H. LIVINGSTON, Suce. to Keystone Hide Company, Lancaster, Pa.

WANTED—RAW FURS, Ginseng, Minks, Racoon, especially broad stripe Skunk, \$1.50. STERN'S FUR CO., New Brunswick, N. J.

AVIATION

AVIATION—Salary while learning, \$18 to \$35 per week, while under instruction in our factory and at our airport. Call or write for information without obligation. WEEKS AIRCRAFT CORPORATION Department S, Plankinton Building, Milwaukee, Wisconsin.

SITUATIONS WANTED

SOBER HONEST MAN wants country home. Light work, low wages. J. C., care of American Agriculturist.

AGENTS WANTED

EVERY HOME A PROSPECT: make big money, employ crew; sell dependable trees, shrubbery; all or part time; landscape service; experience not essential; full cooperation; com. paid weekly; we deliver, collect. Write WILLEMS, SONS' NURSERIES, Desk A, Rochester, N. Y.

MEN TO SELL our high grade garden and field seed direct to planters. A good position with big income. Experience unnecessary. COBB CO., Franklin, Mass.

WANTED: C. W. Stuart & Co., Newark, New York State (Nurserymen for 75 years) need live wire salesmen. Part or full time. An excellent opportunity. Write for particulars.

AGENTS: \$16 day and New Ford Auto Free. Sell groceries. Over 400 items used daily every home. Steady all year job. Your own groceries about half price. Send for samples. HARLEY COMPANY, Dept. B-2265, Dayton, Ohio.

TOBACCO

LEAF TOBACCO. Good, sweet chewing, 3 lbs. 90c; 5 lbs. \$1.25; 10 lbs. \$2.00. Smoking, 3 lbs. 60c; 5, 90c; 10, \$1.50. UNITED FARMERS, Mayfield, Ky.

HOMESPUN TOBACCO: Chewing 5 lbs. \$1.50. Smoking 5 lbs. \$1.25. Box 50 Cigars \$1.75. Pay when received. Pipe free. FARMERS UNION, A6, Paducah, Ky.

HOMESPUN TOBACCO: Chewing 5 lbs. \$1.50; ten \$2.50; Smoking 10 lbs. \$2.00; pay when received. FARMERS ASSOCIATION, West Paducah, Ky.

CIGARS FROM FACTORY. Trial 50 large Perfectos, postpaid \$1.00. SNELL CO., Red Lion, Pa.

When writing Advertisers
Mention American Agriculturist

The Little Shepherd of Kingdom Come

(Continued from Page 29)

—had sworn to kill each other on sight. Bushwacking had already begun. When Chad asked about the schoolmaster, the old woman's face grew stern, and Melissa's lip curled with scorn.

"Yankee!" The girl spat the word out with such vindictive bitterness that Chad's face turned slowly scarlet, while the girl's keen eyes pierced him like a knife, and narrowed as, with pale face and heaving breast, she rose suddenly from her chair and faced him—amazed, bewildered, burning with sudden hatred. "And you're another!" The girl's voice was like a hiss.

"Why, 'Lissy" cried the old mother, startled, horrified.

"Look at him!" said the girl. The old woman looked; her face grew hard and frightened, and she rose feebly, moving toward the girl as though for protection against him. Chad's very heart seemed suddenly to turn to water. He had been dreading the moment to come when he must tell. He knew it would be hard, but he was not looking for this.

"You better git away!" quavered the old woman, "afore Joel and Rube come in."

"Mebbe he come hyeh to find out whar they air—don't tell him!"

"Lissy!" said Chad, brokenly.

"Then whut did you come fer?"

"To tell you good-by, I came to see all of you, Lissy."

The girl laughed scornfully, and Chad was helpless. He could not explain, and they could not understand—nobody had understood.

"Aunt Betsey," he said, "you took Jack and me in, and you took care of me just as though I had been your own child. You know I'd give my life for you or Uncle Joel, or any one of the boys"—his voice grew a little stern—"and you know it, too, Lissy—"

"You're makin' things wuss," interrupted the girl, stridently, "an' now you're goin' to do all you can to kill us. I reckon you can see that door. Why don't you go over to the Dillons?" she panted. "They're friends o' your'n. An' don't let Uncle Joel or Rube ketch you anywhar round hyeh!"

"I'm not afraid to see Uncle Joel or Rube, Lissy."

"I'm sorry not to see Jack. He's the only friend I have now."

"Why, Jack would snarl at ye," said the girl, bitterly. "He hates a Yankee." She pointed again with her finger. "I reckon you can see that door."

They followed him, Melissa going on the porch and the old woman standing in the doorway. On one side of the walk Chad saw a rose-bush that he had brought from the Bluegrass for Melissa. It was dying. He took one step toward it his foot sinking in the soft earth where the girl had evidently been working around it, and broke off the one green leaf that was left.

"Here, Lissy! You'll be sorry you were so hard on me. I'd never get over it if I didn't think you would. Keep this, won't you, and let's be friends, not enemies."

He held it out, and the girl angrily struck the rose-leaf from his hand to her feet.

Chad rode away at a walk. Two hundred yards below, where the hill rose, the road was hock-deep with sand, and Dixie's feet were as noiseless as a cat's. A few yards beyond a ravine on the right, a stone rolled from the bushes into the road. Instinctively Chad drew rein, and Dixie stood motionless. A moment later, a crouching figure, with a long squirrel rifle, slipped out of the bushes and started noiselessly across the ravine. Chad's pistol flashed.

"Stop!"

The figure crouched more, and turned a terror-stricken face—Daws Dillon's.

"Oh, it's you, is it? Well, drop that gun and come down here."

The Dillon boy rose, trembling.

"What're you doin' sneaking around in the brush?"

"Nothin'!" The Dillon had to make two efforts before he could speak at all. "Nothin', jes' a-huntin'!"

"Huntin'!" repeated Chad. He lowered his pistol and looked at the sorry figure silently.

"I know what you were huntin', you rattlesnake! I understand you are captain of the Home Guard. I reckon you don't know that nobody has to go into this war. That a man has the right to stay peaceably at home, and nobody has the right to bother him. If you don't know it, I tell you now. I believe you had something to do with shooting Uncle Joel."

The Dillon shook his head, and fumbled with his hands.

"If I knew it, I'd kill you where you stand, now. But I've got one word to say to you, you hell-pup. I hate to think it, but you and I are on the same side—that is, if you have any side. But in spite of that, if I hear of any harm happening to Aunt Betsey, or Melissa, or Uncle Joel, or Rube, while they are all peaceably at home, I'm goin' to hold you and Tad responsible, whether you are or not, and I'll kill you"—he raised one hand to make the Almighty a witness to his oath—"I'll kill you, if I have to follow you both to hell for doin' it. Now, you take keer of 'em! Turn 'round!"

(To be Continued Next Week)

Additional Classified Advertising

LUMBER—BUILDING SUPPLIES

ROOFING PAPER, 3-ply, \$1.35 per roll, 100 sq. ft. Prepaid. Asphalt shingles, roofcoating, paint. Send for price list. WINKER BROS., Millis, Mass.

MISCELLANEOUS

USED CIVIL WAR ENVELOPES with flags, designs, etc., \$1 to \$15 paid. Other stamps on envelopes before 1871 bought. W. RICHMOND, Cold Spring, N. Y.

WANTED—HAY, GRAIN, Potatoes, Apples, Cabbage, Carrots. Pay highest market prices. THE HAMILTON CO., New Castle, Pa.

HONEY: 60 lbs. best clover \$0.60. Buckwheat \$5.40. Not prepaid. Satisfaction guaranteed. F. W. LESSER, Fayetteville, N. Y.

WANTED TO BUY old bags. We pay excellent prices. Write for prices. We pay freight. OWASCO BAG CO., Rochester, N. Y.

WANTED USED BURLAP bags or cotton bags any quantity all year round. HOFFMAN BROS. BAG CO. 39 Gorham St., Rochester, N. Y.

HAVE YOU EVER considered weaving rugs at home to make money? An enjoyable business, now more profitable than ever. Our new catalog will interest you. Write for it today. UNION LOOM WORKS, 332 Factory St., Boonville, N. Y.

SECOND HAND 3 H.P. Wagner motor, perfect. \$60. PAUL DICKINSON, Lisbon, N. H.

RADIO 5 TUBE cheap or exchange for raw furs. Write W. SIMMS, Lake, New York.

FINE THIN SHELL pecans, grower direct to consumer. 27c lb., prepaid, by mail and express. 6 lbs. up. JOE P. WILSON, Gulfport, Miss.

EXTENSION LADDERS, 20 to 32 ft. 25c per ft. 32 to 40 ft. 27c per ft. Freight prepaid. ARTHUR L. FERRIS, Box A, Interlaken, N. Y.

WANTED AUTO CYLINDERS to grind or hone. Ford cylinder blocks ground and fitted with piston rings and pins for \$16.50. Write for prices on other cars. WOLFE BROS., Punxsutawney, Pa.

GENUINE FAIRBANKS PORTABLE Platform Scales at \$16.15 for the 500-lb. and \$18.90 for the 1000-lb. are 20 to 25 per cent lower than pre-war price. THE PECK CO., St. Johnsbury, Vt.

PEANUTS—Buy direct from growers. Roast them yourself. 10 lbs. \$1.50; 25 lbs. \$3.00; 100 lbs. \$10.00; 500 lbs. \$40.00; 2000 lbs. \$150.00. Now booking orders for "FROSTPROOF" Cabbage Plants. J. P. COUNCIL COMPANY, Franklin, Va.

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WANTED TO BUY

I WANT A REAL COUNTRY PLACE near New York City for a health home. Detailed particulars. Photographs returned. State best cash price, mortgage terms. J. C. CARLAND, 291 Clinton Ave., Brooklyn, N. Y.



State Troopers Nab Chicken Thieves

WHILE chicken thieves were operating in the village of Sheridan, Chautauqua County, N. Y., they were surprised by the appearance of Corp. Harry Adams and G. W. Pratt, troopers from troop A of Batavia. On account of darkness the officers were unable to follow and the thieves escaped through the vineyards. The thieves had made one haul of chickens and had left them in their car which was standing along the road side.

The next night a Ford Coupe owned by Earl J. Caldwell of Irving, was stolen from his barn. Mr. Caldwell lives about 12 miles from where the chickens were stolen. Trooper Adams secured the names and address of the thieves from the State Automobile License Department and immediately got in touch with troopers at their home town and when the thieves returned home they were placed under arrest and returned to Sheridan for trial before Judge Luce, who gave them a fine of fifty dollars and ninety days in jail. The prisoners admitted that they stole the Ford Coupe and were taken to Irving before Judge Putney where they were held on the charge of Grand Larceny and Burglary.

When they serve their first sentence they will be held on the second charge which no doubt will be a longer sentence. The prisoners gave their names as Bernard B. Barrett and Gordon C. Schautz of Mount Morris, N. Y. The prisoners said they left the car in a barn owned by Simon Kelly, Catlin Ave., Port Allegheny, Pa. Corp. Adams, Mr. Caldwell and one of the prisoners drove to Port Allegheny and got the car. The license numbers were removed and thrown away and the motor number had been filed off; otherwise the car was all right. The farmers in our vicinity have been paid several visits recently and have suffered heavy losses in poultry. It is hoped that the splendid work done by Corp. Adams will have a tendency to keep thieves and violators from our county.

"Tipster Sheet" Editor Sentenced to Federal Penitentiary

GEORGE GRAHAM RICE, who was the publisher of the "Wall Street Iconoclast," a tipster sheet, was recently sentenced to the Federal Penitentiary at Atlanta, Georgia, for a term of nine years, and was fined \$5,000. This sentence was given by Judge John C. Knox, on December 21, 1928, in the United States District Court for the Southern District of New York, for using the mails to defraud, and for conspiring with others to do so. George Graham Rice's real name is Jacob Simon Herzig. He also goes under the name of Joseph Hart. He has had a spectacular career, and has served numerous prison sentences for his activities.

They Have His Money

On September 11 I sent a money order for \$2.00 to the U. S. Volunteer Air Service at 500 Fifth Avenue, New York City. As I did not hear from them, I sent them two letters since that time but have been unable to get any reply.

WE find that the Volunteer Air Service is operated by a man named Elliott who maintains nothing more than a mailing address at 500 Fifth Avenue. Repeated efforts to get in touch with him have been unsuccessful. The U. S. Volunteer Air Service advertises for the price of \$2.00 to send a \$2.00 aviation book, "The A B C of Aviation" and also to give a small pin, a membership card, and some useful literature on aviation.

There is an unusual amount of interest among our readers on the subject of aviation. This provides a fertile

field for fakers as well as for legitimate concerns. We suggest that subscribers, who are interested either in getting information or in taking courses in aviation, investigate a company very thoroughly before they send any money to them. We do not recommend correspondence courses in aviation and we feel that any of our readers who contemplate a residence course in flying at a reliable school should be very sure that there is sufficient money to complete the course before enrolling for it.

One Man's Word As Good As Another's

For sometime I have been selling potatoes to J. Mendelson & Son of Spring Valley, New York. Sometime ago they ordered three hundred 150 pound sacks at \$1.60 a sack and left a deposit of \$100.00. They finally decided to move them by truck. As it was less work for me, I agreed to let them have them for \$1.55 and they were to pay for every load they took. Later they stopped payment on a check, telling me that the potatoes were not up to weight. I weighed them myself and know that the weight was correct. I believe that they have done this because the price of potatoes has gone down since they made the bargain.

NATURALLY we have no way of proving that the potatoes were up to weight or not, but at least it appears to us that one man's word is as good as another. We have written several letters to J. Mendelson & Son, but so far have not had the courtesy of a reply, and we are giving the facts for the information of our readers. It seems to us that there is considerable question as to whether our reader will be able to collect through legal action. This appears to be just another case showing the importance of knowing the reliability of a firm before you sell to them.

Another Picture Enlarging Scheme

An agent was around a few days ago making a special introductory offer that for \$3.98, they would enlarge a picture for which they usually charge \$22.50. We were to pay for this when the proof was brought. Can you tell me if this company is all right? Their name and address are Modern Art Institute of 245 West 34th Street, New York City.

THIS appears to be a one-man concern with the office at the above address usually locked so that it is difficult, in fact impossible, to get any detailed information on them. It would appear, however, that this is the same old scheme of picture enlarging which we have so often mentioned in the Service Bureau columns. The work delivered by these companies is usually inferior and we have yet to hear of any subscriber who has been satisfied with it. If you wish pictures enlarged, take them to your local photographer. He will do a good job at a reasonable price.

Read Before You Sign

THE letter which we are quoting below came to us from a book company in response to a complaint from our subscriber which we forwarded to them. The letter perfectly explains the attitude of various companies selling books and it is their own statement of their position. So far as we know they are legally justified. Our purpose in printing the letter is to show our readers what they may expect from them.

"I am attaching a duplicate of the contract signed by Mrs. ——. You notice that the order form says very plainly that the order cannot be cancelled later on.

"If we acceded to Mrs. —'s request, we should be out the cost of goods, packing and shipping charges, entry fees and many other items.

"In accordance with our well-defined



There is no reason nowadays for anyone to buy "bargain" tires

TIRE prices today are lower than they EVER have been. Today you can buy the finest tires made for less money than second-rate tires cost a few years ago.

It always has been real economy to buy the better grades of tires. With prices at the present low level there is no reason for anyone to buy anything BUT the best.

We aren't going to brag about Kelly-Springfield quality—we don't believe it is necessary. But we will say this:

If you want the greatest possible mileage at the lowest possible cost, you will make no mistake in putting Kellys on your car—and hundreds of thousands of car-owners will testify to the truth of that statement.

"Kelly dealers everywhere—there must be one in your town"

KELLY-SPRINGFIELD TIRE COMPANY
GENERAL MOTORS BUILDING NEW YORK, N. Y.

KELLY SPRINGFIELD TIRES

policy, we do not propose to take back Mrs. —'s books. The contract which she signed is legally binding and we are in a position to force settlement for the entire balance if we wish to take an arbitrary stand. * * * We believe, in view of the contract which Mrs. — has signed and the fact that she has kept our merchandise for so long, that you will point out to her that it is all to her interest to make settlement with their office and avoid a lawsuit."

Another Way to Waste a Dollar

"I am enclosing an ad from W. Gordon Woods of Buffalo, N. Y. Will you kindly answer through your columns for the benefit of subscribers, if this 'Moon Sign Book' as described is of any value to farmers?"

THE circular letter which was enclosed by our reader reads in part, as follows:

"Things planted at certain times will produce a better quality of goods than the same thing planted at others, or reverse; at least many people have found it to be so. The only real and true way is to test it and find out. One dollar is not too much to spend to find out, and if it proves true, as it will, you will be very thankful, that you decided to spend that dollar.

"Just enclose one dollar and your name and address and you will receive the Moon's Sign Book and plan book telling you when to plant, reap, set eggs, etc., so as to be in harmony with the best influences of the moon and planetary signs."

Needless to say we advised our sub-

scriber to keep the dollar. The very best scientists, after considerable study, state that the time of the moon has no effect on the growth of crops.

Consult a Physician

Will you please give me some information concerning an artificial ear drum put out by the George P. Way Company of Detroit, Michigan?

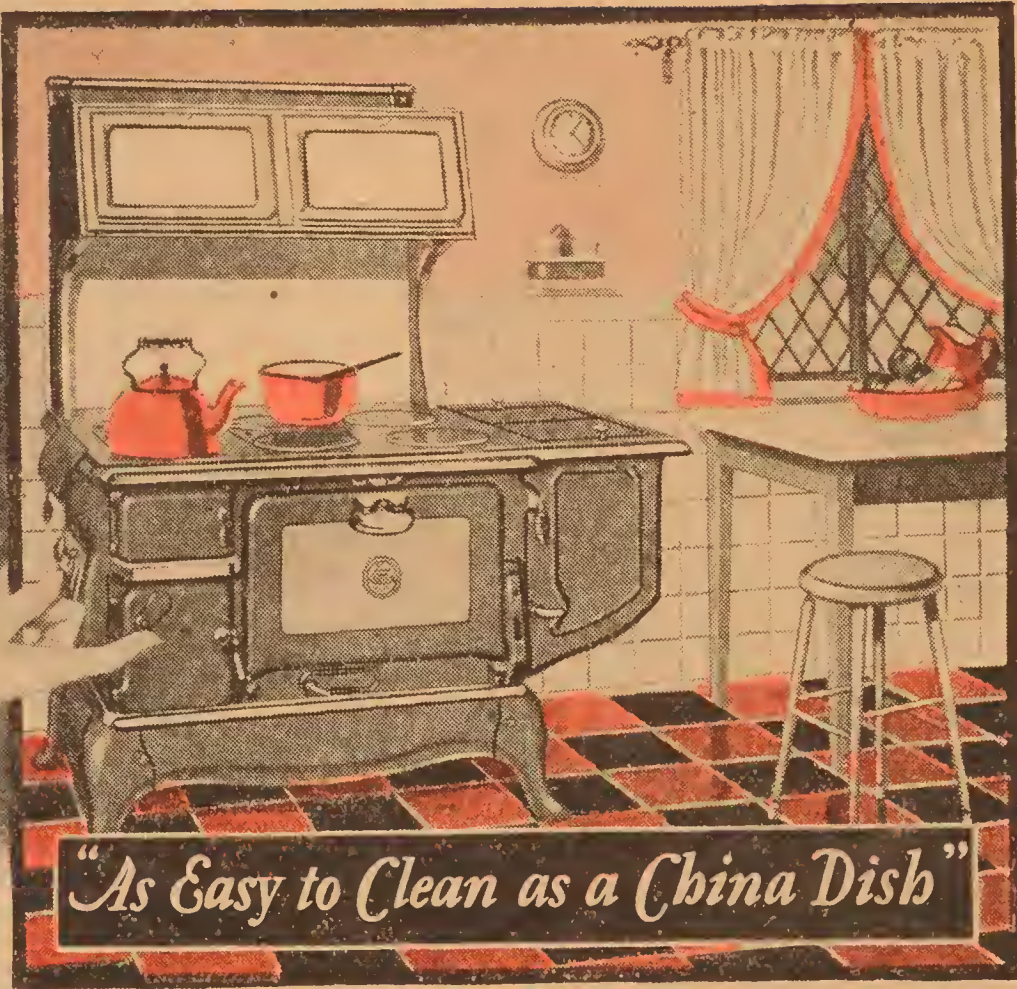
WE find on investigation that Mr. Way has been dead for a number of years, in spite of the fact that form letters mailed to prospects give the impression that they were written by him personally. Information from a reliable source indicates that the device sold by them may be of assistance to some people. However, there are various causes for deafness and in many cases the ear drum has not proven of any value. In view of these facts, we believe that the wisest way is to consult the best possible physician for advice in case of deafness.

The Children's Aid Society of New York, is interested in hearing from any one who is willing to provide a home for one of the many children who come under its care. These children range in age from babies to 15 years. Any one who is at all interested will be able to get full particulars by writing to Miss C. B. Comstock, Dist. Superintendent, The Children's Aid Society, 21 Collier St., Hornell, N. Y.

Send for- **FREE** Kalamazoo Spring SALE Book



Approved by Good Housekeeping Institute



"As Easy to Clean as a China Dish"

SAVE
1/3 to 1/2
of
Factory
Prices



Oil Stoves \$16.50 UP

Your Choice of **5** Colors In Beautiful Porcelain Enamel Ranges

Kalamazoo's Big Spring Sale is on! This new FREE book quotes sensationally low Factory Prices. Send today!

It's the greatest Sale in Kalamazoo's 28 years. More bargains than in 20 big stores. Savings of 1/3 to 1/2. Don't buy before you get this new book. You'll regret it, if you do.

200 styles and sizes of Quality Ranges, Heaters, Furnaces, Oil Stoves, Gas Stoves, Electric Ranges, on SALE. Also Refrigerators, Washing Machines, Kitchen Cabinets. Payments as low as \$3 down, \$3 monthly. A Year to Pay!

750,000 Satisfied Customers

Mail coupon now! Buy direct from factory. Buy the way 750,000 satisfied Kalamazoo owners have bought during the last 28 years. Get factory prices. Kalamazoo owners are everywhere—many in your own town! Ask them! Compare Kalamazoo quality with other quality. See the big difference. Don't pay twice the Kalamazoo price for quality not half so good!

Everything Is Color Now!

COLOR—bright, cheerful color for your kitchen this Spring! New colored ranges in beautiful porcelain enamel! Choice of 5 colors—Ivory Tan, Nile Green, Delft Blue, Pearl Gray, Ebony Black—trimmed in highly polished nickel. Always clean—always easy to clean. Porcelain enamel baked on in our own enameling plant—no chipping, no flaking, no cracking.

Brighten Your Kitchen

Why wear yourself out with a worn out range, when it's so simple to own a modern, colorful, porcelain enamel range? Modernize and economize. All Kalamazoo Coal and Wood Ranges, Combination Gas and Coal Ranges and Gas Stoves approved by Good Housekeeping Insti-

tute... another proof of their quality. Write today for FREE book.

Sale Prices on Heaters, Furnaces

Included in this SALE are striking new Cabinet Heaters priced from \$33.75 up. So handsome that they harmonize with the finest furniture. Heat several rooms. New and exclusive features.

Also new pipe and pipeless furnaces at reduced prices—now \$54.95 up. Exclusive Kalamazoo Hot-Blast Fire-Pot—new ring type radiators—easy shaking grates—upright shaker. FREE furnace plans, FREE service. Make a double saving by installing your own furnace, after buying it at Factory Sale Prices. It's easy to install your own furnace. Thousands have. This New Book shows how. Get it!

24-Hour Shipments

Kalamazoo is near to you. 24-hour shipments. Orders filled same day as received. No waiting—no delay. All Kalamazoo products carefully packed. Safe and quick delivery guaranteed.

Cash or Easy Terms

Kalamazoo's easy payment plan enables you to buy on terms so small that you scarcely miss the money—as low as \$3 down, \$3 monthly. Year to Pay. Everything backed by a \$100,000 bank guarantee. Satisfaction or money back. 5-year guarantee on Kalamazoo parts and workmanship.

30 Days' FREE Trial

Use whatever you choose for 30 days in your own home FREE. Satisfy yourself on Kalamazoo quality before deciding. 30 days' approval test on everything.

Above All Else—Quality

You simply can't get better quality than Kalamazoo quality. Why? The reasons are: First, Kalamazoo specializes—Kalamazoo stoves and furnaces are built complete in one big 13 acre factory. We make nothing but stoves and furnaces. Second, Kalamazoo has tremendous buying power—that means purchasing the best raw materials at lowest prices. Third, big scale production enables us to manufacture efficiently at extremely low cost. By selling direct, eliminating all "in-between" profits, you get absolute rock-bottom factory prices. Last year Kalamazoo customers saved \$1,000,000. Save at this Big Kalamazoo SALE. Send for your FREE book now!

"Finest I've Ever Seen"

The range I ordered from you the first part of the month arrived O. K. and is working fine. I am a stove plate molder and have worked at the trade for over 20 years and I wish to state that yours is the finest stove I've ever seen.

Arthur Cropper,
Northfield, Ohio

Quality Baker

Stove works perfectly. Stoves costing \$175 could not begin to compare with it in fuel economy, baking quality and in heating performance.

Wm. Rock,
Rochester, Minn.

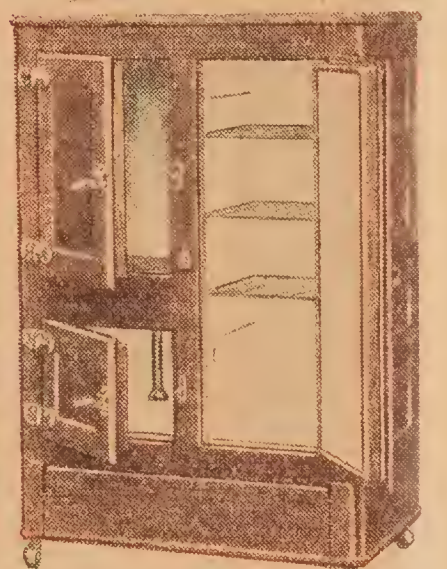
Cabinet Heaters

\$33.75
up



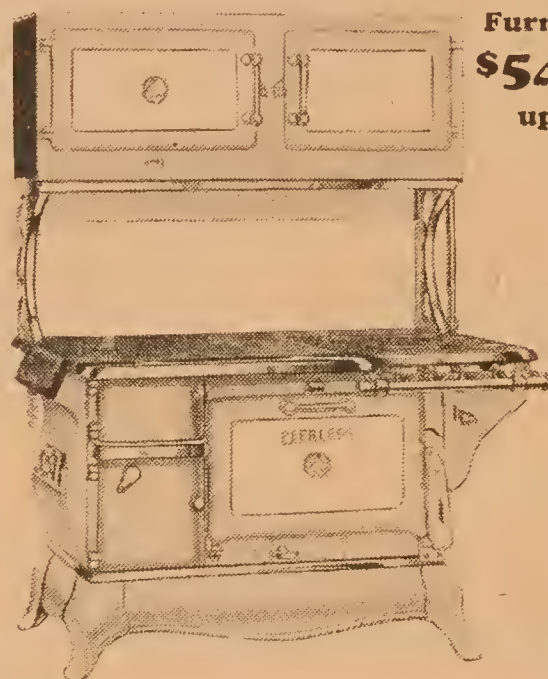
Refrigerators

\$19.75
up



Furnaces

\$54.95
up



Mail This Coupon Now for Free Booklet

Coal and Wood Ranges ☐

Gas & Combination Ranges ☐

Heating Stoves ☐

Cabinet Heaters ☐

Pipe Furnaces ☐

Pipeless Furnaces ☐

Oil Stoves ☐

Important: Be sure to put an (x) in column at left to indicate articles in which you are interested.

Kalamazoo Stove Co., Mfrs.
801 Rochester Ave., Kalamazoo, Mich.

Dear Sirs: Please send me your FREE catalog.

Name

Address

City State

Ranges

\$37.75
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"A Kalamazoo Direct to You"

AMERICAN AGRICULTURIST

\$1.00 Per Year

February 9, 1929

Published Weekly

A Bill To Reduce School Taxes

Enthusiastic Support for Proposal to Aid Rural Schools

THERE is now a rural school bill before the New York State legislature which is of vital interest to every resident in rural districts of the State. This bill, Senate No. 71, was originated by the New York State Department of Education and introduced in the Senate by Senator J. Griswold Webb and in the Assembly by Irving F. Rice, chairman of the Committee on Education, who has been especially active in his support of constructive rural school legislation. The bill provides four and a half million dollars more direct State aid for the one-room district schools, or so much thereof as may be needed to carry into effect the provisions of this bill.

AMERICAN AGRICULTURIST enthusiastically endorses this bill because it will materially reduce school taxes in most one-room school districts and at the same time enable these districts to maintain even better schools than they are now doing. The bill also has the endorsement of Governor Roosevelt's Agricultural Advisory Commission, whose chairman is Henry Morgenthau, Jr. This commission has just devoted one whole meeting to a study and discussion of the provisions of this bill.

Before we outline and explain the provisions in this suggested act for the relief and betterment of the one-room district school, let us briefly review the rural school situation in this State.

Outside of cities and villages under superintendents, there are now in New York about 9,600 school districts, of which approximately 7,900 are one-room school districts. Nearly 8,700 districts each have less than five teachers.

These districts were laid out more than one hundred years ago, before the days of the automobile and in the days when country districts were much more highly populated than they are at the present time. Wages of teachers and other school expenses have constantly advanced, while the value of farm property in the majority of these one-room school districts has greatly decreased, with the result that the burden of supporting the local district school has become almost unbearable in literally hundreds of these districts.

More than this, the burden of taxation has been very unequally and unfairly distributed. For example, the full valuation of district No. 10 in the town of Annsville, Oneida County, is only \$15,382, while there are scores of other districts in the State required to maintain no better schools

than the poor districts, that have valuations running into several hundred thousand dollars. It is very plain that if the one-room schools are to be continued—and many of them must be for the sake of the young children—the localities must have more financial help for the support of such schools.

Then there was also the question of giving the older children in these small districts equal educational opportunities with boys and girls who live in the villages and cities.

The "little red schoolhouse", so-called, that is, the one-room school, has a lot to be said in its favor. It makes a place where the younger children of the neighborhood can be taught, but it is obvious that it does not have much to offer to the boy or girl of the seventh or eighth grade, for the teacher, no matter how well trained she is, cannot spread the brief school day far enough to give any adequate or worth

while instruction to the older children, and certainly not to those of high school grade.

The result of such a system was, and is, that country children are at a great disadvantage in obtaining a high school education. Not only do they have to travel by their own private means of transportation to the distant village high school, but moreover, their district or their parents have to pay for part of their tuition in that high school. At the same time, the village children who attend the same classes have only a few steps to go to school, and that school and all of its privileges are absolutely free to them.

What the Central Rural School Act Is

It was because of these two situations, that of the heavy financial burden on small districts, and of the unfair, unequal educational opportunities of the older pupils in the small districts, that AMERICAN AGRICULTURIST favored the passage of the Central Rural School Act. This act was not perfect, but it was a step in the right direction. It has been grossly misinterpreted and misrepresented by those who did not understand it, and by those who have deliberately tried to further their own selfish purposes to stir up misunderstanding about it.

The Central Rural School Act provides an *optional* plan whereby several district schools in any community may unite with the village school in one big, central district, where all of the property in that district is assessed on the same basis, and in particular where every boy and girl on the farms may have an equal and better opportunity to obtain a better education.

It should be understood that there is no *forced* consolidation permitted by the Central Rural School Act. There is a law on the statute books, initiated by the Education Department, which makes it impossible for anyone to close any one-room district school in any central district except by the vote of the majority of the people in that district.

Under the Central Rural School Act, therefore, it is possible to keep the small one-room school for the small children and at the same time provide better educational opportunities for the older children, and particularly for those of high school grade.

The act also provides for larger grants of financial aid from the State so that the central districts are able to maintain a very fair local tax rate even with their added educational opportunities, and this rate is in

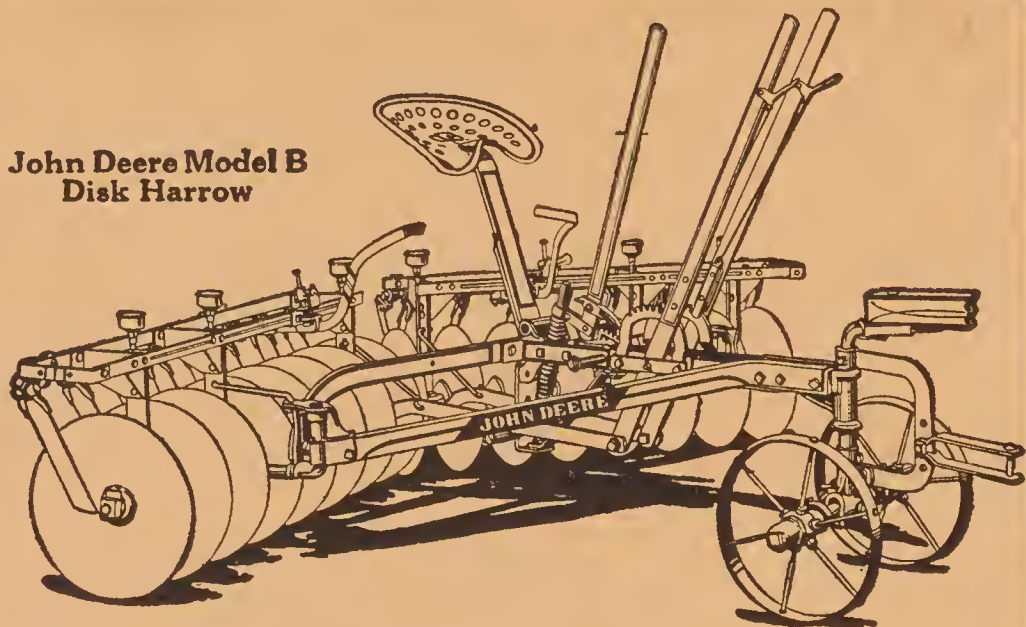
(Continued on Page 10)

HOW THE PROPOSED RURAL SCHOOL BILL WOULD HELP YOU

	Assessed Valuation	Full Valuation	Present State Aid (1928-29)	Estimated Aid Under Proposed Bill
CAYUGA CO.				
*Case 1	\$ 53,250	\$ 76,071	\$ 594.20	\$ 1,195.72
Case 2	140,400	175,500	439.40	798.00
Case 3	77,950	91,706	449.70	1,133.18
Case 4	82,033	113,935	437.20	1,044.26
Case 5	224,865	299,820	431.60	425.00
Case 6	58,338	94,094	569.80	1,123.62
CHAUTAUQUA CO.				
Case 1	51,217	78,795	604.00	1,184.82
Case 2	139,050	252,818	433.10	488.73
Case 3	95,757	174,104	434.80	803.58
Case 4	195,285	348,723	433.00	425.00
Case 5	39,006	52,008	739.60	1,291.97
Case 6	57,480	82,114	582.50	1,171.54
FRANKLIN CO.				
Case 1	43,500	106,098	636.00	1,075.61
Case 2	169,952	173,420	437.00	806.32
Case 3	22,100	22,551	822.00	1,409.80
Case 4	12,800	27,827	983.80	1,388.69
Case 5	20,098	39,407	832.00	1,342.37
Case 6	27,585	57,469	793.00	1,270.12
ONEIDA CO.				
Case 1	111,489	192,222	425.00	731.11
Case 2	206,755	356,474	425.00	425.00
Case 3	37,250	59,127	735.00	1,263.49
Case 4	52,205	71,514	594.00	1,213.94
Case 5	78,158	97,698	445.00	1,109.21
Case 6	46,146	59,930	616.90	1,260.28
RENSSELAER CO.				
Case 1	238,985	318,647	432.60	425.00
Case 2	110,395	169,838	367.41	820.65
Case 3	38,407	45,185	744.80	1,319.26
Case 4	256,364	341,819	438.60	425.00
Case 5	84,255	105,319	429.80	1,078.72
Case 6	24,460	34,943	815.60	1,360.23
SENECA CO.				
Case 1	71,938	95,917	460.90	1,116.33
Case 2	221,600	295,467	428.20	426.00
Case 3	123,736	156,628	427.00	873.49
Case 4	422,029	578,122	427.20	425.00
Case 5	93,284	121,148	425.00	1,015.41
Case 6	72,875	94,643	457.80	1,121.43
ULSTER CO.				
Case 1	17,290	29,810	955.00	1,380.76
Case 2	69,982	120,659	467.80	1,017.36
Case 3	111,916	223,832	432.00	604.67
Case 4	335,563	575,109	429.60	425.00
Case 5	40,440	109,297	642.00	1,062.81
Case 6	202,181	381,474	429.80	425.00
			Total \$23,104.71	\$39,503.48

*These illustrative cases do not refer to actual districts but are simply examples showing approximately how the proposed school bill would work.

John Deere Model B
Disk Harrow



'It Does Better Work'

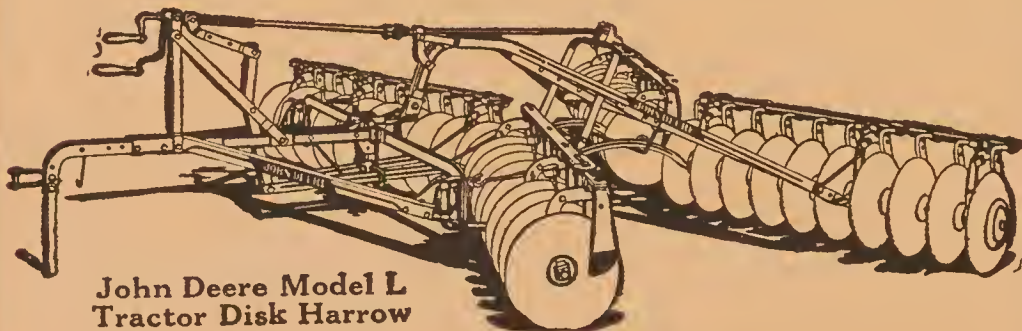
Any Model B owner will tell you that this John Deere Disk Harrow does better work. Better performance is the quality that has kept the Model B at the very top among horse-drawn disk harrows for nearly half a century.

You need the Model B for the better work which its unusual flexibility and enormous strength insures.



The Model B has been strengthened throughout. Distinctive features responsible for its widespread popularity have been retained. It's the same flexible, good-working harrow, that your grandfather knew, but with tractor-harrow strength.

[All John Deere Disk Harrows Are Equipped with Heat-Treated Alloy Steel Disk Blades]



John Deere Model L
Tractor Disk Harrow

Two Good Diskings



The Model L has strength to spare. Main frame braces are heavy angle steel, and every other part is built up to resist wear and stress.

It's flexible, too, the front section having the same pivoted yoke construction as the flexible Model B.

If you want to be sure that all of your soil will be disked twice every round, use the John Deere Model L Tractor Disk Harrow.

The automatic yielding lock coupling between sections aids the rear disks in cutting out ridges left by the front disks—no part of the field is left undisked.

Here's a valuable feature: The disks can be angled or straightened without stopping or backing the outfit.

See these strong, flexible harrows at your John Deere dealer's. Write for literature describing them. Address John Deere, Moline, Illinois, and ask for Folder LD-51

JOHN DEERE

THE TRADE MARK OF QUALITY MADE FAMOUS BY GOOD IMPLEMENTS

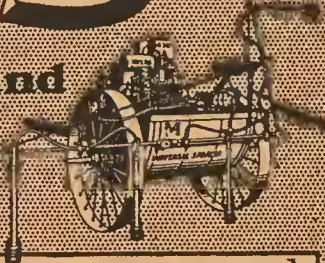
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Self-
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Universal Orchard and Field Sprayers

WIDELY adaptable. Does finest kind of spraying on potatoes, cabbages, celery and other rowed field crops as well as trees. The one spray rig for every purpose. Send for catalog today. 658

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Manufacturers for more than 50 years — Pumps — Water Systems — Hay Tools — Door Hangers



Julius Gordon, Master Farmer

A Fireside Reflection

EDITORS' NOTE—
The following article

By Jared Van Wagenen, Jr.

by Mr. Van Wagenen was written for the January issue of the Schoharie County Farm Bureau News. While it refers particularly to Julius C. Gordon, Master Farmer, it covers so well the whole spirit and ideal of the Master Farmer movement that we are reprinting it in AMERICAN AGRICULTURIST with credit to the Schoharie County Farm Bureau News.

We believe you will all enjoy reading this fine piece, for it expresses so well the whole idea we have been trying to convey through the Master Farmer movement that agriculture can be made a knightly occupation.

WE may read how in England they have an ancient ritual which has come down across many centuries. There, when a man has rendered such distinguished service to his King or Country that he is deemed worthy of



special recognition and honor, he is called to kneel before his Sovereign who, lightly striking him three blows with the flat of his sword across his shoulders, pronounces the immemorial formula, "In the name of God, of St. Michael and of St. George, I dub thee knight. Be

Governor Roosevelt Confers Degree

In the same spirit spoke Governor Franklin Roosevelt to twenty-two farmers of New York and New Jersey: "And now I declare you to be Master Farmers with all honors and privileges to that distinction belonging"—and so Julius Gordon received a well earned title to carry back to Lawyerville and to Schoharie County. * * *

The idea of recognizing distinguished agricultural service by the public conferring of this Order of Merit has already been adopted in a number of western states. The Breeders Gazette has referred to these farmers as constituting "The Corn Belt Gentry." In those states it has very rapidly come to be a greatly coveted honor which has lent dignity to the profession of agriculture and has raised the whole tone of agriculture. To the American Agriculturist must be given the credit for bringing this good custom to New York state. * * *

The Standards Are High

Very briefly the idea is this—A man must first be "nominated" by some friend or neighbor. Then if he accepts the nomination he must submit a most detailed statement covering almost every possible detail of his farm operations and also of his community and family life. This year there were some 300 nominations and these were in the first place carefully sifted out by the staff of the American Agriculturist until only 45 of the most noteworthy ones remained. These names together with their questionnaires and testimonials in their behalf which had been secured (without their knowledge) from those who knew them best, were turned over to a Committee of Judges made up of some of the best known names in the agriculture of our state. On this committee among others were Governor Franklin D. Roosevelt, Berne A. Pyrke, Commissioner of Agriculture and Markets, and Dean A. R. Mann of the State College of Agriculture.

I had a slight previous acquaintance with about a half dozen of these men, having met them during the years in various agricultural activities. I think I know enough about them and about the ideals which guided the judges so

that I can understand the essential standards which a Master Farmer must measure up to.

He need not necessarily be the most extensive farmer of his county because, as a matter of fact, some of these men were Masters of comparatively small farm operations. On the other hand it is only fair to say that at least two of them are farming on what in New York state at least we call a very extensive scale.

Neither is the Master Farmer always the man with the greatest amount of training in the College of Agriculture or the longest list of scholastic degrees. It is true that in the group there was at least one former University Professor—a highly trained man of recognized attainments. On the other hand there were some who held no other diploma except that granted by the crossroads school house.

Wealth Not Essential

The Master Farmer is quite likely not the wealthiest man in his community although it is true that two or three of these men are, according to our modest farm standards, really rich men, having accumulated in their business what frankly seems to me quite an incredible fortune to have been gathered from the land. Still, preferably in the minds of the judges, a Master Farmer is one who has come up from the ranks—a man who has demonstrated his ability to make a living from the soil. However, as a matter of fact, some of these men began life as farm hands. They are men who have known what it meant to meet the interest on their mortgages and whose only patrimony was their keen brains and their strong bodies.

Moreover the Master Farmer is typically a family man. They came, every last one of them, with their wives or with their wives and daughters. There was one who gloried in the proud possession of ten children. There were two others who tied for second place with six children each. If my memory is correct, there was not a single bachelor or childless man in the whole group. Evidently a Master Farmer does not intend that his name shall perish from the earth.

Not for Himself Alone

But, if I understand this Master Farmer ideal aright, there was one respect in which all these men were very much alike. It is just this: that a worthy Master Farmer cannot live for himself alone. It is most unfortunately true that in our countryside there are some men who judged merely by their barns or cattle or orchards or corn fields might be reckoned as Master Farmers and yet who are forever shut out from that fellowship because they recognize no obligations of service or helpfulness to their community or their generation. When in the course of time they shall pass on to make room for worthier men, their going may best be described by that scathing phrase used by the biographer when he chronicled the passing of Jehoram, King of Israel. "And he departed undesired."

But without exception these Master Farmers must be men of good repute among those who know them best and no amount of agricultural skill or financial success can atone for lapses in moral character or standards of conduct. Of course they must be good farmers but before that even they must be good family men, good community workers, good churchmen. They must be men who will help to carry the social responsibilities of their time.

We believe that our Schoharie County representative measures up to these standards and so we, his neighbors, salute him with a phrase from the ancient ritual of the Knighthood of the olden time, "Arise, Sir Julius Gordon."

Winter egg production is largely obtained from pullets that are well grown, properly fed, and carry a surplus of flesh.

Save Your Ten Dollars

Facts on the Farmers' and Livestock Dealers' Association

IT seems too bad that honest and sincere dairy-men are still continuing to lose their money in the sum of ten dollar membership fees to the New York State Farmers' and Livestock Dealers' Association.

We are continuing to be flooded with letters from our readers asking if this organization is reliable and if it will do what its organizers claim. Here is one, for instance:

"Our community wishes information relative to the New York State Farmers' and Livestock Dealers' Association. An organizer states that the purpose of his association is to increase the money for cattle condemned for TB, and to help farmers get a fair price for their milk. The organizer claims that this association was the effective means of bringing about the increase in the indemnity allowed for TB cattle."

Another correspondent writes:

"Please send me what information you possess about the New York State Farmers' and Livestock Dealers' Association. There have been two canvassers in this vicinity the past week. I am thoroughly in accord with the ideals for which this organization stands, but do not think it is necessary to send out salesmen to sell memberships at ten dollars each. What salaries do these men receive, and how is this money spent?"

We have answered these questions several times in AMERICAN AGRICULTURIST, but do so again with the hope of saving our readers from spending ten dollars, from which they can never hope to get value in return. No matter if you are opposed to TB testing or if you are in line with some of the worthy ideals like getting increased prices for milk, you are wasting your money in the vain hope that this so-called association can help you. We have proof of these statements.

For example, the organizers are holding meet-

ings in different counties and are telling a very plausible story about how they were successful in getting the bill through the legislature last year increasing the indemnities for condemned dairy cattle.

The History of the TB Indemnity Bill

What are the facts? In order to get them, the writer of this article went to Albany and asked Commissioner Pyrke of the State Department of Agriculture and Markets the direct question as to what part, if any, the Farmers' and Livestock Dealers' Association played in getting the increased indemnity bill passed. We asked Senator Leigh Kirkland, who is chairman of the Agricultural Committee in the Senate, the same question.

Each of these men stated that the Farmers' and Livestock Dealers' Association had nothing to do so far as they knew, either in suggesting or passing the TB increased indemnity bill. Each of them gave us a statement, which we print in this article telling how this legislation came to be started and how it was passed. Read these statements, from the men who had charge of this legislation in Albany, and decide for yourself the truth of the statements of the officers and organizers of the Farmers' and Livestock Dealers' Association that they were responsible for the passage of this act. If they have misled you in this one important matter, how much trust can you put in their statements about aiding you in other ways?

The first statements which we print are from Commissioner Pyrke, and are copies of letters which he gave us written to a farmer who asked him for information about the passage of the increased indemnity bill and the part that the

Farmers' and Livestock Dealers' Association had, if any, in aiding its passage. The first letter from Commissioner Pyrke to this farmer follows:

Commissioner Pyrke's Statements

"I assume that your letter refers to Chapter 70 of the Laws of 1928, amending Section 88 of the Agriculture and Markets Law, increasing the maximum amounts to be paid by the State for indemnity for animals slaughtered to prevent the spread of tuberculosis. This amendment raised the maximum on grade animals from \$75.00 to \$90.00, and on pure-bred animals from \$125.00 to \$150.00.

"The history of the change is this: About a year ago this time, there was held in this department a conference on the subject of the tuberculosis control situation. There were present at the conference members of the TB Committee of the State Federation of Farm Bureaus, one of the editors of the AMERICAN AGRICULTURIST, and representatives of this department. It was the consensus of opinion at that conference that in view of the substantial increases in the cost of dairy cattle, the maximum limits of indemnity should be raised about 25 per cent. Following this conference, this department prepared bills covering the proposed changes in the statute. On the convening of the legislature, these bills were introduced by the chairman of the Agricultural Committees in the Assembly and in the Senate at our request, and were passed virtually without opposition. The Governor, upon a recommendation to that effect by this department, gave executive approval to the bill, and it became a law February 17, 1928.

"I trust this is the information that you desire."

To this letter the farmer replied, asking for further information about the Farmers' and Livestock Dealers' Association, and to this inquiry, Commissioner Pyrke wrote as follows:

"I have no disposition to be drawn into any controversy, direct or indirect, with the New York State Farmers' and Livestock Dealers' Association.

(Continued on Page 12)

The Story of Nitrogen

How Legumes Add This Fertilizer Element To the Soil

By A. W. BLAIR

Soil Chemist, New Jersey College of Agriculture

and taken nitrogen from the air to their mutual benefit, but up to this time no one had satisfactorily explained how intimately the one was related to the other.

This work effectively solved the problem as to why some plants failed to respond to a treatment of nitrogenous fertilizers. As it happened these plants were legumes and through the aid of the particular bacteria, were getting all the nitrogen they needed. Other crops—the non-legumes—were not able to get their nitrogen in this way and therefore responded to a direct application of a nitrogenous fertilizer. This plant-

bacteria partnership has proved a wonderful blessing to mankind. But for this association it is difficult to understand how the fertility of the soil in certain sections of the country could have been maintained.

The bacteria which are one party to this contract are exacting in their requirements. Like other labor organizations they refuse to work under unfavorable conditions. They do not like a water-logged soil or one that is strongly acid or that contains other poisonous substances. They develop best in a well drained soil and one that is well supplied with organic matter and with phosphates and lime or other basic material.

Fortunately for the farmer these are exactly the conditions that are required for successful farming over a large area of the country. Given these conditions and a soil supplied with the proper organisms, such crops as alfalfa, the clovers, vetches, peas, beans, etc. enter into the partnership and become nitrogen factories on a grand scale. The nitrogen thus fixed aids the plant in which it has been fixed and when this plant is returned to the soil and goes through the decomposition changes, the nitrogen is again converted into available plant food for the succeeding crop.

On a laboratory scale it has been possible to make direct and rather exact measurements of the amount of nitrogen fixed by legumes, but on a field scale such exact measurements are not possible. The best that has been done is to use indirect methods

(Continued on Page 9)



Alfalfa—champion nitrogen gatherer, soil builder and a fine dairy feed.

IN an earlier article an account was given of some of the methods of taking nitrogen from the air and fixing it by artificial processes so that it may be used to feed growing crops. There are also natural methods by which this same atmospheric nitrogen may be fixed and made available for plants.

Nearly one hundred years ago agricultural chemists observed that not all crops acted alike when treated with manure or nitrogenous fertilizers. They noted that certain crops responded to a treatment of nitrogenous fertilizer almost in proportion to the amount used, up to a certain limit, while in the case of other crops there appeared to be little or no relationship between the amount of fertilizer used and the response the crop made. This problem puzzled investigators for more than half a century. It remained, however, for two German scientists to work out and announce a satisfactory explanation.

In the late 80's of last century Hellriegel and Wilfarth, after exhaustive studies discovered that there was a very close relationship between the group of plants which we call legumes and certain soil bacteria. In short they found that a partnership was formed between the growing plant and certain forms of bacteria. The plant generously furnished a home and certain food material for the bacteria, while the bacteria, thus housed and cared for, assisted the plant in taking nitrogen from the soil air.

For many centuries legume plants and soil bacteria had lived together

Editorial Page of the American Agriculturist

AMERICAN AGRICULTURIST

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Vol. 123 February 9, 1929 No. 6

Are Tax Relief Plans "Bunk"?

AS might be expected, there has arisen a number of attempts to belittle and to criticize the various efforts that have been made to give farmers of New York State tax and other practical relief. A newspaper story from Albany credits certain members of the legislature with statements to the effect that the plans suggested by Governor Roosevelt's Farm Relief Commission and by the legislative leaders will do little or no good.

These plans include the assumption by the State of the county's share of 35 per cent of the cost of state and county highway construction which totals \$4,500,000, assumption by the State of the cost of maintaining these highways, and additional state aid to poor rural schools (explained in this issue of AMERICAN AGRICULTURIST).

The newspaper story stated that certain members of the legislature argued that the tax eliminations did not amount to much more than \$50 per farmer, and they then intimated that this would not be very much relief, and therefore the whole program was "bunk". Certain other individuals and agencies in the State, always against everything, have also taken the same position.

Now, of course, no law that can be passed is going to be any panacea or cure-all for the troubles of agriculture. We have said time and again when discussing farm relief of all kinds that what the nation or state could do was very limited, that farm relief was mostly up to the farmers themselves; but on the other hand there are certain very gross injustices that the State is now committing against agriculture that certainly should be corrected. These have to do mostly with the whole program of taxation, whereby one-third of the property of the State is paying two-thirds of the taxes, and the farmers' property is all in that one-third. The suggestions already made by the legislature and by Governor Roosevelt's commission are at least a start toward correcting these inequalities in the unfair farmer tax situation, and they are the only practical suggestions where a real effort has been made to put them into legislation and to carry them out.

What do you farmers think about a statement to the effect that an average saving of \$50 a farmer in taxes is not worth making? What do you think about the argument that because re-

sults may be small at first the whole effort for tax relief is "bunk" and should not be made?

We are enthusiastic over the start that has been made. We realize perfectly its limitations. We do not know whether the relief will be \$25 or \$100 per farm on the average, or what it will be, but we do know that the fight is worth making, and we are going to continue to make it with other constructive agencies until results are secured.

We have no patience whatever with individuals or agencies which are against every constructive effort that is being made simply because they themselves had no part in making it.

A Chance to Express Yourself

EACH year sees more and more women entering the different trades and professions, earning their own living and often the living of those dependent upon them. This is true even with the business of farming, and there are now a good many farms in the United States managed and even worked entirely by women. Farming is different from any other business in the world in that success depends upon its partnership with the home and the cooperation of mother, wife and daughter in the house.

It is an interesting question as to who makes the greatest contribution to the success of the whole farm enterprise, the man or the woman. We would like to see this question discussed and think that letters on this subject from both men and women would be well worth reading. Therefore, just as a small encouragement, we will pay \$3 for the best letter, \$2 for the second best, and \$1 each for all the others we can find room to publish from our readers on this subject, "Who is the most necessary to the farm success, the man or the woman, and why?" Letters should not be long and should be written plainly on one side of the paper. The contest closes March 30.

A Plan to Help Locate Country Criminals

GOVERNOR ROOSEVELT has just recently forwarded a letter to Senator Caleb H. Baumes, chairman of the New York State Crime Commission, which is of especial interest to every country dweller. In this letter the Governor calls attention to the handicaps under which rural communities labor in handling the crime problem.

"New York," says the Governor, "has met this problem to a great extent by the establishment of a State Police of whose splendid record we are all justly proud. There remains, however, one other very important function whose value is being increasingly realized ***. I refer now to the detection of a criminal in those cases where he is not caught redhanded in the act."

The Governor then refers to the exact science now used in detecting the criminals as contrasted with the hit-and-miss methods of a few years ago, among which are the science of finger prints, determining the type of gun from which a bullet is fired, the deductions that are possible to be made by every motor tire track, the preservation and identification of footprints, and "a hundred other different telltale signs which would mean nothing to the layman but stand as a clear trail before the eyes of those specially trained investigators, provided always they are at the scene of the crime within a reasonably short period."

The Governor suggests to Senator Baumes that it might be possible to establish a general State detective bureau of trained experts whose officers could be made quickly available to any locality where a crime had been committed.

There is merit in this suggestion. Every farmer knows how difficult it is to locate and arrest a criminal who has committed a crime in a farm neighborhood, or for that matter in any small town or village. Once he gets away, there is no one well trained enough to read the signs that he

left behind him. The result is that the perpetrators of most country crimes get away. Many of these criminals live in the city and are organized, and by the use of the automobile and the truck prey upon country districts.

Let There Be No Price Cutting This Spring

WE are printing on our Dairy Page a report made by the New York Milk Stabilization Committee, which was appointed a short time ago to make constructive suggestions for obtaining an adequate supply of milk during the short periods without going outside of the New York milk shed. The committee was appointed by a group representing the dairy and farm organizations, the farm papers, and the college and State authorities, and is headed by Dr. C. E. Ladd, extension director of the New York State College of Agriculture.

The chief suggestion made by this committee so far is that the low prices of milk during the months of March and April affect the fall production of dairies due to the discouragement of producers through feeling that they are not receiving a price for their product which justifies the feeding of adequate amounts of grain to maintain the highest possible production.

We are especially glad to see this point emphasized. It cannot be made too emphatic. We all know that last year the dairymen of this section lost millions of dollars because the dairy organizations got into a price cutting row and lowered the prices to the producers months before there was any reason for so doing. There was no demand on the part of the consumer or the consumer's representatives to lower the prices of milk, yet the reductions were made just the same. Afterwards there was a good deal of "passing the buck" as to who was responsible for the first cut, but trying to place the blame on somebody else does not put those lost dollars into the farmers' pockets.

Dairymen should insist that such a deplorable situation must not happen again, and they should be on watch to hold fully responsible the organization or the dealer who starts another price cutting war with its resulting losses to everybody concerned. AMERICAN AGRICULTURIST promises here and now that we will show up, without fear or favor, those who attempt this practice this spring.

Eastman's Chestnut

WHEN our good friend, Jared Van Wagenen, Jr., goes on a trip, he tells us about his experiences in delightful stories in AMERICAN AGRICULTURIST that we all eagerly look forward to. Last summer, you may remember that he described in his quaint and readable style his trip down through Pennsylvania to Gettysburg and then into the Shenandoah Valley into old Virginia. We hesitate to tell tales out of school, but you might ask him sometime when you see him why he never told this one on himself.

It was a drowsy summer day in a sleepy hamlet in the old domain of Virginia.

"Are you a native of this town?" asked Mr. Van Wagenen.

"Am I what?" languidly asked the one addressed.

"Are you a native of this town?"

"What's that?"

"I asked whether you were a native of the place?"

At this juncture there appeared at the open door of the cabin the man's wife, tall, sallow, and gaunt. After a careful survey of the questioner, she said:

"Ain't you got no sense, Bill? He means was yo' livin' heah when you was born, or was yo' born before yo' begun livin' heah. Now answer him!"

News from the Publisher's Farm

BEFORE we get too far into the new year, let us stop a minute and look backward at the progress that we have made during the last few years. The gain or loss of circulation is the best way to measure a publication's popularity in the minds of its subscribers. Going back four years to 1925, we find that the AMERICAN AGRICULTURIST had a total circulation as of

Dec. 31, 1925...132,564
Dec. 31, 1926...137,377
Dec. 31, 1927...144,196
Dec. 31, 1928...150,867

Now let us stop a moment and see what part of this circulation was in New York State. The following are the figures for the same periods:

Dec. 31, 1925... 95,065
Dec. 31, 1926... 96,822
Dec. 31, 1927...102,789
Dec. 31, 1928...106,701



Henry Morgenthau, Jr.

The figures which I have given you above paint a most encouraging picture and I wish to take this opportunity to thank our readers for the continued increasing support which they have given us each year during the last four years. In return, we are trying our best to give you each year a more interesting, and a more worthwhile magazine, and at the same time to render each subscriber continued assistance through our Service Bureau.

* * *

I have just received a report prepared by G. P. Scoville and T. E. LaMont of the New York State College of Agriculture. The data collected by these two men is extremely interesting and I wish to point out to you a few excerpts. Scoville and LaMont show that since 1879 to date there are only three varieties of apples whose selling price has had an upward trend during this period. These three varieties are—Northern Spy, R. I. Greening and McIntosh. In studying the yields of apple varieties by ages in Newfane Township in Niagara County from 1918 to 1926, they found amongst trees thirty years old or over that the Twenty Ounce was first with an average of 5.50 bushels of packed fruit per tree, Baldwin was second with an average of 5.33 bushels of packed fruit per tree, R. I. Greening tied for second place with 5.33 bushels of packed fruit per tree, and Northern Spy was fourth with an average of 4.82 bushels of packed fruit per tree. It is interesting to note that Northern Spy and R. I. Greening which are two out of the three varieties which have shown an increase in their selling price are also amongst the leading four varieties in production.

Studying the yields of trees from five to twenty-nine years old they found that N. W. Greening was first, Wolf River was second, Ontario was third, and York Imperial was fourth.

Scoville and LaMont further point out that in making a study on 192 farms in Newfane Township that from 1921 to 1926 the following varieties of apples were on the increase, in the order in which I give them:

Baldwin, R. I. Greening, Delicious, McIntosh, Jonathan, Cortland, Winter Banana, N. W. Greening, Gravenstein, Golden Delicious, and Yellow Transparent.

They also show that the following varieties decreased, in the order in which I give them:

Duchess, Wealthy, Maiden Blush, Rome Beauty, Wagener, Stark, Northern Spy, Ben Davis, Wolf River.

Anyone who is thinking of planting an orchard would do well to

write to the College of Agriculture for a copy of the report which Mr. Scoville and Mr. LaMont have prepared as it contains a great deal of information which I have not got the room in my column to elaborate on.

* * *

In the November 24th issue I told you that we were faced with the problem of whether or not we would stay in the milk business. I wrote about our search for a Grade A milk market and how we had located it. In Mr. Waterbury of the Maplehurst Dairy Company of Stamford, Connecticut, we found a man whose standards in the milk business assured us of an excellent market. Before making a contract with Mr. Waterbury I notified the Farmers' Cooperative Milk Company of Poughkeepsie that I was planning on making a change. This cooperative milk company which,

by the way, is one of the oldest if not the oldest in the State of New York, sells all of its milk through the Dairymen's League. Inasmuch as my milk was being sold by the Farmers' Cooperative Milk Company through the Dairymen's League, and inasmuch as I have always believed and preached "co-operation", I felt that this was an opportunity for me to show that I believed in what I preached, even though it was at some personal sacrifice. I have therefore signed a contract with the League and have given them the authority to sell my milk for me to the Maplehurst Dairy. As the Grade-A market is a very limited one, and having secured it after considerable difficulty, and wishing to hold the market now that I have got it, I am glad to make the changes in our dairy which are necessary to comply with the very strict regulations of the Connecticut health authorities.

Henry Morgenthau, Jr.

A Visit with the Editor

What is Machinery Doing to Agriculture?

A SHORT time ago I was visiting with the president of a large manufactory of barn equipment and we got to talking about the great changes that were taking place in agriculture, and what seemed to be happening to many farmers. I made the remark that I was not worried about the deserted farms from an economic standpoint and that with even the farmers that we have left the surplus is still our greatest problem. I said, however, that it seemed too bad from a social standpoint for the country to lose so many fine American families who had lived on the land for generations and had contributed so much to the country's welfare.

To this my friend agreed, but said that it was simply the working out of the stern old law of "the survival of the fittest", that machines and equipment were making it possible for one man to do the same work that once required three or four men, and that the future would see even

fewer farmers, for machinery and good equipment were bound to increase as well as scientific knowledge.

"Farming is a business of small profits," he continued, "and when any savings are made at all they will be made on a small margin. For example, there are now few large business corporations that make large profits, and this is particularly true with many of the concerns that do business with farmers. Their profits sometimes seem large because they are made on a large volume of business, but the margin of profit is so close that there would be none at all, in fact there would be heavy losses, if every advantage were not taken of the use of modern machinery and of modern scientific knowledge.

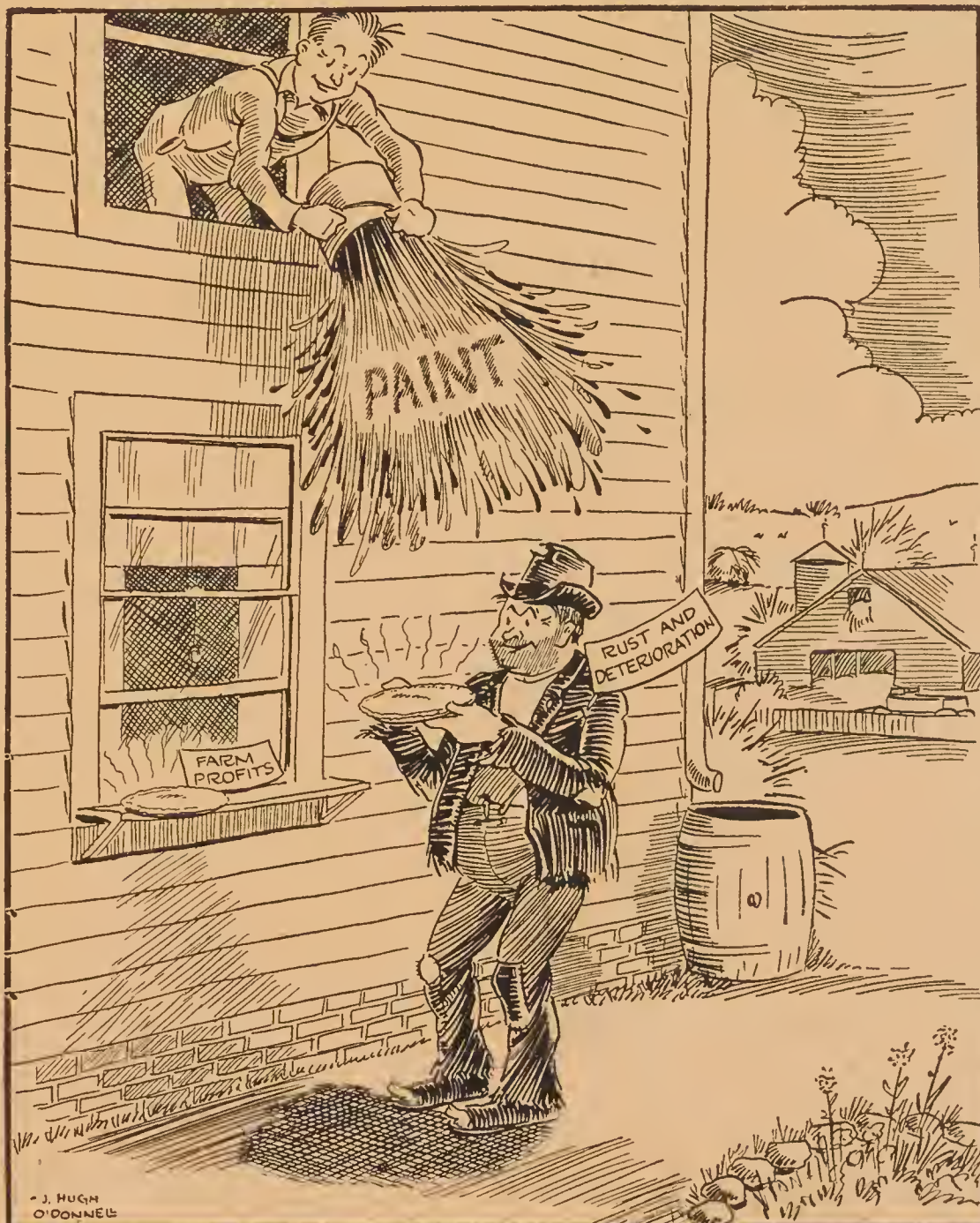
"This law, the survival of the fittest, is particularly hard," he continued, "on many of the fine type of men living on the small farms in these hills or even in some of the valleys where the land is poor, whose farms are so small and whose capital is so limited, that they cannot do business on a large enough scale to make a profit. Eventually men of this type will all leave the farm business.

"We are in the midst of a great change in agriculture and when it is completed you are going to see farmers who are specialists, and who are especially equipped for their particular business. I believe, too, that you are going to see farming on a larger scale. Most of the potatoes will be grown by potato growers who do little else, and who will be equipped and informed for their special job. So with dairying and fruit growing. In fact, there is already a great tendency along this line at the present time."

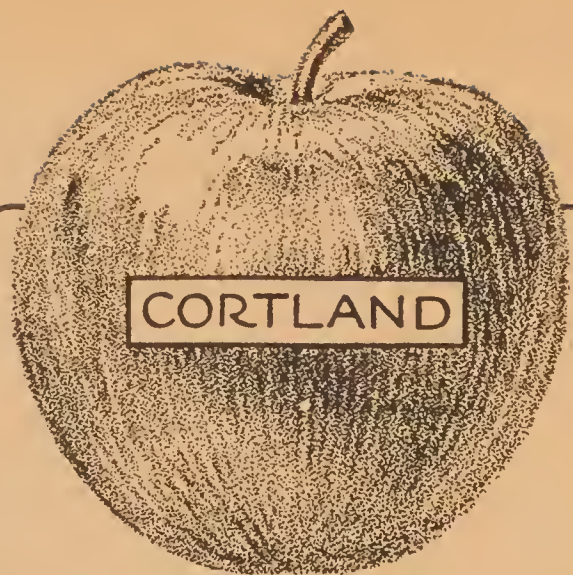
Then my friend, the equipment manufacturer, said: "Now, for example, take silo filling. It is one of the hardest and most disagreeable jobs of the whole year and one of the most costly so far as labor is concerned. So I studied how I could still have ensilage and yet cut down the cost and the work. I purchased manure spreaders and rigged them to receive the cut up corn from a machine that cut the ensilage right in the field. When each spreader was full, it was driven to the blower and unloaded into the blower by means of a movable apron. Not a man's hand touched the corn from the standing stalk to the inside of the silo. These are the changes that are taking place all along the line that are going to release more farmers

(Continued on Page 22)

PROTECT YOUR INVESTMENT IN EQUIPMENT



Courtesy—Southern Ruralist



Bred for Earlier and Larger Crops

The great popularity of the new Cortland apple is well deserved. Bred from the McIntosh and the Ben Davis, it has all the flavor and color of the McIntosh together with the well-known keeping qualities of the Ben Davis. The Cortland apple is as large or larger than the famed McIntosh. The Cortland is bright red in general color and its flesh is fine and crisp, yet tender and juicy. The Cortland's strength of stem withstands the attacks of wind and storms. Result—more apples on the trees and a bigger salable crop.

And the Cortland fruits early and keeps like a late apple, which is another decided advantage.

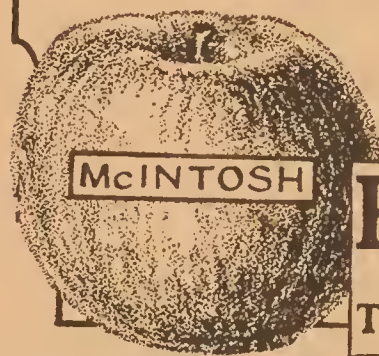
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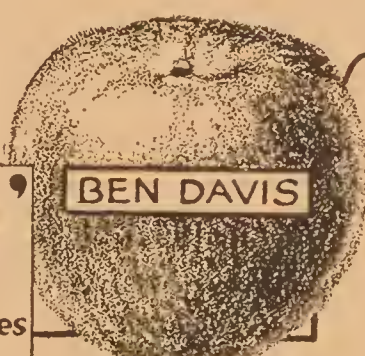
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A.A.'s Western New York Farm and Home Talk

How Tariffs Are Made

By M. C. BURRITT

THESE notes are written in our national capitol where I have been attending the tariff hearings, January 21 to 28.

As I have listened to the testimony, I have wondered how many American Agriculturist readers really knew or realized how our tariffs are made. Very few, I venture to say, fully understand the process, so I thought you might be interested in a little account of it. American tariff acts were passed in 1909, 1913, 1922 and a new one will probably be enacted in 1929. Since a tariff bill is a revenue producing measure, it must originate in the House of Representatives and there be presented by the Ways and Means Committee. The permanent tariff commission of which our S. J. Lowell is a member, has no power to make tariffs but only to make investigations of costs, imports, etc., and to advise the President who has authority to raise or lower existing tariffs already enacted into law by Congress.

It is before the House Ways and Means Committee that the hearings are now being held. When the committee has concluded its hearings and determined what tariffs it thinks ought to be enacted, it will report a bill carrying these tariffs to the House. These may be approved or changed on the floor of the House during the debate on the bill. When passed by the House the bill goes to the Senate where it is referred to the Finance Committee and further hearings may be held. On the floor of the Senate items in the bill may also be changed. If the Senate and House bills do not agree they are sent to a joint conference committee which compromises differences. The report of this committee must then be approved by both houses before it is sent to the President for his signature. The passage of a bill which affects business and agriculture in so vital and in so detailed a way is a long, slow, laborious process. Everyone who wishes must be heard and opposing interests reconciled or compromised.

Hearings are Public

The Committee, of which there are twenty-four members, holds its hearings in a room in the House Office Building near the Capitol, which will seat about two hundred people. Hearings are open to any one and a regular printed schedule is followed. Any one with facts to present, particularly if he represents a group or a large interest may list himself as a witness. The committee sits behind a wide semi-circular desk on an elevated platform at one end of the room. The witnesses face the committee with their backs to the audience. Stenographers take down every word of testimony and much additional evidence is inserted in the record by permission of the chairman. All this is printed in a small volume each day and copies are available to those who want them.

Great interest is being shown in schedule 7, "agricultural products and provisions" and several hundred witnesses have been and will be heard. Farmers are getting a full, fair and sympathetic hearing and the majority of the committee are distinctly favorable to adequate farm product tariffs. Farm organizations such as the National Grange, the American Farm Bureau Federation, the National Dairy Council, the National Horticultural Council and many state organizations—including our Dairymen's League—who prepare their material carefully, do not make unreasonable requests and really

prove their cases, are getting good hearings. The fundamental thing that farm organizations are seeking is to have the agricultural sections of the tariff wall raised to a level with the manufacturing sections of the wall. They want the old practice of using farm products to maintain a favorable trade balance discontinued. They are not opposing increased tariffs on manufactured articles, but they may do so if an attempt is made to raise them too high.

Witnesses Must Be Brief

There are so many witnesses to be heard that the committee has been compelled to limit each to five minutes. One cannot present very much in that time and really these public hearings do not amount to very much. They give organizations and individuals an opportunity to register their approval or disapproval of tariffs and to file their own recommendations and detailed "briefs" with supporting data. Oratory and general statements count for little or nothing. Definiteness and brevity of requests, concrete evidence and supporting data are the important thing. There is great difference in the effectiveness of witnesses. The committee soon senses who "knows his onions" and who does not and they listen to and question the man who really knows and can tell what he knows, what he wants and why.

It is a liberal education to sit in these hearings and listen to the testimony. In the sugar and molasses hearings, for example, besides the technical facts, the whole economic status of our dependencies, the independence of the Philippines, reciprocity with Cuba, foreign trade balances and many other complicated questions were brought into the discussion. In all tariff revision the effect on the consumer as well as the producer is important. In some cases, as with field seeds and feeds, farmers are consumers as well as producers. Care must be taken in relieving producers of foreign competition not to burden the consumers. Listening in on these hearings is a good lesson against selfishness and provincialism.

The committee has a real job to formulate tariffs which will be effective and at the same time fair to everybody. Public policy toward agriculture in a large way will be a determining factor. To some extent but probably less than usual politics and wire pulling will play a part. In general it is the farmers' day in court and he will probably get the best tariff deal he ever had.—M. C. Burritt, January 25, 1929.

Transplanting Evergreens

"Can you tell me what would be the best time of the year to transplant small native pine trees, such as are growing on much of our abandoned land and in back pastures. We would also like to know the time of year to cut wild rose bushes in pasture land to kill them."—Mrs. A. E. M., New York.

IN general we believe that best results will be secured from transplanting any kind of tree early in the spring before growth starts. Evergreens, of course, keep their leaves the year round but the chances are that they will be more likely to live if they are planted in the spring rather than in the fall or summer.

There are various opinions concerning the proper time to cut plants of any kind in order to kill them. The general rule which applies to any plant is that it should be cut at a time when it is weakened by new growth or seed production. With most plants it is necessary to cut them more than once. Food is stored in the roots and continued growth made necessary by continued cutting will in time use up this reserve and cause them to die.

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Bend — twist — stretch — rub — pound! All the friction and the thousand strains that you would give to a rubber boot or overshoe in months of roughest wear are given by testing machines in our factory, in hours — even in minutes!

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A strip of the rubber that makes the leg of the boot is stretched — stretched — stretched. This is to make sure it is really “rubbery” — elastic yet strong. In a few seconds it is given more pulling and stretching than you would give it in a month.

Another piece of rubber such as goes into the toe and instep is twisted — bent — twisted again and again, until it's strained far more in ten minutes than you would strain it in ten months.

You would be astonished at these

tests. It's as if a giant farmer put on a pair of Goodrich boots and — like the giant who walked seven leagues at a step — strode through a whole year's wear in a single short afternoon.

These tests assure you of good value when you buy Goodrich footwear. Look for the name Goodrich. It is plainly stamped on all our boots, overshoes and rubbers — the honor mark of a great company.

From sturdy boots, overshoes and work-rubbers for men and boys to dainty stylish Zippers and rubbers for women and girls, the Goodrich line of tested rubber footwear meets the needs of every member of your family. *The B. F. Goodrich Rubber Company, Akron, Ohio.*



A favorite with farmers — this brown Goodrich boot with white sole. Sizes, boys' to men's. All lengths, knee to hip.

This sturdy Norka comes in black with white or brown sole. Unrivalled for heavy wear.



These strong, comfortable all-rubber overshoes come in all sizes with 4, 5 or 6 buckles.



Goodrich

RUBBER FOOTWEAR FOR EVERY MEMBER OF THE FAMILY

Cleaned and Re-Cleaned



There is a big difference between ordinary seed and seed re-cleaned to famous Pine Tree standards of quality. It will pay you to get samples and prices from the nearest Pine Tree dealer.

For your protection every bag of Pine Tree Clover, Timothy, Alfalfa and other farm seeds, is sealed with the Pine Tree Certificate. Ask your dealer for Genuine Pine Tree Brand of known origin.

With the A.A. Crop and Vegetable Grower

State Association Meets at Utica

THE New York State Vegetable

By PAUL WORK

on transportation and on the phases of

Growers' Association held its nineteenth annual meeting at the Hotel Utica, in Utica, on January 22nd and 23rd. Some 300 growers were in attendance and the meeting was undoubtedly the best thus far held. The Empire State Potato Club completed the first year of its work with a splendid show and program. One of the 4-H boys who was third among the juniors, won sweepstakes in the adult classes. It is time our grown-up growers and exhibitors should look well to their laurels. The liberal premiums for miscellaneous vegetables, which were provided by commercial concerns, brought out excellent exhibits in spite of the fact that the show was held in the dead of winter.



Paul Work

In spite of competition with the Farm Products Show at Harrisburg, the trade exhibit space was completely filled. Sprayers, packing equipment, greenhouses, heaters for hotbeds, insecticides and fungicides, seeds and periodicals being represented. Growers value this opportunity to meet factory representatives of the various concerns in order to learn what they can about the merits and use of the various aids which nowadays cut so large a figure in our business.

Hedrick Speaks at Banquet

The large ballroom of the Hotel Utica was filled to capacity for the banquet on Tuesday evening. Mr. Frank Baker, rose grower of Utica, acted as toastmaster. Dr. U. P. Hedrick, Director of the Geneva Station, was the principal speaker and he told of the highly significant work which Dr. E. L. Sturtevant did with vegetable varieties during the first several years of the existence of the Station, now 45 years old. Dr. Hedrick complimented the Association upon the splendid attendance as compared with meetings of several years ago, which he well remembered, and at which the whole crowd consisted of as many as 50 growers.

J. D. Ameele of Williamson, was selected to present a gold watch to Mr. Joseph Bogner of New Hartford, in the name of the Association and in appreciation of his tireless interest and support of the Association from its earliest days. It was thru Mr. Bogner that the Utica meeting was made possible and a great deal of its success is due to him as leader of the local group.

Tariff Action

At the Directors' meeting on Monday evening, the vegetable tariff schedules, the subject of hearings before the Ways and Means Committee, were thoroughly considered. The Association decided to recommend the following changes and it delegated Mr. George Kricheldorf, Manager of the South Shore Co-operative Association of Silver Creek, to represent it at Washington:

Onions from 1½¢ per lb. to 2½¢.
Tomatoes in the natural state from ½¢ per lb. to 1¢.
Prepared and preserved tomatoes from 15% ad valorem to 40% ad valorem.
Cabbage, rutabagas and carrots from 25% ad valorem to 1¢ per lb.
Cauliflower from 25% ad valorem to 1½¢ per lb.
An increase of 100% was asked on dextrin and starch and from ½¢ to 1½¢ per lb. on potatoes.

Resolutions passed by the Association urged the establishment of a set date and place for the annual meeting; indorsed the farm relief program advocated by the New York State Farm Bureau Federation; asked for research

marketing which are concerned with the products before they leave the growers' hands; matters of cultural conditions, harvesting, grading, packing and packages. This phase of marketing research seems to have been seriously neglected. The Association went on record as favoring a state potato grading law. Plans were laid for membership in the Atlantic States Shippers Advisory Board. The State Fair commission was asked for refrigerated cases in order that highly perishable vegetables may be kept in a good condition throughout the week.

The following officers were elected for the coming year:

P. D. Vererouse, Oswego, President; Albert Schillroth, Orchard Park, Vice-President; Howard Crandall, Ithaca, Sec'y-Treasurer; Paul Work, Ithaca, C. H. Riley, Sennett, T. Harvey Holmes, Albany, Clarence Steele, Elba, Executive Committee.

Cornell Students on the Program

N. F. Mansfield and G. J. Dinsmore represented the Vegetable Gardening Club, a student organization at Cornell. Mansfield told of his summer experience as a field man for a cannery in Chautauqua County. Dinsmore pointed out the advantages in germination and earliness of maturity to be gained by sizing sweet corn seed before planting.

Greenhouse Crops

The program was conspicuous by the number of commercial growers who took part in the discussions. Reginald Brownsey of Albany, told of the culture of tomatoes, cucumbers, lettuce and radishes in the greenhouse range of Brownsey and Marx, which is reported to be the largest in the state, embracing about 4 acres.

Plant Protectors

Walter Henry, of Eden, N. Y., reported highly successful results with the use of paper protectors for muskmelons, although results vary somewhat with different weather conditions. In 1928, young plants were transplanted to the field May 18 and protected with caps. On September 1 these had brought a return of \$221. Plants set out May 24 under protectors yielded \$137.80. Those without the protectors were set in early June and by September 1 they had yielded only \$111 worth of fruit. Counting labor and material and with melons 5 x 6 feet, the cost per acre is about \$29. The caps have been successful against temperatures as low as 27° F.

J. D. Ameele of Williamson, reported on control of late blight of celery in his neighborhood and Roy Porter of Elba urged the tariff protection on vegetables. Walter Emerick of Watervliet, told how he has developed the culture of brook trout as a sideline in connection with his gardening business.

Concentrated Fertilizers

Professor F. O. Underwood of Ithaca, taking the place of Professor E. L. Worthen, indicated that one can save about \$5 a ton by using a 10-20-10 fertilizer instead of a 5-10-5. These are both of the 1-2-1 ratio and the grower would simply apply twice as much of the latter as of the former to get the same results. Care must be exercised to see that these highly concentrated fertilizers, some running as high as 15-30-15, should be thoroughly mixed with the soil in order to avoid injury to plants.

Ray Huey of the State Department of Agriculture at Albany, told of the service that is being developed in crop and market reporting for vegetable growers. Estimates are based upon reports from around 500 growers scattered throughout the state and out-of-

(Continued on Page 11)



Harris' Early Stone The Best Tomato for Canning

We have raised this tomato here in the north for many years, selecting it carefully for earliness, vigor and good quality of fruit so that now we have a strain which ripens almost as early as John Baer and Bonny Best, and retains all the fine qualities of Stone Tomato.

We are large growers of Northern Grown Seed Corn, Pedigree Tomatoes and many other varieties of vegetables and flowers of the highest quality. Buy direct from the farm. The cost is surprisingly low for such high class seed.

Send for our Free Catalogue Today.

SPECIAL OFFER—For 20¢ in stamps we will send our catalogue and two (2) packets of Harris' New Early Stone Tomato (value 24¢) and a coupon good for 20¢ on any subsequent order amounting to \$1.00 or more.

Joseph Harris Co., Inc.

R. F. D. 9
COLDWATER, N. Y.

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Prepare now Automatic Irrigation for a Dry Season.

A brief dry spell may wipe out the profits of a whole season's toil. Why take this needless risk? Plan now on an automatic watering system. See how little it costs to have protection against drought and frost—with high-quality, low-cost White Showers Irrigation Systems. Send for Free Book of facts and figures.



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Our catalog gives results of State College corn variety tests and will help you choose the variety for husking or silage that will pay best under your conditions. Write for FREE catalog with description and price of these and other Pedigreed corn seeds.

K. C. LIVERMORE

Box A

HONEOYE FALLS, N. Y.



The Story of Nitrogen

(Continued from Page 3)

and arrive at an approximation. In the eastern United States where alfalfa may be cut only three or four times during a season, the total hay from an acre may remove as much as 200 pounds of nitrogen or even more. On the same land a crop of corn, grain or timothy hay will remove only about 30 to 60 pounds of nitrogen per acre. On this basis it may be argued that the alfalfa must have obtained a rather large proportion of its nitrogen—possibly 150 to 175 pounds per acre—from the air. Certainly it is a well known fact that under favorable conditions with reference to drainage, supply of mineral fertilizers and lime, alfalfa may be grown continuously for a number of years, without the use of any nitrogenous fertilizers and without depleting the soil's natural supply of nitrogen.

Experiments have shown that a crop of soybeans grown to maturity will return in vines and beans as much as 80 to 90 pounds of nitrogen per acre. Judging by the amount returned through non-legume crops on the same land, there is good reason for believing that one-half to two-thirds of this nitrogen is taken from the air, and when it is remembered that 50 pounds of nitrogen is equivalent to over 300 pounds of nitrate of soda, the significance of this is apparent.

Under favorable soil and climatic conditions (not too far north) a fair crop of soybeans may be grown between wheat harvest and wheat seeding time in the fall. This crop if plowed under will return to the soil in the neighborhood of 60 pounds of nitrogen to the acre exclusive of the roots. If we assume that the nitrogen in the roots balances that which was taken from the soil, then we would have in the part above ground the equivalent of nearly 400 pounds of nitrate of soda. But we have in such crops more than the actual nitrogen taken from the air. The organic matter of legume crops decomposes easily and is thus quickly converted into available plant food for the following crop. Furthermore legume crops are usually rich in potash, much of which is taken from the subsoil and this also becomes available for succeeding crops.

Nitrogen Accumulation and Lime

Mention has been made of the conditions under which these partnership organisms will develop best. In this connection special emphasis should be placed on the need for lime. As a rule they do not thrive in a strongly acid soil, and with poor development of the organism there is poor nitrogen fixation and therefore poor plant growth. Soybeans grown on a strongly acid soil are dwarfed, have few nodules and poor root development and are likely to be crowded out by crab grass which thrives on an acid soil. When this same acid land is limed the beans show abundant nodules and easily outgrow the crab grass and in this way give proof that they are getting nitrogen from the air.

On the limed soil fertility plots at the New Jersey Agricultural Experiment Station, where little or no nitrogen has been used for the last 20 years, it has been impossible to prevent clover from coming in—volunteer—after grain crops and timothy. On the other hand where no lime has been used and the soil is quite acid, hardly a clover plant can be found. This volunteer clover on the limed plots has had a marked influence on the crop yields, the plots thus treated, giving in some instances, almost as high a yield as those that received a liberal application of nitrogenous fertilizers. This is a striking demonstration of what may be done in the way of restoring fertility to soils that have had their supply of nitrogen and organic matter seriously depleted.

Lime and legumes when joined in the contest for the nitrogen of the air form a working organization which in the aggregate is superior to all the power-fixing plants in the world.



A Thrifty French Planter Sees Prosperity In Mulch Paper Grown Melons

READ the letter at the top of this page carefully.

Behind it is a story of an agricultural tragedy, one you yourself know well—a situation where a group of melon growers in far away France market their crops annually at a nig-gardly profit, or at a loss because each year all the melons of the section are dumped into an over-stocked market at the same time, while ten days earlier maturity might mean fortune!

One of this group with vision, senses the possibilities of Gator-Hide Mulch Paper in stimulating growth and bringing his melons to market while there is still a market for the melons and a profit for himself.

Earlier crop production is one of the big features of paper mulching. U.S. Department of Agriculture bulletins and reports from State Agricultural Colleges show conclusively that Mulch Paper, by increasing soil temperature

and conserving soil moisture, brings crops to maturity far in advance of normal plantings. Under many conditions Gator-Hide Mulch Paper maintains a *daytime* soil temperature all through the twenty-four hours. This means that bacterial activity in the soil goes on without interruption, it means twenty-four hours instead of eight or ten hours of growing time a day.

And one thing more: Gator-Hide Mulch Paper reduces the necessity for cultivation, and for weeding to an absolute minimum. It not only produces bigger and earlier crops, it produces crops at a smaller expenditure of time, effort and labor for cultivation.

Gator-Hide now available in any quantity

Last Spring, Gator-Hide was

Marignane (B.-du-Rh.) July 26th, 1929

Dear Sir: FARMING UNDER PAPER

Here is one of the centres of the truck-growing industry, and we specialize in melon-culture. Just at this time, the melon season is in full swing, everybody's fruit arrives at maturity at about the same day; as a consequence, prices drop with a thud, and a melon worth 6 francs (30 cents) last week is only worth 3 francs (15 cents) today.

A gain of ten days, therefore, will make all the difference and would be ample compensation for the cost of the paper, even if the saving in labor cost were ignored.

We have no rain-fall here, from May till September, and moisture is supplied by irrigation canals. You do not mention that the mulch-paper method is equally applicable in dry seasons, where there is no rain-fall.

How can I get the Mulch Paper? I am going to try at once with some autumn-sown peas. I believe one could start the crops earlier here with paper, for it is on account of the coldness of the soil at night, that planting the melons and cucumbers is delayed until the second week in May.

Thanking you in advance for any help you can give me. Yours faithfully, (Signature on request)

From a letter written by a French melon grower who is interested in earlier maturity and increased prices for his crop.



And here is the answer to the French planter's question: At the right: 121 melons weighing 142 lbs., growing under Mulch Paper. In the unmulched row at the left the yield was 26 melons weighing 31½ lbs. Both rows planted at the same time.

available only on a restricted basis—four rolls to an individual. This was to allow the greatest possible number of planters to experiment with it. Now, many are planning to plant acres under Mulch Paper in 1929.

Don't let this year pass without testing Gator-Hide Mulch Paper. See for yourself on your own land how it increases yield, does away with the need for back-breaking cultivation, enables you to market your crop days—weeks—before your neighbors while prices are highest. If your local dealer cannot supply you with Gator-Hide Mulch Paper write us using the coupon.

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Type A—for Annuals, primarily in field culture.
18" width—300 lineal yards to roll . . . \$3.50
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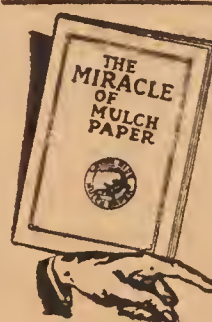
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My dealer is

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My address

PLANT UNDER GATOR-HIDE MULCH PAPER IN 1929

A Bill to Reduce School Taxes

(Continued from Page 1)

many cases much lower than the taxes paid by the districts before they joined the central district.

In other words, the Central Rural School Act is a centralization, or consolidation if you wish to call it that, of the districts themselves, but not a consolidation or centralization of the schools. The districts may be brought together for fairer and better administration and taxing purposes, but without closing the schools—unless the voters in each of the districts so vote.

No Action Until Majority Vote It

This Central Rural School Act in practically its present form went into effect about May 1, 1925. Since it took effect, it has been working out very successfully in actual practice. There are now more than fifty central rural districts, and more applications are coming regularly into the Department for new districts to be laid out. The attitude of the Education Department is that no central district shall be laid out by the Department until the local people have proven that the very great majority of them are enthusiastically back of the plan.

In the discussions at the meetings where the plan for a central rural school district has been considered, there has often been considerable opposition. Where the opposition was too pronounced, the Department of Education has refused to go forward until it was convinced that the opposition came from a small minority. Those who opposed were often sincere in the stand they took, being oftentimes misled by those who had selfish axes to grind rather than the best interests of the taxpayers or the educational interests of the boys and girls at heart.

American Agriculturist has sent representatives into several of these districts after they have been established. We have gone to those who were opposed to the plan in the first place and have asked them if they wanted to go back to the old plan. In all of our investigations, we have never found more than three or four persons who would go back to the old plan under any consideration.

Why should they? Their taxes are oftentimes lower. They still have their one-room school for their small children, if they wanted it, and their older boys and girls have the advantage of the village high school on an equal basis with the village children, and transportation is provided for these older children.

One Room Schools Need Help

But while the Central Rural School Act is helping to solve the problem of some rural school districts, there are still thousands of districts in the State not ready to take advantage of this legislation, and the Department of Education could not take care of all of them at once even if they did wish to reorganize under this act. Moreover, there are probably districts in the State so situated that it would not be practicable for them to get together under the provisions of the centralized school law.

So these small districts are still

faced with the great problem of trying to maintain their schools with an almost ruinous tax rate. This is especially true of those districts which now have a very small valuation and do not have the advantage of some railroad, manufactory or other public utility in the district to help pay the taxes.

So the reputable farm organizations of the State, American Agriculturist, the Education Department, Governor Roosevelt's Agricultural Advisory Commission, and leaders in the State legislature have all been studying the problem to find the best way to relieve some of the taxes and to help the small districts keep their schools. The result of all this study is the introduction of the Webb-Rice bill, mentioned at the beginning of this article. This bill may be amended or altered in some of its details, but in its present form it provides the sum of \$4,500,000 appropriated to the State Education Department for the purpose of more State aid to the small one-room, one-teacher district schools.

How the Proposed Bill Would Work

The provisions of the bill are very simple. The chief and most important one reads as follows:

"C. Apportionments for districts employing but one teacher. The commissioner of education shall apportion and pay annually, at the same time and in the same manner as other public school moneys are apportioned and paid under this article, to each district employing but one teacher the sum of fifteen hundred dollars less the amount of a four mill tax on each dollar of the actual valuation of the taxable property of the district. The amount apportioned to each such district under this section shall not be greater than the amount of the excess of the total expenditures for school purposes in such district above the amount which would result from a tax of four mills on each dollar of actual valuation, provided, however, that no district shall receive less than four hundred and twenty-five dollars; such actual valuation to be determined in the same manner as provided in section four hundred and ninety-one-b of this article."

Interpreted and explained, the above paragraph means that each one-room district school is allowed the sum of \$1500 each year as the cost of maintaining and running the school. Of this sum the district itself will raise a four-mill tax on each dollar of the full valuation of taxable property in the district, and the State will pay to the district all of the rest of the difference between the sum raised by the four-mill tax and the \$1500.

Comparing this with the old system of making appropriations for the schools, it is simplicity itself. For example, every trustee and local district school officer knows how complicated and how hard to understand are the many different methods of making apportionments of school money under the present system. To name just a few of them, there are district quotas, teachers' quotas, building quotas, library grants, and many others. If the new bill goes into effect, it does away with the present complex system of making apportionments of public

(Continued on Page 22)

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It doesn't pay to wallow all over the road—taking chances every minute with a skid in the ditch, an overturned car—or worse. For snow is treacherous.

Play safe! Keep your WEED Chains handy in your car, ready to put on the tires when there's snow on the road. The minute you feel your tires slipping. Don't take a chance, but get the grip of steel under your tires when the going is slippery.

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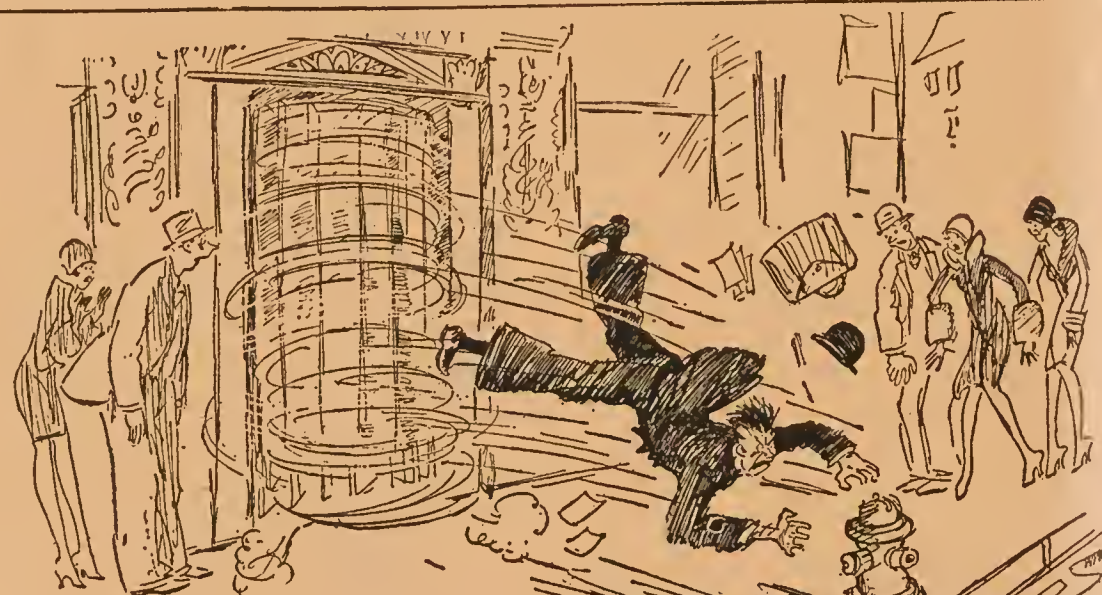
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2 to 3 feet..... 25c each

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Burpee's Annual. It describes Burpee Quality Seeds, Bulbs and Plants. A million people use it as their garden guide.

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GROW YOUR OWN STRAWBERRIES

Big delicious berries, 80 days after planting. Plenty berries all summer and fall. Another big crop next year. New lower prices.

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25 MASTODON ..	\$ 1.00
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State Association Meets at Utica

(Continued from Page 8)

state information is freely used in making up reports as mailed. This service is available to any grower on request.

Paper Mulch Discussed

In a paper by H. C. Thompson of Ithaca, it was pointed out that the highest reported returns from paper mulch for vegetable crops can hardly be expected at all times, but under certain conditions and with certain crops the scheme is clearly worthy of trial. Results, of course, vary decidedly according to weather conditions.

Professor A. L. Wilson of the Utah Experiment Station, was present and told of the culture of tomatoes, onions and celery in that state. The production of onions of the Sweet Spanish type has received a great impetus during recent years. Special selections are being made resulting in firm bulbs with heavy skins which will stand shipping and storage a good deal better than the old Denia and Giant Gibraltar. Professor Wilson called attention to the commercial production of a special strain of green celery under the name of "Utah". This is very crisp, white, stringless, of excellent heart and is as tender and crisp as the finest Emperor or Pascal.

C. R. White, President of the New York State Farm Bureau Federation, spoke on activities of interest to vegetable men including increased tariff, better transportation adjustments, protection from filtering and others. H. E. Crouch of the State Department at Albany, reported that a regional market at Newburgh is now practically insured, and studies have been begun looking forward to the development for much needed facilities at Buffalo. Mr. Crouch pointed out the various requirements for different classes of trade which must be met on the modern city market.

Vegetables Fail to Germinate in Acid Soils

FEEDS of such crops as spinach, beets, and carrots germinated poorly on a soil that was strongly acid and in need of lime in recent studies at the N. J. experiment station. The few plants which did develop were stunted and yielded little marketable produce.

Carrots and beets planted on strongly acid plots were a complete failure. On the moderately acid plot the yield of beets was about 12 tons per acre. On the well-limed plots, however, they were able to secure yields of from 15 to 18 tons per acre.

Similar results were obtained with spinach planted on strongly acid soil, land that had not been limed for 20 years. The crop was a total failure. On the moderately acid plots the plants were dwarfed and yellowish in color, while on the well-limed soil the plants were much larger, and the leaves had a dark green, healthy appearance.

Another Way to Control Squash Vine Borer

Some weeks ago I saw an inquiry in your paper for something to kill the white grubs that eat into the middle of vines, notably squash and summer asparagus vines. Before that I read of a gardener in Chicago who found that a strong tobacco water poured around the roots of the vines would do the trick. I tried it and found it worked real well. I soaked half a paper of fine cut tobacco in about two quarts of water for twenty hours and then poured it on the plants. I am passing the recipe on to you for wider circulation if you care to use it.—G. A. W.

Closing up all the openings, windows, knotholes, and cracks in the hen house is a poor plan if no other means of ventilation is provided. Colds and roup will result from a tightly closed, ill ventilated hen house.



...for your POTATOES

LAST fall's big crop of potatoes brought prices down low. The growers who made a profit were those who kept their potato plants on the job by keeping them well-fed and healthy.

LEFT is a healthy potato plant with the sturdy, upright stems, and smooth, even-colored leaves obtained when a plant is fertilized with a complete fertilizer containing plenty of potash. This type of plant pays the grower a good margin of profit.

RIGHT is a potato plant grown on a soil deficient in

potash although abundantly fertilized with nitrogen and phosphorus. The plant is stunted, the leaves are crinkled, and the petioles shortened. The leaves, deep green at first, later become bronze in color. The entire plant may collapse. Growers who produce plants of this type suffer big losses in poor crops.

Don't let your plants become so starved for potash as to develop hunger signs.

Field demonstration and successful farm practice show that a potato fertilizer should contain at least 100 pounds of actual potash per acre. Many growers are getting excellent results from 200 pounds of actual potash per acre. A complete fertilizer, applied at the rate of 2,000 pounds per acre, should contain 5 to 10% potash. Make sure that your potatoes get plenty of potash. Potash will help you have a good year every year.

Agricultural and Scientific Bureau

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of Amsterdam, Holland

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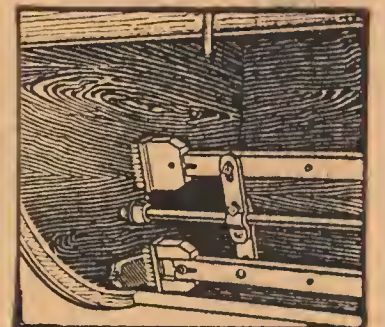


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World leaders for 47 years

THE SPRAYER THAT NEVER CLOGS

the odds are against YOU



WHAT will it profit you to save a little money on the price of dairy feed if your cows go off condition or develop one of the many ills that result directly and indirectly from the use of low quality ingredients or improper combinations in cheap feeds?

Larro costs more than inferior feeds, but you can't escape paying its price and more, no matter what you feed. What you seem to save thru buying a cheap feed, you will lose over and over again when sickness and herd troubles shrink your milk production and sap the vitality of your cows.

When you feed Larro, you know that it is made of ingredients selected for quality; you know that it does not change; you can depend on it to keep your cows healthy and produce a bigger profit over your feed cost—no matter what your roughage is.

Don't gamble with the health of your cows—the odds are against you—feed Larro and keep your cows fit to do their best job of producing milk.

THE LARROWE MILLING CO.
DETROIT • MICHIGAN



With the A. A.
Dairyman



Save Your Ten Dollars

(Continued from Page 3)

If I were a farmer I would not consider a ten dollar payment to this association a good investment, as I feel that we already have an abundance of farm organizations and that all organization service to farmers can be given through the groups that have been in existence for some time. On the other hand, if any farmer feels disposed to give up ten dollars for an affiliation fee with any new organization, under the spell of a persuasive promoter, I have no objection.

"This association had absolutely nothing to do with the Kirkland Law of last winter which increased the maximum amounts of indemnity that might be paid by the State (Chap. 70 of the Laws of 1928). Certain groups, which I assume more or less represented this association, appeared before the legislature in support of another bill on the same subject, which did not become a law. In fact, I know of no accomplishment whatever to date of this organization.

"I am not intending to say that the association has accomplished nothing; I am simply recording the fact that if it has accomplished anything I have no knowledge of it."

Senator Kirkland's Statement

In answer to our inquiry regarding the history of the increased indemnity bill, Senator Kirkland, chairman of the Agricultural Committee in the Senate, gave us the following statement:

"In answer to your inquiry regarding bill introduced by me in 1928 increasing indemnities paid to those who had TB cattle condemned and slaughtered by the State, I am pleased to give you history of same:

"As a dairyman, with a large farm for an ordinary dairyman, I was as familiar with the rapid advance of cattle values as any one in the State. I recognized the heavy losses some were having, where they lost high class cattle, and found many felt something needed doing.

"At the request of Mr. Underwood, secretary of the Farm Bureau Federation, I met him and Mr. White, president of the Farm Bureau Federation, in Rochester on New Year's day to talk over the questions that might come before the legislature that particularly affected agriculture.

"Several matters were discussed, among them the need of increasing the indemnities paid for slaughtered TB cattle. When I left them, it was with the understanding that I would introduce a bill and they would use their influence in support of same.

"The next day I took up the working out of the details with Commissioner Pyrke and Assemblyman Witter on the Kirkland Bill Int. No. 71. This bill was introduced January 9, 1928, and passed the Senate January 30th. I hurried this bill as rapidly as possible, knowing some farmer would be saved a loss when this bill became law. Many members after its introduction urged me to do so to save farmers in their districts from a loss. This bill became law February 17, 1928.

"There was no voice raised in opposition to the bill, with the exception of one who said he was not opposed but did not know whether this bill went as far as it should.

"No hearings were held as there were none asked for, which is the custom always followed in handling bills. As a matter of fact, there were good reasons, I believe, for asking for this legislation and the bill passed without any opposition.

"I hope I have answered your question. I have another bill introduced this year to provide that the State pay cost of testing of accredited herds. This cost is now borne by the owner of the herds. I believe this should be the next step we should take to make our program a success. I asked to have this bill drawn some weeks before the legislature convened and certainly hope it meets the approval of those interested. The Con-

ference Board of Farm Organizations, I understand, has endorsed this bill."

A. A. Gave Facts to the Governor

We might add that at one time there seemed to be some doubt as to whether Governor Smith understood the proposals in the increased indemnity bill, and there was a feeling that he might not approve the bill if passed by the legislature. So Henry Morgenthau, Jr., publisher of American Agriculturist, went personally to Governor Smith and explained the situation to him, and asked his approval of the bill. The Governor asked Mr. Morgenthau and American Agriculturist to furnish him further detailed information and figures regarding the whole TB situation in the State, and proof that the farmers really did need larger indemnities when their cattle were condemned. We furnished these facts and proof for the Governor, and he later signed the bill without question.

Now where, we ask you again, did the Farmers' and Livestock Dealers' Association have any part in the passage of this important act?

They make the claim also that they worked for increased prices of milk for dairy farmers. This is of course a very laudable ambition and ideal, but, as a practical question, we ask farmers inclined to believe this where and how this association has ever added one cent to the prices received by the farmers, or how a few scattered officers without any standing with the milk dealers whatever could possibly do any practical thing to increase the price of milk? We challenge the officers to produce proof that they have ever been effective in any way, shape or manner in getting farmers a larger price for their milk.

In a little circular issued by the New York State Farmers' and Livestock Dealers' Association, they state some of their aims and ideals. One of them reads as follows:

"It (the association) will be of assistance to the farmer in many ways in aiding him in his problems of marketing, helping him with his claims before the Agricultural Department of the State ***"

Re-read Commissioner Pyrke's letter given above, and conclude for yourself how much real assistance this so-called association has ever been in helping farmers with the State Department of Agriculture and Markets.

The Real Purpose of the Association

The circular or statement of the association also contains this:

"At the present time, it is necessary to replenish New York State dairies largely with cattle from outside the State. This condition could be eliminated by allowing dealers to buy good dairy cattle, testing them while in the dealers' hands and selling them to the farmer, who must purchase to replenish a dairy after a test."

Right there is one of the "niggers in the woodpile" back of this cattle dealers' association, for we believe that the above statement shows that one of the real objects of the organization of this association in the first place was to get a law or a ruling which would allow the cattle dealers who wished to traffic in cattle affected by TB and sell the reactors to the state for the indemnities.

The other object seems to us to be a straight money-making deal for the organizers.

We challenge the officers and organizers to make a public sworn statement, certified to by a public accountant, making an accounting in detail of all of the ten dollar membership fees that they have collected from farmers.

Where does this money go? What salaries do the officers get? What are the salaries of the organizers? How much money and how much effort are put into real service to the farmer members who pay these hard-earned ten dollar fees? Those are some of the questions we feel the dairymen of the State ought to begin to ask this association.

Why were some of the cattle dealers interested in this movement in the first place? The answer is simple. The law provides that cattle dealers shall not buy untested cattle, have them tested and then receive the indemnities from the reactors from the State in the same way that ordinary dairymen are paid. There was a time before this law was passed when many dealers made a practice of buying untested cattle from farmers at too low prices and then selling the reactors to the State.

For example, in the year preceding September, 1921, approximately a half million dollars were paid out by the State on the so-called private tests, which were very largely tests for dealers. No wonder they are against the present system when they are shut off from easy money like that! Both the farmers and the taxpayers suffer. No wonder that these dealers, using their farmer members to help "pull their chestnuts out of the fire", are trying to get changes in the law so that they can operate under the old system again.

Now do not misunderstand us. We believe that the great majority of cattle dealers are honest and reputable. We know that cattle dealers are necessary in the dairy business. We do not believe that a majority of these men will have anything to do with the Farmers' and Livestock Dealers' Association.

We are sorry to have to be so outspoken, but since it was organized, American Agriculturist has made it one of its chief duties to expose schemes that take money from farmers without giving adequate return. We believe this is the case with this Farmers' and Livestock Dealers' Association, so if you want to save your ten dollars, keep it in your pocket.

Keep Herd Sires Till They Prove Their Value

It has frequently been stated that the progress of the dairy industry is hindered by killing many herd sires before their true worth is known. This statement is emphasized by records of the offspring of King Hengerveld Aaggie Fayne. Because the offspring of this herd sire did not look especially promising when they were young, he was killed. Following this one of his daughters as a three-year-old produced 24,612 pounds of milk and in all 31 of his daughters have made Holstein-Friesian Advanced Registry records.

Slaughtering a bull before his value is known has been likened to killing the goose which laid the golden egg. Viciousness on the part of the animal is probably the most common reason for sending herd sires to the butcher. The proper remedy for this is a properly constructed safety bull pen.

Regulations for Shipping Country Dressed Veal

MANY shippers of country dressed calves have been asking for information on the regulations of the New York City Board of Health regarding the proper shipment of calves slaughtered and shipped by farmers.

The ruling of the New York City Board of Health provides that calves must be shipped with the liver, lungs, heart, and spleen in and all naturally attached, also the head on. An exception is made where calves are inspected and passed as fit for human food by a duly authorized official of the United States Government, or of any State or municipality, and shall

(Continued on Page 14)



To the Dairyman Whose Herd IS NOT Prize Strain 'Let's Increase Your Profits Too'

Says Uncle Charlie

WE hear a lot of talk about the increased milk production and profits from pure-strain cows, but what about you fellows whose herds are *not* prize strain?

Aren't *your* cows worthy of "saving?"

Don't *you* want more profits?

Seems to me you deserve more attention than the well-to-do man who can afford back-to-Adam pure-blood Holstein Guernseys, Ayreshires and other aristocrats. There's nothing I love to see more than a finely blooded cow, but why make such a fuss about it? When it lives up to its name it is doing no more than the job it was bred for.

Utmost Milk Production from ALL

The important thing to my way of thinking is to get most milk from *every* herd. There's no surer way than to feed Bull-Brand Dairy Ration. Made on a perfectly balanced formula, from choicest protein concentrates, minerals and other essential ingredients, for 10 years it has had the record of being the most productive per dollar of feed cost.

Unusual Records

Dairymen say that it brings the milker up to fine condition and keeps her there. It does away with caked udders and other similar troubles. It gives a splendid increase in milk at a saving in feed cost. B-B customers quote records like the following: "B-B increased my milk flow 25% the first week." "An increase of 75 lbs. a day." "Yearly profits of \$205.00 to \$210.00 per head." "Fat enough for beef."

"Daily averages of 13 to 14 quarts of 4% milk."



Many of the thousands of Feeders who have written us these reports have prize cows. But just as many of them have non-pedigreed cows. B-B Dairy Ration has always proven the most profitable and productive for both kinds.

That is why it enjoys a solid reputation among the feeders. Why dairymen have stuck to it for periods ranging from 8 to 10 years. Why the men who try other rations always come back to B-B.

More Milk—or Money Back

B-B offers you the same increased milk production and profits. Feed it to your cows and note the immediate pick-up. Note the improved condition. Count your extra profit dollars. And remember that you are using B-B with this provision: if you find it does not give your cows the most milk per dollar of feed cost, bring back the empty sacks for a complete refund of your money.

Your profits must be increased, too!

Maritime Milling Co. Inc., Buffalo, N. Y.



The World's Most Modern Mill



FEED BULL-BRAND

Dairy Ration (24%), B-B Red-E-Mixt (20%), B-B Hi-Test (20%) or B-B Marmico (16%), whichever is most suitable for your roughage. Use the Bull-Brand full line of Poultry Feeds

A LIFETIME ROOF

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The American Agriculturist Advertisers Are Reliable!

Government reports show: Three-Fourths of Wells on Farms are contaminated

*diseased animals and birds
having access to drinking
tanks also pollute the water!*

The water you feed your cattle and poultry is dangerous! It is contaminated by millions of germs due to surface drainage, etc.

B-K, a concentrated sodium hypochlorite, fed in the drinking water kills these germs.

The B-K Way of Sanitation is effective in preventing the spread of abortion, calf scours, etc., from infected animals, roup and white diarrhea, etc., in poultry. The barns, platforms, mangers, poultry houses, incubators, brooders, etc., should all be disinfected the B-K Way.

You dilute B-K to use. That is why it is so economical. It is clear as water—won't soil—contains no acid or poison.

The B-K Way of Sanitation, the result of nearly 20 years' research and practical use, is an easy, inexpensive way to prevent disease. Complete direction

charts are included in every B-K package. Your money back if not satisfied.

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Breeding, Sanitation.]

[No. 213, Poultry Health and
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Regulations for Shipping Country Dressed Veal

(Continued from Page 13)

have been marked as having been so inspected and passed.

Calves officially inspected and passed in this manner in the country, may be shipped without the liver, lungs, heart and spleen in or head attached.

Neither the Federal Department of Agriculture nor the New York State Department of Agriculture & Markets has been in a position to extend any inspection service of this kind. Therefore, inspections of calves before shipment can only be made by a licensed veterinarian of a municipal board of health, and provided the inspection and certification of such an official is approved by the New York City Board of Health.

The Department of Agriculture and Markets understands that there are few municipalities that have such an inspection service.

In the absence of such inspections and certifications, it is necessary to ship country dressed calves with the liver, lungs, heart and spleen (frequently called melt) in and naturally attached and with the head on. Such shipments will be inspected by officers of the New York City Board of Health after they arrive in New York City.

Stabilization Committee Studies Milk Surplus Problem

ON December 20 a milk stabilization committee was formed, consisting of representatives of producers' organizations and the New York State Department of Agriculture and headed by Dr. C. E. Ladd of the New York State College of Agriculture. It is stated that the committee represents the first scientific application of expert ability which has been directed at this problem. One startling fact developed by the committee at the initial meeting recently is that the most burdensome surplus now comes in January, February and March.

After studying the situation carefully, the committee has agreed that the extension of the New York Milk Shed is not necessary and that low prices in March and April have a serious effect on fall production due to the discouragement of producers who feel that they will not receive a price for their produce which justifies the feeding of adequate amounts of grain to maintain the highest possible production. The figures on the New York milk prices showed that when a sharp reduction in the fluid milk prices occurred early in the spring that there was invariably a smaller production the following November than there was in the November of the preceding year. Consequently, the committee feels that every effort must be made by distributing companies, farm organizations and individual producers to stabilize the market in the spring so that this reduction will be unnecessary.

Looking Ahead

All educational agencies in the state should immediately start active campaigns to have the dairymen so arrange their crops that they will sow green crops such as oats and peas, buckwheat, millet, sowed corn or early cabbage so that this green feed will be available to feed during July and August, which will keep spring cows' production at its highest possible point. If this is done spring cows will hold their production of milk during September, October and November which will supplement the milk from the fall dairies and furnish the necessary amount to supply the market this coming year.

The committee has divided its activities into two parts, the formation of a short time program to meet the demands of next fall, and the laying out of a long-time program to meet the needs of the market for years to come. Among the members of the commit-

Metal Tubes Replace Rubber



A single-tube system—now with half as much rubber—half as much wear! Short tubes—easy washing—clean milk! Send for illustrated catalog.

"IT MILKS THE COWS CLEAN"

Single Unit



Double Unit

L. C. Noble, Poultney, Vermont, says: "After using another milker for more than two years I installed a Burrell. I find that it milks the cows clean, costs less for power, easier to clean, is all around the best milker I ever used."

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MILKING MACHINES AND CREAM SEPARATORS

the door fasteners form a safety ladder

A convenient, permanent ladder of wide, low, safe rungs directly under the opening—completely safe and convenient. The hoops are adjusted from the ladder so providing long life for the silo and perfect protection for the silage.

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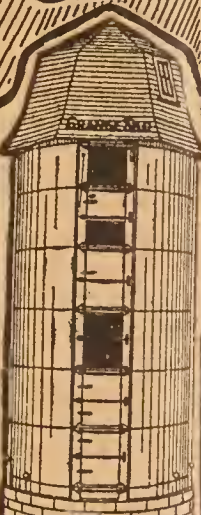
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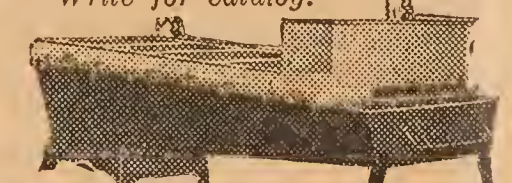
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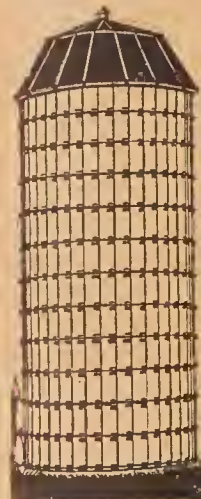
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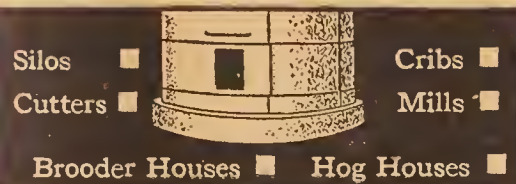
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tee are: Professors H. A. Ross and Fred B. Morris, State College of Agriculture; H. D. Phillips, State Department of Agriculture and Markets; E. Victor Underwood, New York State Farm Bureau Federation; E. J. Walrath, New York State Grange; Hugh Adair, Sheffield Farms Producers Association; L. A. Dalton, Agricultural Agent D. L. & W.; H. E. Babcock, G. L. F. Exchange, and George R. Fitts, Dairymen's League Cooperative Association, Inc.

Another committee studying the same problem is composed of representatives of metropolitan milk dealers and producers' organization. This committee was ordered created at a conference of dealers and producers with Commissioner of Health, Wynn, on December 5th.

Those serving on the committee are: Clark W. Halliday, Sheffield Producers Association; George R. Fitts, Dairymen's League Cooperative Association, Inc.; B. S. Halsey, Sheffield Farms Company; F. W. Janssen, Janssen Dairy Company; E. B. Lewis, Horton Ice Cream Company; W. H. Marcussen, Borden Farm Products Company; J. F. McCauley, Model Dairy Company, and I. E. Nathans, an independent dealer.

Canadian Department Reports on "Sugar Jack"

THE Canadian Department of Agriculture at Ottawa, Canada, has conducted tests on a process of treating roughage by a contrivance called sugar jack converter. Their conclusions are as follows:

"1. The sugar jack process feed is more expensive than silage and does not equal the results in milk and butterfat.

"2. Dry unprocessed roughage produced milk and butterfat equal in quantity and quality to that produced from the roughage of the same character after processing by the sugar jack method.

"3. In the sugar jack converter, said to be the active principle in the process, was found upon analysis to consist largely of common salt, slaked lime, and a little vegetable matter. Warm water alone and warm water with common salt added to replace the sugar jack proved to be just as satisfactory in the sugar jack process as did the sugar jack converter."

It would seem that the silo has no serious rival as a means of furnishing the dairy with succulent roughage.

Readers Say Heaves Can Be Helped

IN a recent issue a statement was made that there is no cure for heaves. This statement is correct, but it is recognized that there are a number of things which will lessen the trouble from the disease. One subscriber writes as follows:

We have had good success in giving a horse with heaves one teaspoon of fenugreek and a small amount of powdered camphor gum in oats. The trouble apparently disappears and the horse will work all day without being tired.—Mrs. C. B.

Another subscriber writes: If D. O. M. will try the following I think if it is not a cure, he will at least be able to work his horse and have no more trouble: 2 ounces oil of tar, 2 ounces oil of amber, 2 ounces of tincture of iron. Use one teaspoonful in feed at night. The horse will show improvement in a few days.—H. A. B.

A few years ago one of my horses got the heaves and a bad cough. I gave it feeding molasses, as much as I could take up at one dig with a large kitchen spoon three times a day. It relieved both the cough and the heaves in a short time. The horse has an attack every summer but a few doses of molasses in the beginning makes it all right.—C. W.

"Scoop shovel" feeding of dairy cows is unprofitable. A good practice is to feed each cow one pound of grain mixture for every 3 or 4 pounds of milk produced.

Robber Cows!

Two out of three cheat their owners

DAIRY experts say that only one cow in three—on a national average—actually pays a profit. They also assert that in the average herd a milk increase of only *ten percent* will **DOUBLE** the profit to the owner.

If yours is an average herd you can make more money than you are—**MUCH** more. By the simple process of spotting the "boarders" and converting them into producers you can realize the real profits of your labors. No merchant can make money with some one robbing the till. Neither can a dairy herd return a proper profit if poor milkers are allowed to offset the good milkers.

What a chance to boost those winter milk checks! No bank—and mighty few crops—offer you the yield on a small investment that can be yours by adopting a common-sense conditioning plan for your cows. The plan is not new. It has been in vogue for over thirty years—with added thousands of new converts every year.

A few cents per cow per month invested in Kow-Kare, the great cow conditioner and regulator will surprise and convince you. This scientific compound of Iron, the great builder and blood tonic, blended with potent medicinal herbs and roots helps your cows digest and assimilate their natural winter diet. It enables you to "force" cows for more milk, while maintaining a health standard to throw off the ills to which dairy cows are so frequently subject.



For cows off feed, cows out of condition and low in yield, Kow-Kare will prove its worth in no uncertain terms. The extra quarts of milk that come with perfect digestion and elimination will speak for themselves.

For Cows at Calving

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Reviewing the Latest Eastern Markets

Milk Prices

The following are the February prices for milk in the basic zone of 201-210 miles from New York City.

Dairymen's League prices are based on milk testing 3.5%. Sheffield on the basis of 3%.

Class	Dairymen's League	Sheffield Producers
1 Fluid Milk....	3.37	3.17
2A Fluid Cream	2.46	2.30
2B Cond. Milk..		
Soft Cheese..	2.71	
3 Evap. Cond.		2.30
Milk Powder		
Hard Cheese	2.50	
4 Butter and American cheese. Based on New York City Market quotations on butter and American cheese.		

The Class 1 League price for February 1928 was \$3.37 for 3.5% milk and Sheffield's \$3.27 for 3%.

The above prices in each class are not the final prices the farmer receives. The final price received from the dealer is the result of the weighted average.

Butter Makes Sharp Gain

CREAMERY	Jan. 30	Jan. 23	Feb. 1, 1928
SALTED			
Higher than extra....	50½-51	48 -48½	48½-49
Extra (92sc).....	50	-47½	48
84-91 score.....	45 -49½	43½-47	43 -47½
Lower Grades.....	44 -45	42½-43	41 -42½

Last week we reported that the undercurrent of sentiment was that butter prices were on the upward trend. The market developed accordingly. The first improvement became apparent on Thursday shortly after we went to press. It developed into a sellers' market. Consumption was good and street stocks were on a low level. By the 28th the situation had so improved that prices advanced a full cent on extras. The firmer feeling that prevailed on that day naturally would follow the close clearance of goods over the previous week end. This was added to by advices from producing sections of severe storms. Since then the market has reported a clearance sufficiently close to warrant another gain of a full cent that brings the price of extras to 50c. There are some who make no bones of the fact that this recent ad-

vance is going to react on the consumptive side of the trade. Many are showing some anxiety fearing that higher retail prices are going to make housewives a little more cautious, thereby curtailing consumptive demand and once more slowing up the outlets. Naturally this leads to cautious buying and although the undercurrent is firm the situation is being watched very closely. Many of the big buyers are holding off long lines and just taking what their immediate trade requires.

The cold storage situation appears satisfactory. Withdrawals from January 18 to January 25 were over 600,000 pounds in excess of those taken out during the same period a year ago. On January 25th, the four largest cities reported 12,146,240 pounds compared with 14,764,772 pounds the same time a year ago.

Fresh Cheese Lower

STATE	Jan. 30	Jan. 23	Feb. 1, 1928
FLATS			
Fresh Fancy	24 -25	24½-25½	25 -25½
Fresh Average.....			
Held Fancy	27½-29	27½-29	29 -29½
Held Average			

The fresh cheese market continues slow and prices have slipped a fraction of a cent. Fresh makes from both New York State and Wisconsin are slow and offers to sell at 24c are not attracting many buyers. As much as we dislike to make the statement, the situation at this writing would indicate that we may see another slight reduction in our next report. Well cured cheese on the other hand, manages to hold on fairly well, although there are some lots of cured Daisies from Wisconsin that are barely holding their own, and some of those descriptions may experience a reduction before long.

An examination of the cold storage holdings bears out the movement of the market, for we have on hand approximately 4,000,000 pounds more cheese than we had a year ago. On January 24, the ten cities making daily reports had on hand 15,112,000 pounds compared with 10,966,000 pounds a year ago. In other words we have got about 40% more cheese on hand this year than a year ago, and it is unreasonable to expect that with so much of a commodity to sell, prices will remain firm. There is one factor from which we can get a little comfort. From January 17 to 24 the withdrawals from cold storage totaled 606,000 pounds, almost four times as much as was taken out during the same period last year.

Egg Market Highly Sensitive

NEARBY WHITE	Jan. 30	Jan. 23	Feb. 1, 1928
Hen's Sel. Extras....	46-47	47-48	42-43
Hen's Av'ge Extras....	45-	45-46	40-41
Extra Firsts.....	43-44	42-44	39-39½
Firsts	41-42	41-	38
Undergrades	-40	-39	-37
Pullets	38-40	35-36	
Pewees		30-33	
NEARBY BROWNS			
Hennery	47-48	46-	42-43
Gathered	39-46	38-45	41-

The egg market is far from a well settled affair. One day the situation looks good and the next day you'll show an absolute change of face. A few cars will have a tremendous effect upon the sentiment of the trade. On Tuesday, January 29, the market on fresh eggs, during the morning, showed considerable strength and activity, and considerable business was done at a one cent premium over the prices of Monday. However, a few cars were carried past noon, and immediately the receivers showed a strain of nervousness that resulted in the loss of the premium that brought prices back to Monday's level, the same which we quote above.

The immediate future is somewhat problematical. Some of the Pacific Coast whites arriving are quite seriously frosted, and the severe storms out in the West are holding back shipments. This is taken as an indication that receipts are going to recede which may result in a slightly improved market here. On the other hand, cold storage holdings are extremely heavy compared with a year ago and undoubtedly

these held goods will interfere with much of a price advance on nearbys.

On January 25 the ten cities making daily reports were said to have in refrigerators 311,000 cases of eggs compared with 53,000 at the same time a year ago. From January 18 to 25, 130,000 cases of eggs came out of storage in those cities, whereas during the same period a year ago 73,000 moved out.

Live Poultry Supplies Ample

	Jan. 30	Jan. 23	Feb. 1, 1928
FOWLS			
Colored	30-31	28-30	29-30
Leghorn	30-31	28-30	28-30
CHICKENS			
Colored	26-28	26-28	26-35
Leghorn	26-28	26-28	27-32
BROILERS			
Colored	33-40	32-40	45-48
Leghorn	33-37	32-36	40
CAPONS	40-43	36-38	35-42
TURKEYS			30-50
DUCKS, Nearby	28	29-30	29-33
GEESSE	20-30	24-28	25-26

Live poultry supplies on the 30th were all that the trade could handle, and here and there, there was enough excess to give a little anxiety to the undertone. By the time the reader gets this report the situation will have been determined, but we can gain a lesson from it. The daily radio reports give us a slight indication of the situation from day to day and when supplies are ample, as they have been during the past few days, we can almost bank on a price reduction, especially when values are on a higher level than they were the week previous. Fowls at the moment are selling slowly. The supplies available would indicate that prices have got to moderate slightly in order to speed up trade. Broilers have been in considerable accumulation and our top quotations are extreme. Capons are wanted, and fancy ones, it is said, would have no trouble in bringing a premium over the top figures given above, but they must be very fancy. Medium grade stock is in sufficient supply. Heavy supplies of Long Island ducks have made necessary a slight reduction. On January 30 over 11,000 ducks arrived, and although this seems to be a small amount in a city of many millions, nevertheless we must consider that there are other supplies than live Long Islands; and inasmuch as the trade wants fancy large ducks, 5 pounds or over, anything 4½ pounds and under has suffered a price concession.

Potatoes Without Improvement

STATE	Jan. 30	Jan. 23	Feb. 1, 1928
150 lb. sack....	1.85-2.00	1.85-2.00	
Bulk, 180 lbs.	2.00-2.25	2.00-2.25	
MAINE			
150 lb. sack....	2.00-2.35	2.00-2.35	3.00-3.35
Bulk, 180 lbs.	2.35-2.65	2.35-2.65	3.60-4.00
PENNA.			
150 lb. sack			
No. 1			
Bulk, 180 lbs.	2.00-2.25	2.00-2.25	
LONG ISLAND			
150 lb. sack			
No. 1	2.50-2.75	2.50-2.75	3.50-3.75
Bulk, 180 lbs.	2.75-3.10	2.75-3.10	4.00-4.35

The potato market shows no change from a week ago. The tone holds steady. As the saying goes, "All is quiet along the Potomac." There is very little to add in the way of comment concerning the potato market. Certainly those who are shipping anything but No. 1 are making a big mistake. To get an idea of the situation, we can cite the case of Long Island's grading No. 2 which are bringing from \$1.00 to \$1.25 per 150 pound sack. If it were possible to keep these second grade potatoes off the market, we believe, the situation would be much improved, but as long as growers and shippers continue to send them in, we must make the best of it.

Beans Advance Again

The bean market is beginning to show some signs of life. All stocks are held with confidence and the trend is upward. Marrows have advanced on inside quotations. Jumbos are still \$11.50 to \$12.50 per hundred, while average Marrows are from \$10 to \$10.75. Pea beans have advanced once more to a top of \$11 per hundred, with common stock at \$10.25. Red Kidneys have as yet not changed in price but

they are in a stronger position. Common are selling at \$8.25 with the best at \$8.75, but this last price is on the inside, and any day now we look for a new outside quotation on choice goods.

Hay Slightly Improved

The hay market is slightly improved on No. 2 stock, and No. 1 timothy is scarce and firm. Furthermore timothy containing mixtures of grass or clover and grading No. 1 shows a slightly better price. Aside from this the market is in an unimproved condition. Low grades are still unwanted and we repeat our advice to shippers, given last week, to hold back on No. 3 and sample hay; even No. 2 is none too well off. Rye straw is bringing \$22 to \$23 and oat straw from \$14 to \$15.

Feeds and Grains

FUTURES	Jan. 30	Jan. 23	Feb. 1, 1928
(At Chicago)			
Wheat (Mar.)	1.24½	1.24¾	1.30½
Corn (Mar.) .....	.97½	.97½	.89½
Oats (Mar.) .....	.53½	.53¼	.54¾
CASH GRAINS			
(At New York)			
Wheat, No. 2 Red	1.62½	1.64¾	1.57
Corn, No. 2 Yel.	1.16¾	1.16	1.08½
Oats, No. 2.....	.63½	.63½	.66¼
FEEDS	Jan. 26	Jan. 19	Jan. 28, 1928
(At Buffalo)			
Grade Oats	39.50	39.00	36.50
Spring Bran	34.00	34.50	35.50
Hard Bran	37.00	38.00	37.50
Standard Mids	33.00	33.50	35.00
Soft W. Mids	42.00	43.00	43.50
Flour Mids	38.00	39.00	38.00
Red Dog	41.00	41.50	40.50
Wh. Hominy	40.50	40.50	40.50
Yel. Hominy	40.50	40.50	38.00
Corn Meal	41.00	43.00	38.00
Gluten Feed			47.75
Gluten Meal			56.00
36% C. S. Meal	47.00	47.00	47.00
41% C. S. Meal	51.00	51.50	50.50
43% C. S. Meal	53.50	53.50	53.00
34% O. P. Linseed Meal	58.00	57.00	49.00

The above quotations are those of the local Buffalo market and are P. O. B. They are reported in the weekly letter of the N. Y. State Department of Agriculture and Markets.

Meats and Live Stock

Live veal calves have reached \$20 per hundred for prime stock. At that figure the market was firm and active, and indications were that it would not only hold steady but premiums might be paid. Farmers holding calves out of poor producing cows had an opportunity to turn them off at a good price on the 30th. Even common stock sold as high as \$15 on January 30. Naturally this high price is going to strike at consumption, but for the time being the market holds steady.

Live lambs are also meeting an active demand and a steady market, with the best marks bringing \$17.50 per hundred, mediums from \$13.75 to \$16.

Steers are irregular and prices are lower. Good stock generally brought \$13.25 with common to medium from \$9.75 to \$12.25. Bulls are also less regular, a few good ones are still bringing \$9.50 per hundred. Although some have been procured at \$9.25, with common light weights as low as \$7.50.

Cows are meeting an irregular market also. A few good ones bring \$8.25 with varying grades bringing all the way down to \$4. Reactors generally bring from \$5 to \$8.

Hogs are steady, those weighing from 85 to 110 pounds are cheapest at \$9 to \$9.75. Medium weights from 130 to 160 pounds are quoted at \$9.75 to \$10 per hundred, while heavier weights from 165 to 200 range from \$10 to \$10.75.

Rabbits are steady to firm, bringing from 20 to 24c per pound.

Country dressed veal is meeting a fair demand. Most of the best to arrive brought from 24 to 25c, but premiums were prepaid. Common stock sold as low as 14c.

Dressed hot house lambs have been selling very slow unless showing exceptional qualities. Prices for the best range from \$12 to \$13. Poor ranging down to \$8, and imitations at \$3 to \$7. Country dressed sucklings weighing from 8 to 12 pounds have been bringing from 28 to 30c. As weights increase prices reduce to 18c for 30 pounders.

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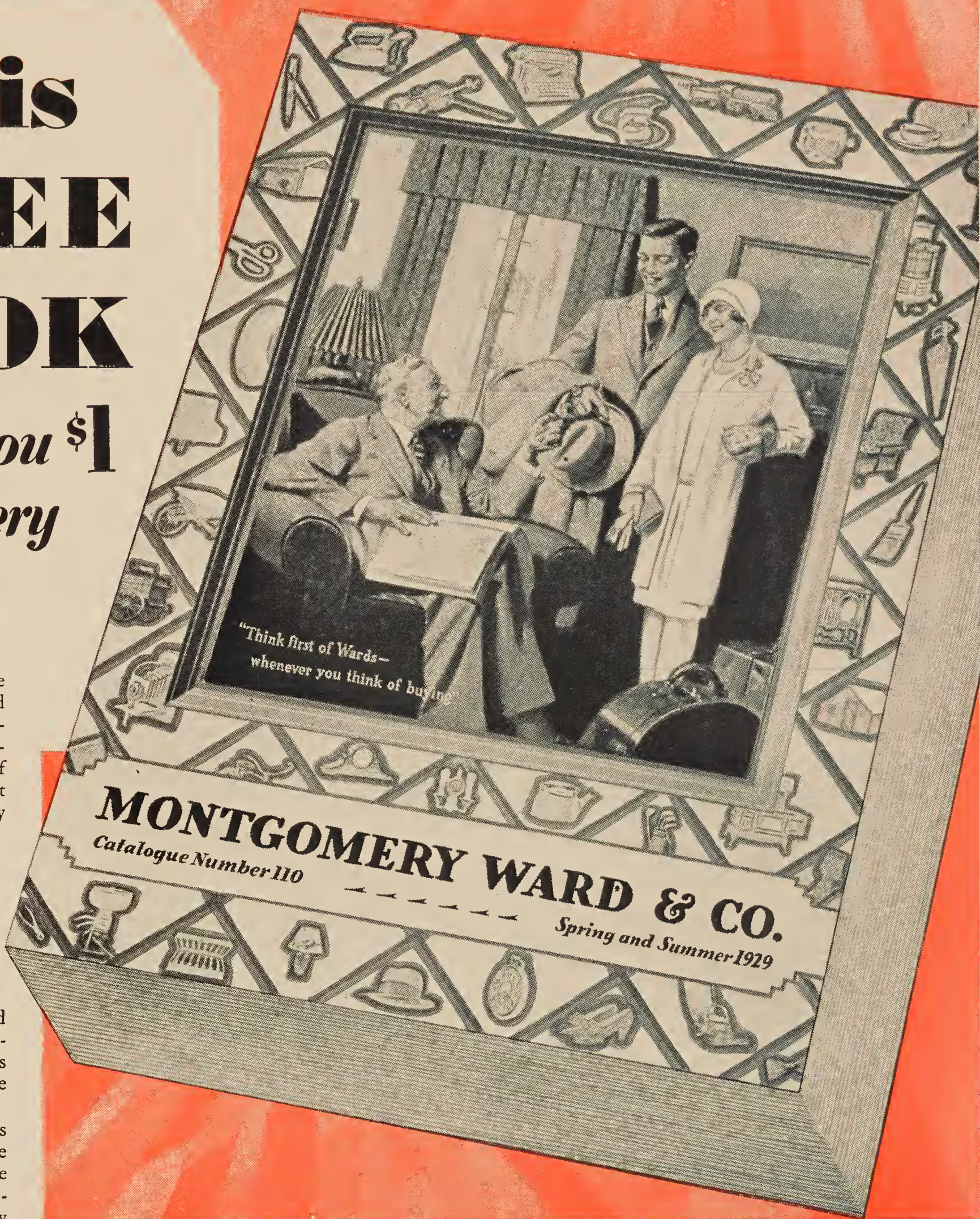
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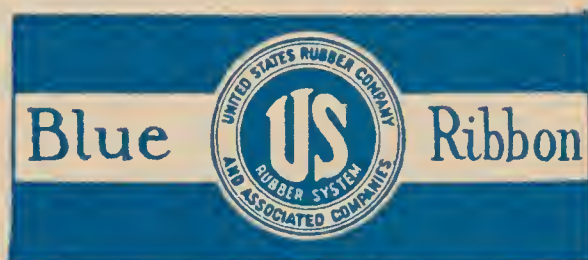
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Farm News from New York and Pennsylvania

Farm Organizations Present Tariff Needs at Washington--County Notes

REPRESENTATIVES from both agricultural and manufacturing interests have been stating their case to the House Ways and Means Committee in anticipation that a new tariff law will be passed at the present session of Congress. From present indications it appears that the case of Agriculture is being presented more effectively than it has ever been in the past. Farm organizations, including the American Farm Bureau Federation, the National Grange and various cooperative associations, have sent representatives loaded with facts and figures to prove their claims that various agricultural products need a higher tariff in order to afford producers the same protection that has been enjoyed in the past by manufacturers.

The Proposed Increases

Following is a brief, condensed statement showing most of the important changes which have been recommended:

Stocker and feeder cattle, $3\frac{1}{2}$ cents a pound, against $1\frac{1}{2}$ cents; beef cattle, 4 cents, against 2 cents; sheep and goats, \$3 a head, against \$2; swine, 3 cents a pound against $\frac{1}{2}$ of a cent; fresh or frozen beef and veal, 8 cents, against $\frac{3}{4}$ of a cent.

Fresh milk, 8 cents a gallon, against $2\frac{1}{2}$ cents; butter, 15 cents, against 12 cents; oleomargarine and other substitutes, 15 cents, against 8 cents; cheese and substitutes, American, 8 cents, against 5 cents; Swiss, 12 cents, against $7\frac{1}{2}$ cents.

Poultry, 10 cents, against 3 cents; eggs, 10 cents, against 8 cents; corn, 30 cents a bushel, against 15 cents; barley, 24 cents a bushel, against 20 cents; oats, 16 cents a bushel, against 15 cents; rye, 30 cents a bushel, against 15 cents.

Peaches, pears, plums, prunes, ripe or in brine, 1 cent a pound, against $\frac{1}{2}$ a cent; currants and raisins, 4 cents, against 2 cents; berries, 2 cents, against $1\frac{1}{4}$ cents; cherries, in natural state, 4 cents, against 2 cents; maraschino or manufacturing type, 8 cents on unstemmed and 13 cents on stemmed, against 40 per cent ad valorem; lemons and limes, $2\frac{1}{2}$ cents, against 2 cents and 1 cent, respectively; oranges and grapefruit, 2 cents, against 1 cent.

Green beans and peas, 2 cents, against $\frac{1}{2}$ a cent and 1 cent, respectively; dried, $3\frac{1}{2}$ cents, against 1 cent and $1\frac{1}{4}$ cents, respectively; onions, $2\frac{1}{2}$ cents, against $1\frac{1}{2}$ cents; potatoes, 1 cent, against $\frac{1}{2}$ a cent; raw tomatoes, 3 cents, against $\frac{1}{2}$ a cent; tomato paste, 60 per cent, against 40 per cent; canned tomatoes, 60 per cent, against 15 per cent; turnips, rutabagas, carrots and parsnips 14 cents, against 12 cents; celery, 2 cents, against 25 per cent; horseradish, 5 cents, against 25 per cent; cabbage and cauliflower, 1 cent, against 225 per cent.

Peanuts, unshelled, 6 cents, against $4\frac{1}{4}$

cents; shelled, 7 cents, against 6 cents; blanched, 9 cents (new duty); walnuts, unshelled, 6 cents, against 4 cents; shelled 15 cents, against 12 cents; almonds, unshelled, $6\frac{1}{4}$ cents, against $4\frac{3}{4}$ cents; shelled, 19 cents, against 14 cents; filberts, unshelled, 4 cents, against $2\frac{1}{2}$ cents; shelled, 10 cents, against 5 cents.

Alfalfa seed, 6 cents, against 4 cents; red clover, 8 cents, against 4 cents; sweet clover, 4 cents, against 2 cents; crimson clover, 2 cents, against 1 cent; white clover, 4 cents, against 3 cents; timothy, 3 cents, against 2 cents; flaxseed, $1\frac{1}{2}$ cents a pound, against 4 a bushel of fifty-six pounds; soya beans, 2 cents, against $\frac{1}{2}$ a cent; cottonseed, 2 cents, against $\frac{1}{3}$ of a cent; hay, \$6 a ton, against \$4.

Dairymen will be interested primarily in the proposed increases on dairy products and vegetable oils. Among others pressing the case for dairymen were Bradley Fuller of the Dairymen's League Cooperative Association, Wesley Bronson of the New England Milk Producers Association and John Brandt, Minnesota, President of the Land-o'-Lakes Creamery, Inc. These men showed that imports of milk had increased from approximately 2,500,000 gallons in 1920 to approximately 7,400,000 gallons in 1926. Since that time imports of milk and cream from Canada have temporarily decreased due first, to the embargo for a time caused by the typhoid fever epidemic in Canada and by the difficulty which Canadians have had in meeting the sanitary requirements of the Lenroot-Taber Import Milk Act.

Charles W. Holman, Secretary of the National Cooperative Milk Producers Federation, ably presented the views of the Federation relative to import duties on vegetable oils and animal oils. At first thought it might seem that these would have little effect on the dairymen but it has been conclusively shown that there is much substitution of fats in industry which has a marked effect on the demand for dairy products. For example, certain imported oils are used in the manufacture of soap. Other oils which might be used for soap are diverted into cooking compound and oleo and these, in turn, decrease the demand for butter and cream. There is a special fight on relative to a proposed tariff on the heavy imports of these vegetable oils from the Philippines which in the past have not been subject to any duty.

Poultry producers are asking for a tariff of 10 cents on poultry as against the old tariff of 3 cents and 10 cents a dozen for eggs as against 8 cents. For some time, imports from China have held the place of considerable importance in the markets due to the fact that these eggs can be brought into this country for approximately 14 cents a dozen. While these eggs are not usually imported in the shell but enter broken or frozen, nevertheless, they displace a considerable number of Ameri-

can eggs because they are used to a large extent by bakers.

Live stock producers are asking for an increased tariff, stating that, although the cattle industry is in better shape than a few years ago, it is nevertheless in a state of unrest due to the possibility that the embargo against Argentine cattle and meats may be lifted. Mr. B. F. Davis of Denver, speaking for the Colorado Farm Bureau and Stock Growers Association, advised that the tariff on feeder cattle be made 3 cents a pound and on fat cattle for slaughter—4 cents a pound. Mr.

inducement to try it longer. Many would be pleased to sell for the assessed valuation which is supposed to be from 70 to 80 percent of the value but assessors never lower an assessment. Potatoes are 45 cents a bushel, hay around \$12 a ton baled, in either case not enough to pay the cost of production. The farmer dare not hire help and only does what he can alone. Railroads have their rates so high that daily papers, baked goods, ice cream and chain stores all deliver by truck and much produce is being trucked in large cities at a distance of 75 miles.—C.H.E.

HUGH ADAIR

WE regret very much to announce the death on January 29, of Hugh Adair of Delhi, New York, president of the Sheffield Producers' Co-operative Association. Mr. Adair's death came very suddenly, while he was presiding over a meeting of the Board of Directors of the Sheffield Producers' in New York City. Mr. Adair attended some farm meetings in Elmira on January 3 and 4, and caught a hard cold which developed into the grippe. He had apparently, however, entirely recovered from this.

Mr. Adair was one of the most prominent and successful farmers in Delaware County. He owned a large herd of over 100 head, and was generally regarded as an authority on dairy matters. Early in his life he had been school commissioner and county treasurer. His thousands of friends are saddened by his passing.

Davis' proposal also included increases on other live stock and meats.

In asking for these tariff increases, the farm organizations who are representing the producers state that they are not asking for any favors. The request for tariff increases are based entirely on the premise that Agriculture is entitled to protection in the same degree as manufacturing. In the past due to the fact that many of our agricultural products were exported rather than imported, the tariff has not been fully effective. Due to changed conditions, many agricultural products are being imported. At the same time, it is stated by those who are strongest in their approval of tariff increases that these increases will by no means entirely solve the farm problem.

New York County Notes

Genesee County—We have just had one of the worst floods in the history of the city. The old Towanda Creek has gone wild this time. The fate of Genesee County fair hangs in the balance yet. There are a good supply of eggs which sell for 35 cents to 44 cents per dozen, butter 47 cents to 53 cents per pound, dressed poultry 28 cents to 37 cents per pound, wheat \$1.00 per bushel, cabbage \$1.35 to \$1.75 per bushel, potatoes 60 cents to 70 cents per bushel, onions \$3.00 to \$3.50 per bushel. There is a good supply of apples selling at \$1.25 to \$2.00 per bushel.—J.C.

Columbia County—We had quite a snow storm here Friday with sleet making a hard crust on the top of the snow banks. The first of the week was warmer and caterpillars, butterflies, flies, wasps and bees were seen one day. We had good sleighing here today. Several were hauling wood from the wood-lots with sleighs. Germantown is to have a clinic on Diphtheria and toxin-anti-toxin treatment to be given three days, commencing February 8th. Stuyvesant Falls Masonic Lodge gave a fine venison dinner to fifty members and friends. Ice harvesting is being done in East Hillsdale. The snow plow was out in Hollowville and opened roads. The January number of the State School Bulletin shows a photo of the new Stottville school building. Eggs are 40 cents a dozen in country stores in trade, butter 47 cents a pound to private customers, Kieffer pears \$6.00 a barrel in stores and potatoes 90 cents a bushel.—MRS. C. V. H.

Steuben County—I am not inclined to be a calamity howler but Steuben was surely hard hit the past year. Many farms that were purchased from ten to fifteen years ago at good prices are reverting to the former owners and in some cases the owner discounts their claim as an

Saratoga County—Dogs nearly destroyed the nice flock of sheep owned by Joseph Kobor, and a number were killed and many badly injured. The weather is fair and warm. The ice harvesting only lasted two or three days and then came a heavy rain and thaw so there is no ice ready yet. Dairymen are getting anxious. This is ideal weather for out of door work since there is no snow and it is not very cold. Roads are in fine condition since the ice has gone. Regents and grade examinations are being given this week. A number of cows are being butchered and beef is about 15 cents, and pork 16 cents by the hundred.—MRS. L.W.P.

Rensselaer County—We have had no deep snows as yet and no ice so far. Flu is an epidemic. Most farmers are still holding their potatoes for better prices. The crop in this section was very light.—MRS. F.R.F.

Cayuga County—Cayuga county farmers are meeting with very unstable weather conditions; violent extremes as during last year still prevail. Too warm then too cold, snow then rain and many high gales of wind doing considerable damage. We have a few inches of snow fast being driven into piles. Eggs continue about 40 cents, potatoes 40 cents per bushel, cabbage \$1.00 per dozen. Cows are looking rather thin. Some hay is moving at a fair price. The cold spells have checked egg production in some flocks. Some lumbering and wood chopping is being done.—A.D.B.

Pennsylvania Farm Notes

THE thirteenth annual Farm Products Show was held in Harrisburg January 22 to 25, 1929. Meetings for lectures, discussions and reunions were held in seventeen different places, while the stock and exhibits were housed in five different buildings requiring 100,000 square feet of floor space. Twenty-five state-wide farm organizations held annual meetings sometime during the week. Exhibits were all in place by Tuesday morning and approximately 100,000 persons visited the show, there being no admission charged, but \$9500 in cash prizes were awarded.

This money was raised in part by firms paying for space to exhibit or to sell their wares. Officially the show began in Chestnut Street Hall when Dr. C. G. Jordan, Secretary of Agriculture, presided and addresses were made by Prof. M. S. McCowell of State College; E. S. Bayard, editor of Pennsylvania Farmer; Dr. L. H. Dennis, director of vocational education, and E. B. Dorsett, master of the State Grange. The music was furnished by the Extension Agents of the State. On the platform were seated H. J. Walton of Chester County who grew 696 bushels of potatoes on an acre which were sacked and on exhibit as a pyramid; Mr. Zimmerman of Lehigh County whose herd of cows made the greatest production in the state in 1928 and Mrs. Shellinger, whose hens showed the most dozens of eggs.

More than 1000 boys and girls took part in Junior activities from all parts of the state by showing 100 baby beef steers and 60 fat lambs and many other lines of products.

Aside from potatoes, the displays of vegetables were not as varied as they could have been after such a crop year. The Governor in his budget asked the Legislature to appropriate the sum of \$1,340,000 for show buildings to be built in Harrisburg to house this great farm show in January 1930. If this can be done the largest and best show will be held a year from this to show that Pennsylvania is a real farm state as well as one of mining, manufacturing and railroads. Considering that the state's yield per acre of corn and wheat is ahead of the so-called corn and wheat growing states and that the state is forging rapidly ahead in potato production, this show will soon give a good account of itself in other lines as our Lancaster County has lead in tobacco growing and in wealth in the United States for some years past.—J. N. GLOVER.

The Farm Legislation Situation in Albany

BOTH Governor Roosevelt's Agricultural Advisory Commission and the Legislative Advisory Commission were in session in Albany on January 30 and 31. In the morning of January 30, the Roosevelt commission, headed by Henry Morgenthau, Jr., chairman, devoted most of its time to the discussion of tax relief for the rural schools, and to the tax relief bills now before the Legislature, the most important of which is explained on page one of this issue.

In the afternoon the Roosevelt Commission united with the Legislative Commission, headed by Seabury C. Nastick as chairman, for a joint session. The meeting of farm committees in the afternoon, brought out the opinion that if only one type of relief were possible this year, they would choose more state aid for the country schools instead of trying to relieve the road tax situation at this time. There seemed to be some sentiment on the part of some members of the Legislative Commission to avoid a gasoline tax this year if possible. The Roosevelt Commission consisting chiefly of farmers' representatives, was very emphatic that the gasoline tax should be passed, provided it was safeguarded by returning a fair amount of the proceeds to the localities for the building and maintenance of roads.

Henry Morgenthau, Jr., Chairman of the Governor's Agricultural Advisory Commission, Commissioner Berne A. Pyrke of the Department of Agriculture and Markets, and Tax Commis-

sioner Mark Graves stood for a gasoline tax with proceeds used for road purposes, and for exemption of tractors and other gasoline operated motors which do not use the highways. Mr. Morgenthau emphasized the need of more attention to the dirt roads, until there should be "a hard road to every farm."

Commissioner Graves of the Tax Department said that equalization of school contributions by the passage of the bills now in the Legislature will give by far the greatest relief to the poor rural districts. He pointed out that the cities and wealthy districts as well as the poorer counties would benefit by the increased aid for highways.

Dr. George F. Warren, professor of Economics at the New York State College of Agriculture, when asked to state his choice as to road or educational aid in case only one could be passed, replied that aid for the schools would help the most.

In the meantime, while the various discussions for farm relief methods are under way, Senator Nastick introduced bills in the Legislature suggesting the establishment of a \$10,000,000 revolving fund by constitutional amendment, to be administered for the benefit of the farmers, and the creation of a committee to study how to use this money in the best interest of agriculture.

We will explain the details of this bill next week, as well as give you the latest news of the very important farm matters now under consideration at Albany.



Let your Eyes guide You

Plain common sense says that to "see before you buy," to see with your own eyes, to examine with your own hands, is the right way to select anything. In that way you are certain to get what you want in size, appearance, finish and value. It takes all the guesswork out of the transaction.

That is the reason that the slogan of the "Farm Service" Hardware Stores is "see before you buy." At our stores you are always welcome to personally examine any article as much as you like and to make any kind of comparison you want to. Come in often.

You will find everything here to suit you—a wide variety of merchandise, the best of quality and prices that save money for you!

The "tag" in our window is your invitation.



A Bill to Reduce School Taxes

(Continued from Page 10)

aid, and substitutes the simple system explained above.

A Big Saving in Taxes

But of course the big thing in this bill is the tremendous results it will have in reducing school taxes in most of the districts of the State, and equalizing the present very unfair system where farmers in one district pay from one to twenty times as much school tax for exactly the same school facilities as do people living in richer districts.

The present average annual cost of maintaining a one-room school in New York State is about \$1200. Raising this sum to \$1500 was done with the idea of making it possible through more financial aid from the State to improve the rural school and at the same time reduce the local school taxes. As stated above, these items in the bill may be amended or changed in the bill before it is passed. For example, the \$1500 may be reduced to \$1400 or even \$1300, while it is possible that the legislature may deem it necessary to raise the four-mill tax to five mills. But the principle of requiring a larger total for running the school and of lowering taxes in most of the school districts will remain the same.

On the page where this article begins we have printed a table giving a few illustrations showing how this bill would actually work out in operation and showing the sums that would be saved in these districts if the bill is finally passed and put into force. These illustrations were worked out rather hastily in order to get them in time to publish in this issue, so there may be some inaccuracies, but they are close enough to show you the tremendous savings that would be made in most of the districts and particularly in the poor districts with low valuations. If you subtract the totals of the two last columns you will note that the saving in local taxes just to these few districts alone amounts to \$16,398.77.

The Attitude of A.A.

The publisher and staff of American Agriculturist are tremendously enthusiastic over the progress that has been made in recent years to bring better educational facilities to country boys and girls without increasing the heavy school burden. We have worked on this problem for years. We have been criticised because we wanted to see boys and girls in the country have equal facilities with those who live in the villages and cities, and at the same time decrease the heavy taxes in rural school districts. But we have lived to see most of this criticism die out and the opposition to real school success decline as our readers have come to know the true facts.

The opposition of honest and sincere country people to the proposals for the benefit of the country schools is not to be wondered at because certain agencies and individuals, in order to further their own motives and ambitions have chosen this important question—the welfare of country children and of country taxpayers—to stir up animosities and controversies by constantly circulating propaganda and information that was more or less deceiving and misleading.

It has been fairly easy to stir up such opposition because the common schools are naturally very close to the hearts of country people. They had a right to be excited, if it were true that the new laws would force consolidation and the closing of all the one-room schools. No such act was ever intended. Certainly it never would have had the approval of the constructive farm organizations of this State and of the old reliable American Agriculturist.

But the school question is a technical one, and it is always easier to tear down than to build up. It seems to be easier, too, for people to believe destructive statements about a technical subject like education than it is to believe constructive statements. However, we have had another demonstration that Abraham Lincoln was right about fooling all of the people all of the time. In spite of the fact that

enemies of good schools still keep up their clamor, the people themselves have come to see the true facts and to understand who their real friends are on this rural school question.

Well informed country people now know that the operation of the Central Rural School Act is purely optional and voluntary. They know that the Education Department itself actually asked for the law passed two years ago making it impossible to close one-room schools in a central district without the consent of the majority of the people who live therein.

Now we come to another demonstration of the real interest in the rural schools of the real farm organizations and of American Agriculturist by our support of the present bill now in the legislature which is directly in favor of the one-room school, helping it to improve itself and at the same time greatly reducing the local burden of taxation in supporting it. Without more financial aid, thousands of these one-room schools would actually have to close very soon because the local people, no matter how much they love them, are no longer able to support them without help from the State.

Watch these columns for further discussion of the rural school problems and for news regarding the progress of the Webb-Rice bill.

A Visit With the Editor

(Continued from Page 5)

from the land and make larger scientific specialists of those who are left."

Many of you who read this may not agree with the sentiments of the farm equipment manufacturer whom I have quoted above. I do not know that I do entirely, but he has given us something to think about.

Do not conclude either that this supplanting of men by machinery is confined entirely to the country; in fact, it is going on much more rapidly in the cities. I was in a large packing house in Chicago not long ago and had pointed out to me a machine which had just been installed which was operated by two men and took the place of more than twenty girls. Millions of city factory workers are worrying this minute for fear that the next week will find them without jobs because some machine has been found to do their work swifter and better.

What is going to happen in our social life if our population continues to increase and we continue to find more and more machines to do the work that once was done by hand?

I asked this question of my friend mentioned above, and he said: "Well, first we must keep up the bars of immigration; and secondly we have already solved the problem partially by shortening the hours of labor. I can remember when the laboring man used to work ten and twelve hours a day. Now he works eight hours, and some time he may not work more than four or five. Farmers will work shorter hours. Means of transportation will be so far advanced that millions will live in the country and work only a few hours a day in the city. Also the men who are thrown out of one job will soon find another one because the changing needs of society are constantly providing more work. For example, think of the millions of men who work in the automobile factories and in the local garages of the country and industries that were unknown not much over twenty-five years ago.

Men get hurt temporarily by sudden changes and adjustments in the work of the world, whether it be on the farm or in the city, but in the end they fit into other places, and standards of life, in spite of all these changes, seem to continue to advance. The average family certainly has much more today than it did twenty-five years ago. This means we are using more things requiring more labor and machines to make them."

This is what our friend thinks about the changes brought by machinery. What do you think?



With the A. A. Poultry Farmer



Shall I Hatch or Buy ?

At this time of year there is probably no more important question confronting a poultryman than this, for a wrong answer to the question will spell failure in the chicken house next year. And yet the answer to the question is not so difficult if you take production as a basis. How can I get the most eggs, from hatching from my own stock or by buying chicks? The one way not to solve the problem is by taking the cheapest method. The standard of production behind your flock or the flock you expect to buy from forms the real basis of comparison.



L. H. Hiscock

Take your breeding pen, if you plan to hatch your own chicks, and let's get to the bottom of the argument. This pen should contain only the best of your birds, the ones you know have done well as producers. If these birds have not been culled, if they are simply a bunch of birds, and you are going to let them go at that and simply throw in a few male birds, then by all means buy chicks: you will have a better chance of success.

On the other hand, if you have culled your flock or had it culled, if you have kept track of your egg production from these birds, and they are producers of

good quality eggs, you have good chances of succeeding if you hatch chicks from them. There may be some types that you will still want to eliminate, such as birds with poor vitality, poor productive values when they started this winter, and birds that may be off as regards color, size, etc. The best way to get an idea of your best laying birds is to watch your nests for a few days. Pick out some of the hens that lay persistently, and take them as the basis or standard upon which to judge your flock as a whole. If you really are willing to spend a little time at it you will surprise yourself on how much you can find out about your flock. If the flock is a little too large to keep track of, you will find spiral bands a big help in checking up on your layers.

There is one other way you can help the quality of the chicks you hatch, and that is by using good male birds. If you are a little in doubt about the quality of your breeding pen, buy some good male stock that has a trapnest record behind it. It will eliminate fifty per cent of the inferiority of the flock.

To those of you who are not interested in breeding from your flocks, you have an unlimited field of baby chick salesmen to purchase from. The price of baby chicks varies from very low to very high: what you want is your money's worth. First, pick a dealer that you know is reliable, and second, place your order early so that you will be sure to get chicks when you want them. Once the chicks have reached you in satisfactory condition they are yours for better or worse, and as a result I cannot stress too much care in selecting your stock. If you want egg production, buy for this; if you are after meat, then buy for this type. The main thing is buy with discretion and with a definite end in view. Some of the sorriest stories I hear during the spring months are about chicks that do not pan out, not only thru short-sighted ordering but also thru faulty breeders. There is no excuse for the latter to be in existence, but the first named fault and most of the second named flaw go back to the ultimate purchaser.

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Light Mixed	3.00	5.50	10.00	47.50	90

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500 lots 1/2c less, 1000 lots 1c less.

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W. A. LAUVER, McAlisterville, Pa.

Is Breeding or Feeding Most Important?

Does breeding for high production laying hens produce more latent embryo eggs than is produced in the common farmyard hen. My experience with all kinds of hens is not conclusive that there is any difference. Nor have I ever had any special strain of hens to lay more eggs for me. As to production I have found that feed and care brought efficient results. Some of my neighbors say, "You have a special laying strain." I have all of the credit to give to the hen which is a perfect machine to make eggs. I usually lose some hens by evert-ing from heavy production. I have exceeded New York, Connecticut and New Jersey contest stations by better than 10 per cent all winter and my hens are still going 70 per cent at present.

YOUR question is a very interesting one. It is our impression that it is impossible to get good results with mediocre stock no matter how they are fed and cared for. We believe that you must have a good strain of fowls which have been bred for laying qualities.

It is generally believed by agricultural colleges that the number of eggs which a hen can lay during her life time is rather definitely established, but so far as we know, no hen has ever laid all the eggs which she could produce. After all it makes little difference how many eggs she does lay, especially in the first year or two of her life. The evidence that hens can be bred for better production and that better production is transmitted from

(Continued on Page 24)

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CLEAR SPRING QUALITY CHICKS

per 100 500 1000
S.C. White Leghorns.....\$11.00 52.50 \$100.00
Barron and Wyckoff Leghorns..... 12.00 57.50 110.00
Barred Rocks and R.I. Reds..... 14.00 67.50 130.00
Light Mixed, \$9.00 per 100; Heavy Mixed, \$12.00 per 100, for March and April. 100% live delivery. Postpaid. New circular free giving full details of all breeds. CLEAR SPRING HATCHERY, McAlisterville, Pa. Box 49

BABY

CHICKS

ATHENEON CHICKS

EXHIBITION QUALITY—BRED TO LAY



Atheneon Blue-Blood Chicks Best Investment In Poultry Field Today

Our matings from the world's finest egg laying strains. Pedigreed males from 300 egg dams. Every chick an actual Blue Blood. GENUINE TOM BARRON PEDIGREED MALES direct from the famous Tom Barron Farms of England head our Special Matings. Large 2-year-old dams of proven high egg production. Late moulters. Heavy layers of winter eggs.



MODERATE PRICES—COMPLETE SATISFACTION

You take no chances in buying Atheneon Bred-To-Lay Chicks. They grow faster, lay earlier and produce an easier profit than ordinary chicks due to careful and scientific breeding. Consider these high quality strains in our matings: Regal Dorcas W. Wyandottes, 200 egg pedigree line direct; Holtermann's Aristocrat; Park's Bred-To-Lay Barred Rock, egg pedigree line direct; TANCRED WHITE LEGHORNS and OWEN'S S.C. REDS. Similar Atheneon quality in 14 Popular Money Making Varieties.

Our Grado A Chicks are from pure bred, egg bred stock, selected and culled by experts for vigor, size, type, health, color, head points and standard qualifications. Every male sired by valuable males of special breeding. Long experience in breeding and incubation makes it possible to price my chicks amazingly low for such quality. You can order direct from this Ad—my liberal guarantee of 100% live delivery protects you against loss. References: Athens National Bank, Int. Baby Chick Ass'n.

Athens Chick Hatchery, Box 96, Athens, Ohio.

Send me FREE your illustrated Catalog, complete price list and Special Combination Offers.

Name

Address

PRICES ON GRADE A CHICKS

	100	500	1000
S.C. Wh., Br., Brn. Leghorns—Anconas	\$13.00	\$62.00	\$120.00
Barred and White Rocks—S.C. and R.C. Reds	15.00	72.00	140.00
White Wyandottes—Buff Rocks—Campines	16.00	78.00	150.00
Bf. Orpingtons—Wh. Minorcas—Sil. Wyandottes	17.00	82.00	160.00
Selected Heavy Breeds, Odd Lots	12.00	60.00	110.00

FOR GREATER PROFITS BUY HATCHERY CHICKS FROM

ATHENS CHICK HATCHERY

ATHENS Box 96 OHIO

Is Breeding or Feeding Most Important?

(Continued from Page 23)

one generation to the next is very convincing. It also goes without saying that good hens will give poor results unless they have the proper care.

With the production you have been getting we would naturally expect some trouble with eversion of the oviduct. Recently in a visit with a practical poultryman he told us that he stopped this trouble by increasing the percentage of ground oats in the laying mash. In a general way it can be said that this trouble may be lessened by feeding a less stimulating ration and perhaps by breeding for stronger and more vigorous hens.

Goslings Have Paralysis

I have lost several goslings over half grown. At first they have dizzy spells, their legs suddenly weaken and they cannot stand. Some seem to have a diarrhea. Their necks seem to twist and they are unable to hold their heads up. Could you tell me the cause of this through your poultry column and give me a remedy. The goslings have had free range, plenty of water and cracked corn to eat.—A. W., New York.

I AM afraid that your whole trouble lies in the use of cracked corn, and while perhaps I am wrong, yet I know it is not the usual custom to feed goslings on hard grain. They should, of course, have plenty of water and green food. The grain feedings should be of the mash type. Corn meal to which add ten per cent of good grade beef scrap is one ration. Another in use is: 6 parts cornmeal, 6 parts shorts, and 1 part beef scrap. Either of these rations should be moistened to a crumbly state with milk or water. The amount the birds eat will depend largely upon how good the pasture.—L.H.H.

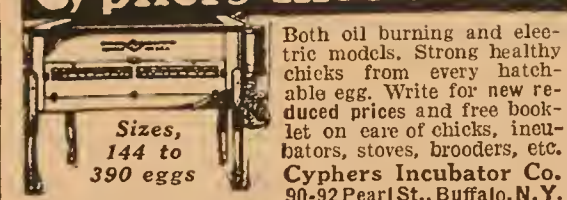
Coating for Poultry Trough

"Could I put an enamel coating of any kind on a galvanized trough, so I could use it for feeding milk to chickens? Would want something easily applied and not expensive."

I THINK a coating of melted paraffin would be just about what you need to keep the sour milk from affecting the galvanizing. Or you can warm a

(Continued on Opposite Page)

Gyphers Incubators



BABY CHICKS

	25	50	100		25	50	100
Barred Rocks	4.00	7.50	14	S.C.W. Leg	3.50	6.50	12
S.C.R.I. Reds	4.00	7.50	14	Heavy Mixed	3.50	6.50	12
500 Lots 1/2c less.				1000 Lots 1c less.			
Free Range Flocks.				Live Delivery.			

B. N. LAUVER, McAlisterville, Pa.

PROFIT BRED CHICKS

County Line Chicks are from proven producers. They can be secured in five breeds, S.C. White Leghorns, Reds, Barred and White Rocks and White Wyandottes all from range reared healthy bred to lay parents. Send for folder which gives prices and information every poultry raiser should know.

COUNTY LINE POULTRY YARDS AND HATCHERY, Box 10 Telford, Penna.

CHICKS White Leghorns \$12. Barred Rocks \$14. Light Mixed \$9. 100% live delivery. Postpaid. Circular free. L. E. STRAWSER, Box 30, McAlisterville, Pa.

DUCKLINGS \$33; EGGS \$14-100 "Duck News" Free. ROY PARDEE, Islip, L. I., N. Y.

Hampton's Black Leghorn Day Old Chicks. The Kind that lay. Circular free. A. E. HAMPTON, Box A, Pittstown, N.J.

CHICKS with vim and vigor



Hatched by men with 19 years experience, from culled flocks. 100 per cent live delivery guaranteed by Prepaid Parcel Post at the following prices:
S. C. White Leghorns.....11c each—\$100.00 per 1000
S. C. Brown Leghorns.....11c " 100.00 " 1000
Barred Rocks.....12c " 100.00 " 1000
S. C. R. I. Reds.....14c " 130.00 " 1000
S. C. Black Minorcas.....14c " 130.00 " 1000
Mixed Broilers.....9c " 80.00 " 1000
Order now for spring delivery. Capacity 60,000 eggs. \$1.00 will book your order. Catalogue free.

The Pennsylvania Hatchery, Liverpool, Pa.
Our Slogan "Service After Delivery"

FINGER LAKE REGION BABY CHICKS

22 years' progressive success with Cornell's advice in culling, grading, and feeding in operating a 71 acre Poultry Farm. Strong, Liveable, Productive and Profitable Baby Chicks. Leghorns, Rocks, Reds, Wyandottes and Giants. Ask for price and mating lists. Custom Hatching.

THE DEROY TAYLOR CO., NEWARK, NEW YORK

BABY CHICKS 100% Live Delivery.

	Postage	Prepaid
Wh. and Br. Leghorns	\$6.00	\$11.00 \$52.50
Buff and Bl. Leghorns	6.00	11.00 52.50
Anconas	6.00	11.00 52.50
Barred Rocks	6.50	12.50 60.00
Wh. and Buff Rocks	6.50	12.50 60.00
SC and RC Reds	6.50	12.50 60.00
SC Bl. Minorcas	6.50	12.50 60.00
Wh. and SL Wyandottes	7.50	14.00 67.50
Buff Orpingtons	7.50	14.00 67.50

All absolutely first class purebred stock from culled flocks. Prompt shipments.
James F. Krejci, 9507 Meech Av. Cleveland, O.

S.C. WH. LEGHORNS BARRED ROCKS R.I. REDS

Send for low price list and booklet, describing our farm, stock, etc. Our Tancred Strain Leghorns are as good as the best. Eighteen years in the Chick and Chicken business.

Brookside Poultry Farms, Dept. A. E. C. Brown, Prop., Sergeantsville, N. J.

QUALITY BABY CHICKS

Five extra given of one hundred ordered. April hatched chicks. Leghorns, White, Brown, Buff, Black—\$14.00 per 100; Barred Rocks, Reds, Minorcas, Anconas, \$16.00 per 100; White Rocks, Wyandottes, Buff Orpingtons, \$18.00 per 100. March, \$2 more; May, \$2 less; June \$4 less. Custom hatching. Eggs for hatching. Odds and Ends, Left Overs, Mixed broiler chicks, Light, 10c; Light and Heavy, 12c; All Heavy, 14c; Better order now. Will send C.O.D. Thousands hatching daily all year around. Active, husky, chicks hatched from healthy free range breeders that will live, grow and lay. Prompt shipments. Postage prepaid. Live delivery. Send for folder. SCHOENBORN'S HATCHERY, 335 Main St., Hackensack, N. J. Phone 1603 or 1604.

100% Live Arrival

	100	500	1000
Ferris Strain White Leghorns	\$12	\$52.50	\$110
Everlay Brown Leghorns	12	52.50	110
Basom's Barred Rocks	14	67.50	130
White Rocks	14	67.50	130
Owens' R. I. Reds	14	67.50	130
Black Minorcas	14	67.50	130
Mixed Chicks	9	42.50	80

JUNIATA POULTRY FARM Box A Richfield, Pa.

BABY CHICKS

13 Leading Varieties—White Leghorns, Black Minorcas, Rocks, Reds, Wyandottes, Hamburgs, Speckled Sussex, Buff Orpingtons.

\$9.00 per hundred and up. Free Catalog and Price List
Lantz Hatchery, Tiffin, Ohio

HIGH GRADE CHICKS

Blood Tested and Utility Stock
Leghorns, Rocks, Reds, Wyandottes, Anconas, Black Minorcas and Mixed. Also two and six weeks old chicks. Pekin Ducklings.

Write for circular and prices.
TAYLOR'S HATCHERY, BOX 12 LIBERTY, N. Y.

Wyckoff Tancred White Leghorns CHIX

Book your order now for March and April Chicks. \$12.00 per 100 \$57.50, 500 \$110, 1000 100% prepaid safe delivery guaranteed.
J. N. NACE POULTRY FARM, Box No. 50, Richfield, Pa.



Lone Oak Poultry Farm

A breeding farm where nothing but our own production and rearing is sold.

Chicks of Known Ability

Breeders used this season were sired by males whose dams' production records ranged from 200-278 eggs. This same blood is being intensified still more in the present flock matings. Make sure of the production ability of your future flock by securing chicks from these choice matings.

Choice breeding cockerels, priced right.

LONE OAK POULTRY FARM, Box 661, BABYLON, N. Y.

FOR YEARS WE HAVE HATCHED AND SOLD

SATISFACTORY CHICKS



POSTPAID PRICES—AMERICA'S FAMOUS PRIZE WINNING STRAINS—

	25	50	100	500	1000
S.C. Wh., Br., Brn. Leghorns; Sheppard's Anconas	\$4.00	\$7.00	\$13.00	\$60.00	\$115.00
Bar., Wh. & Br. Rocks; Br. Orp.; Reds; Blk. Minorcas	4.50	8.00	15.00	70.00	135.00
Barron Wh. Leghorns; Wh. Wyandottes; Bf. Minorcas	4.75	8.50	16.00	75.00	145.00
Ex. Qual. Wh. Wyand.; Reds; Rocks; Wyckoff W. Leg.; Wh. Min.	5.00	9.50	18.00	85.00	160.00
Heavy Mixed 50, \$6; 100 \$11.50; 500 \$55; 1000 \$105. Light Mixed 50 \$5; 100 \$9; 500 \$42; 1000 \$85. J. Blk. Giants 100 \$20. Wh. Pekin Ducklings 25c each. Not Postpaid to Canada.					
We have bred the highest quality for 21 years. Matings culled and selected by experts for Heavy Winter Laying. Careful, personal service on all orders. We ship C.O.D. Bank References.					

THE NEW WASHINGTON HATCHERY CO. Box R, NEW WASHINGTON, OHIO

NATIONAL "SUPERBRED" CHICKS

500,000 SUPERQUALITY CHICKS FOR 1929.

Insure your future poultry profits by ordering NATIONAL SUPERBRED CHICKS NOW.

	25	50	100	500	1000
S.C. White, Brown and Buff Leghorns	\$3.50	\$6.75	\$13	\$62.00	\$120
Tancred and Hollywood W. Leghorns	3.75	7.25	14	67.00	130
Barred and White Rocks, R. I. Reds	4.25	7.75	15	72.00	140
Black Minorcas and Anconas	4.25	7.75	15	72.00	140
White Wyandottes and Buff Orpingtons	4.75	9.00	17	82.00	160
White Minorcas and Blue Andalusians	5.50	10.25	20	95.00	190
Jersey Black Giants	7.00	13.00	25	120.00	230
Mixed or Odds and Ends	3.00	5.50	10	50.00	100

Send for our Free Catalog with prices on Chicks from our SPECIAL MATED FLOCKS. All chicks sent prepaid by either Parcel Post or Express. 100% live delivery guaranteed. Bank references furnished on request. Write us. You will save money by ordering Superbred chicks NOW.

NATIONAL CHICK FARMS Box 408 MIFFLINTOWN, PENNA.

Schwegler's "THOR-O-BRED" BABY CHICKS

THEY LIVE because they are bred from healthy, free range breeders that have thrived and gained in vigor for generations. They LAY because they are from selected and tested high egg power stock. White, Brown and Buff Leghorns, Barred and White Rocks, R. I. Reds, Anconas, Black Minorcas, Buff Orpingtons, White Wyandottes. \$26 and up. 100% live delivery guaranteed. Postpaid. Member International Chick Assn. Write today for FREE Chick Book.

SCHWEGLER'S HATCHERY, 204 Northampton, BUFFALO, N. Y.

HUBER'S RELIABLE CHICKS

10 FREE CHICKS—ON orders booked before March 15th, we give 10 Chicks free with each 100 ordered. When we say RELIABLE—we mean RELIABLE in every way. Breeding stock of highest quality of 19 years of careful development. Special attention paid to health of flocks and records kept.

CATALOG FREE—CHICKS SENT C. O. D. IF YOU WISH
Write for details—get our illustrated catalog which tells all the story. Our prices reasonable. A book on Raising Chicks worth many dollars given free with each order of \$10.00 or more. Big discount for early orders.
HUBER'S RELIABLE HATCHERY, No. High St., Fostoria, Ohio

WYCKOFF AND TANCRED STRAIN

100% Arrival Prepaid to your office.
White Leghorns.....\$12.00 100 \$57.50 500 \$110 1000
THE RICHFIELD HATCHERY, Box E, RICHFIELD, PA.

BOS QUALITY CLASS A CHICKS

From healthy heavy layers. Several varieties. Low prices. Special discounts. No money down. Pay 10 days before shipment or C.O.D. 100% live delivery postpaid. Catalogue free.
Bos Hatchery, Zeeland, Mich. R. 2A

BABY

CHICKS

May We Send You

A COPY OF THE
**1929
EAGLE
NEST
CATALOG
FREE?**

THE EAGLE NEST HATCHERY COMPANY,
BOX 70 UPPER SANDUSKY, OHIO

5 Lb. Leghorns

The old reliable Heavyweight stock. Produced High Up on Pennsylvania's healthy mountain top. Get your chicks from certified record strains above 300 eggs. R.O.P. Hollywood, Tancred, Barron Matings. Hatch weekly pure white eggs up to 24 ounces per dozen. Beautiful Color Plate Leghorn Catalogue Free.

FARM SERVICE
ROUTE A10 TYRONE, PENNA.

CHERRY HILL CHICKS

S.C.W. Leghorns—Wyckoff Strain.....\$12.00
S.C. Everlay Brown Leghorns..... 12.00
Barred Rocks—Wm. Nace's select..... 14.00
S.C. Rhode Island Reds..... 15.00
Mixed or Broiler Chicks..... 9.00
1/2c less in 500 lots. 1c less in 1,000 lots.

25 chicks add 2c. 50 chicks add 1c. Full count. 100% live arrival guaranteed. Parcel Post prepaid. Bank reference. Order direct from this ad or write for free circular.

CHERRY HILL POULTRY FARM,
WM. NACE, Prop. McALISTERVILLE, PA.

PENNA. "State Supervised" CHICKS



Flocks inspected by officials from the Penna. Dept. of Agriculture. Our 13th year. Get our low prices on Reds, Rocks, Leghorns and Minorcas. Member I.B.C.A.

Catalogue free.

THE KEYSTONE HATCHERY,
(The old reliable plant) RICHFIELD, PA.

CHICKS! Breeders on Our Farm

WYCKOFF LEGHORNS
5000 Chicks Weekly
Bargain price \$18.00 per hundred. Ten per cent with order, balance C.O.D. Refund if ordering dates are filled. SPECIAL—200 chicks weekly from pedigreed matings, price on request.

Hatchery Chicks For Greater Profits
MAPLEWOOD POULTRY FARM,
OFFICE 196 LARK STREET, ALBANY, N. Y.

200,000 CHICKS 1929

Goodling's Super Quality. Healthy, Strong and Vigorous

	50	100	500	1000
Single Comb, White Leghorns.....	\$6.50	\$12.00	\$57.50	\$110
Barred Plymouth Rocks.....	7.00	13.00	62.50	120
S.C. Rhode Island Reds.....	8.00	15.00	75.00	
Broiler Chicks, Heavy Breed.....	5.50	11.00	52.50	100
Broiler Chicks, Light Breed.....	5.00	10.00	47.50	90

Order direct. Prepaid 100% live delivery guaranteed. Circular Free.

THE VALLEY HATCHERY Box A, R. No. 1,
RICHFIELD, PA.

BABY CHICKS

Tancred Strain W. Leg. \$12 per 100
Common Wh. Leghorns 11 per 100
Barred Rocks..... 14 per 100
S. C. Red..... 14 per 100
Heavy Mixed..... 12 per 100
Light Mixed..... 9 per 100
500 lots 1/2c less; 1000 lots 1c less.
100% live delivery guaranteed. Order from this ad. or write for free circular.

C. P. Leister, McAlisterville, Pa.

Chicks, Barron Eng. White Leghorns

Common Leghorns, Barred Rocks, Light & Heavy Mixed, as low as 8c, each. 100% guaranteed. "New Circular Free." Prepaid.

TWIN HATCHERY McAlisterville, Pa.

CHICKS

Pure bred. Blood tested free range breeders. Leghorns, Anconas, 12c. Rocks, Ra's, 14c. Wyandottes, Orpingtons, Minorcas, 15c. Black Giants, 20c. 100% live delivery. Valuable Chick Manual Free. Seidelton Farms, Washingtonville, Pa.

SPECIAL FALL prices for breeding Turkeys, Geese, Ducks, and Guinea. Write your wants and for mailing list. **PIONEER STOCK FARM, TELFORD, PA.**

quart of kerosene in a tub of hot water, then shave and stir in as much paraffin as it will dissolve, and paint on two coats when the trough is dry and moderately warm.—I. W. D.

Lights for Chicks in Brooder

A POULTRY raiser in Tennessee reports an interesting discovery which may develop into a standard practice for raising chicks. This poultryman, Willard Butler, accidentally found that chicks would grow faster and that there would be fewer losses where a light was left in the brooder during the night.

This may be explained by the fact that young chicks were unable to eat a sufficient amount at night to keep them satisfied and comfortable until the following morning, especially when chicks are hatched early in the season when the days are still short. On this particular farm a 40 watt electric bulb was placed directly over each hover from 4 1/2 to 6 feet above the floor.

In commenting on the result it was stated:

- 1—Chickens develop faster and more uniformly.
- 2—It is possible to brood from one-quarter to one-third more chicks in the same hover.
- 3—The chicks are more contented and happy and do not crowd their neighbors.
- 4—Losses from death are reduced to from two to three per cent.
- 5—Less labor is required.

Experiments have shown equally favorable results on ducks. We understand that experiments will soon be performed to see whether young turkeys respond in the same manner.—Butler Poultry Farms, Belmar, N. J., R. D. 1.

Feed Turkeys Correctly

I have about 40 young turkeys and four old ones. My turkeys run around the building and out in the fields after grasshoppers and did very well until cold weather came and then some of them got sick and I lost a dozen nice turkeys. They always came and ate with the hens. I always take the sick ones out and give them sour milk but they usually die. They first act as if they could not keep up with the flock but tag around after them and pull in their heads. Their bowels are very loose and the droppings are a bright yellow. They will always eat but they become very poor and light. I feed oats and wheat, mostly wheat.—Mrs. J. A.

FROM your letter I would say your turkeys are undernourished as I do not consider oats and wheat a balanced ration. You see they managed to get along while the weather was warm but when it got cold, they did not have the vitality and strength to resist the conditions and as soon as a turkey gets sick at all they usually develop bowel trouble. If they run with the hens, no doubt they have worms. You might try putting a teaspoonful of turpentine to two quarts of their drinking water once a week; just fix the amount they will drink up quickly and have them thirsty when you give it so all will drink. Were you sure they didn't get some unripe grain or corn to give them indigestion.

You do not mention if they have gravel or grit of any kind. They should have quantities of it, not just what they happen to find. I would suggest a good balanced ration—one of the ready mixed ones would be good. The mash you can leave before them all the time and feed the grain two or three times a day. If their crops are full in the morning it shows they have indigestion as the food has not digested. A half teaspoonful of common baking soda in a half cup of water, given as a dose will often cure a case of that kind.—MRS. C. J. DOXTATER.



Chicks with an official heavy-laying ancestry

Most baby chicks are bought for the ultimate source of egg production. The sooner a pullet starts laying after she is mature the greater will be her egg yield and the cheaper will be the eggs she produces, providing she comes from a heavy-laying ancestry.

Kerr's chicks are bred to lay. They have an exceptional egg-laying inheritance based upon four generations of public egg-laying contest winnings. These winning records are as high as 294 eggs in White Leghorns, 280 in R. I. Reds and 277 eggs in Barred Rocks.

The type, constitutional vigor, livability and rate of growth of Kerr's chicks are strictly in keeping with their unusual inheritance for egg production. Both utility and special matings chicks furnished from flocks that have passed the blood test for Bacillary White Diarrhea.

Write for booklet with prices, giving illustrated account of the Kerr way of producing living, profitable chicks. Liberal discounts on orders up to February 1st.

KERR CHICKERIES, Inc.

Department 10

Frenchtown, N. J. Camden, N. J. Paterson, N. J. Trenton, N. J.
Binghamton, N. Y. E. Syracuse, N. Y. Lancaster, Pa.
Danbury, Conn. W. Springfield, Mass.



HILLPOT Quality Chicks

Leghorns Rocks Reds Wyandottes

Let the Hillpot Low-Egg-Cost Breeds Make Extra Profits for You This Year

The flocks from which your Hillpot Quality Chicks come have been tested out on the one sure basis of profit-production—low-egg-cost.

These special low-egg-cost breeds are, undoubtedly, one of the most attractive values in the poultry market to-day. At a price no higher than that of many chicks of merely average quality, you can buy these big producers that are so easy to raise, that mature so quickly and lay so heavily that you will

find your egg-cost cut to a new and remarkable low figure, while the fine, big, uniform eggs command the top price in the select markets.

THIS VALUABLE BOOK FREE

It gives the actual experience of successful poultrymen with Hillpot Quality Chicks; describes each of my breeds fully; contains important poultry data, house plans, etc.

W. F. HILLPOT, Dept. 129, FRENCHTOWN, NEW JERSEY

HERE: NEARLY EVERYONE RAISES FULL BLOODED "AMERICAN" QUALITY CHICKS

	50	100	500	1000
American or Eng. SC. Wh. Leghorns.....	\$6.75	\$13.00	\$62.00	\$120.00
Hollywood Wh. or Brown or Buff Legs.....	7.25	14.00	67.00	130.00
Tancred Wh. Leg. Anconas—Barred Rocks.....	7.75	15.00	72.00	140.00
RC or SC Reds, Wh. Rocks, Parks Rocks.....	8.25	16.00	77.00	150.00
Wh. Wyandottes, Buff Orp., Blk. Minorcas.....	9.25	18.00	87.00	170.00
Brahmas, Col. Rocks, Blue Andalusians.....	11.25	22.00	105.00	200.00
Light Mixed \$9.00 a hundred. Mixed any breeds our selection \$10.00. Heavy Mixed \$12.00 a hundred.				

Get our NEW CATALOGUE—It proves to you the SUCCESS of our Customers have with our chicks—Breeders called and Bred for High EGG PRODUCTION in Winter when eggs are demanding large premiums. Reference, Curwensville National Bank—100% Live Arrival—Dependable Service. Order Early.

AMERICAN CHICKERIES, BOX 214, GRAMPIAN, PA.

WOLF SELECTED CHICKS

10 FREE CHICKS WITH EACH 100 ORDERED BEFORE MARCH 1st.

Don't miss this chance to get a start with Wolf's extra quality pure-bred high producing stock. Every breeder produced on free range and health of chicks is safeguarded. Get Our Catalog and Price List

Tells about prizes won by our birds. Read about Mary Heneel who made over \$1000 profit in one year with birds of our breeding. All leading breeds—prices very attractive. Write today. Chicks shipped C.O.D. Toe picking stopped instantly with Wolf's "No-Pick." Order box today. \$1.00 postpaid. Satisfaction guaranteed or money refunded.

WOLF HATCHING & BREEDING COMPANY, BOX 1, GIBSONBURG, OHIO



Fairport Quality Chicks

are bred to make money for you. Strong, healthy, vigorous from the world's best and heaviest laying strains such as—Tancred, Ferris, Owen Farms, Daniels, Thompson, Martin, Shepard, Fishel and others. Free range flocks, scientifically culled and supervised. Smith Hatched. 100% live delivery guaranteed. 16 breeds 9c and up. Postpaid. Members International Baby Chick Association. Send now for free poultry book and prices. Buy Hatchery Chicks for Greater Profits.

FAIRPORT HATCHERIES • Box 44 Fairport, N. Y.

Ruehle's Sunnyside Farm

PLEASANT VALLEY, N. Y.

Single Comb White Leghorns trapnested and pedigreed since 1904. Orders for chicks and eggs booked now. Catalogue on request.

LANCASTER QUALITY CHICKS

Our chicks come from flocks culled for Egg Production and Standard Quality by poultrymen trained at Ohio State University. OUR CATALOG is chicken from cover to cover. Write for it. Lancaster Farms Hatchery R.26 Lancaster, O.



WANTED AT ONCE!

300 More Good Men in New York and New England

to help introduce and retail Rawleigh's Good Health Products. You will be supplied from our new branch house just opened at Albany. Sell in town or country. Wonderful opportunity. Nothing new—no experimenting. On the market since 1889. 170 necessities needed daily in every home. Annual Sales over 35 million packages. Largest Company—over 15 million dollars capital—10 great factories and branches. Practically no capital, no experience needed. Quick, easy sales, repeat every 30-60 days. Big pay right from start. Stone, Vt., sold \$212.20; Reagan, N. Y., \$184.40 first week. Profits increase monthly. Dupray, Mass., cleared \$6,000 last year; Emery, Me., \$5,000; Stowe, Conn., \$4,000; Sinclair, N. H., Storm, R. I., \$4,200 each. Thousands make more than they ever could before. You should do as well. Simply follow the same old time-tested Rawleigh Methods which have given consumers best values and satisfaction for 40 years. We supply everything—products, outfit, sales and service methods which secure the most business everywhere. Steady year round—no lay-off—no boss—you are sole owner and manager. For particulars write

THE W. T. RAWLEIGH CO., Inc.

DEPT. B-41 AGR ALBANY, N. Y.

THE LARGEST INDUSTRY OF ITS KIND IN THE WORLD

Paint Without Oil

Remarkable Discovery That Cuts Down the Cost of Paint Seventy-five Per Cent.

A Free Trial Package is Mailed to Everyone Who Writes

A. L. Rice, a prominent manufacturer of Adams, N. Y., discovered a process of making a new kind of paint without the use of oil. He named it Powder-paint. It comes in the form of a dry powder and all that is required is cold water to make a paint weather proof, fire proof, sanitary and durable for outside or inside painting. It is the cement principle applied to paint. It adheres to any surface, wood, stone, stucco or brick, spreads and looks like oil paint and costs about one-fourth as much. Write to A. L. Rice, Inc., Manufacturers, 134 North St., Adams, N. Y., and a trial package will be mailed to you free, also color card and full information showing you how you can save a good many dollars. Write today.

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The Morning Rush

A Minute Saved Is Several Earned in the Early Part of the Day

THESE are unavoidably busy times but the success or failure of the day depends largely upon its start and if we can in even a small degree, calm the troubled waters at their source the battle is half won.

Especially is the usually wild scramble of the morning an abomination in families where there are school children; if we choose to send ourselves to a sanitarium or an asylum at least it is preferable to ruining the nerves of the little folks. Even in college an extra hurried, flurried, nervous morn-

homes no one thinks of them at night and they add very materially to the hurry later.

If the milk and other factors are not hurrying the household more than the school is, be sure to rise in time to give the youngsters a calm and unhurried breakfast time; and see that they are in bed early enough at night not to be unduly sleepy in the morning too.

Whatever happens try not to scold or criticize at breakfast time. Begin the day cheerfully and maybe the provocation will fade into insignificance before night.

Another hobby of mine is never to plan an afternoon out without previously preparing well for supper. I can come home from Thursday Club and have an appetizing supper on the table for my family before my neighbor, who usually goes to the store for supplies for supper before she goes home, even arrives. It is a matter of selfishness

the lentils and 1 pound of ripe or tinned tomatoes, cover tightly and steam the contents for 20 minutes. Then add two pints of water or stock and salt and pepper. Simmer gently for three hours. Rub through colander and return to pan. Add 1 pint of milk. Mix 1 tablespoon of flour to a smooth paste with cold milk, stir into the boiling soup. Cook a few minutes longer and serve with toast or rusks made by cutting a thick slice of bread into fingers and browning them in a slow oven.—MRS. T. T., Canada.

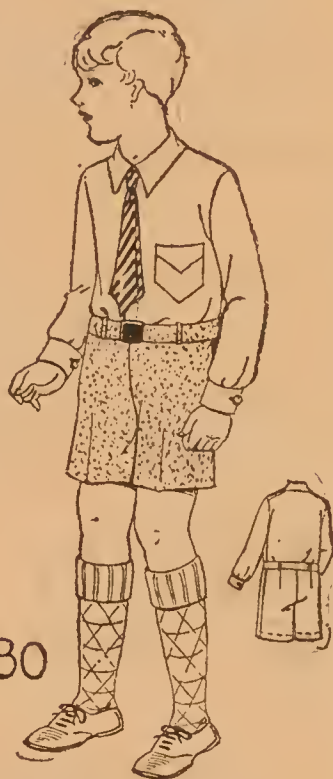
Since tomatoes are injured by long cooking do not put them in until toward the last. If this mixture becomes too thick add more milk.

* * *

Brown Onion Soup

For this soup you require 1 pound of onions, 2 ounces dripping, ½ ounce flour, salt and pepper and three pints stock or a teaspoonful of meat extract in three pints of water. Cut the onions up finely and fry carefully in dripping till a rich golden brown. Put them into

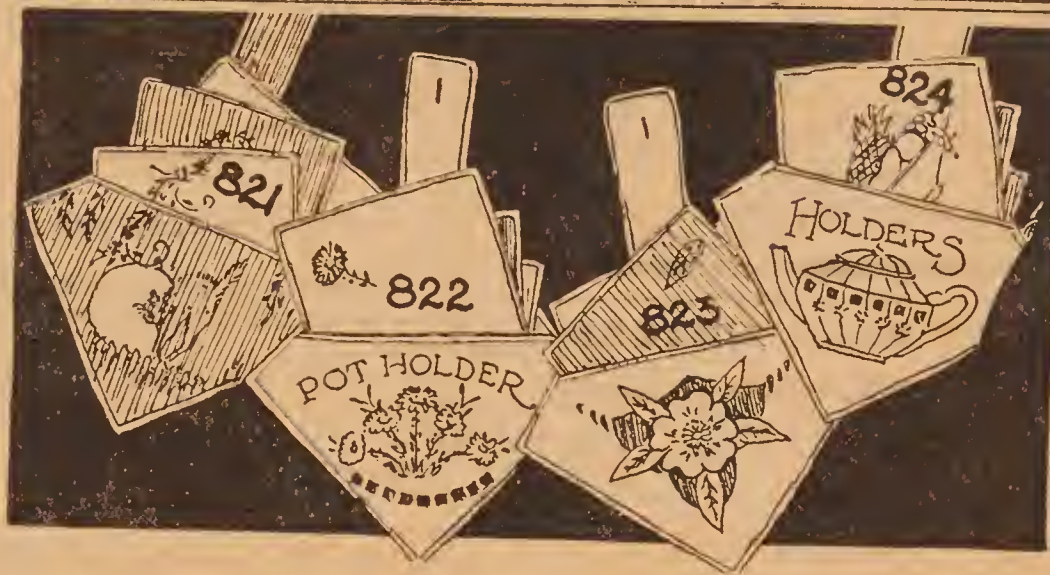
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These neat, attractive little pot holders would grace any kitchen. They are completely made up, edges bound, stamped for embroidery. All are of felt and are outfitted with 3 pads each. Design 821 is in black, 822 is in taupe, 823 is in gray and 824 is in green. Set of holder and pads complete, \$1.25. Send orders accompanied by correct remittance to Embroidery Department, AMERICAN AGRICULTURIST, 461-4th Avenue, New York City.

on my part, too, for I shouldn't enjoy the club if I were worrying about supper.

By the way, preparedness at night saves a lot of worry in the morning for everyone concerned.—MRS. E. M. A., New York.

Tested Recipes

Mutton Broth

YOU will find this a most delicious soup. For it you require a few pounds of neck of mutton. In the country, however, one has often to use what is on hand and beef with some bone in it may be substituted. Soak 1 cupful of barley overnight in cold water. Put in soup pan with meat several hours before dinner time, depending on the kind of meat you are using. It should be cooked till quite tender. Boil gently in sufficient water to cover. An hour and a half before serving add the vegetables—½ cabbage, 1 carrot, 1 small turnip, 2 leeks or onions after you have scalded them with boiling water and drained. If the soup seems thick add more boiling water and take care it does not scorch on bottom of pan. A handful of minced parsley added just before serving is a great improvement. Season to taste with salt and pepper. Serve the meat separately.—MRS. T. T., Canada.

This is a good hearty soup which may well be the main hot dish for either dinner or supper.

* * *

Tomato and Lentil Soup

This is a favorite soup on a cold day. The quantity is for a small family. Double everything if the family is large. Wash and soak ½ pint lentils overnight. Dice 1 carrot, ½ turnip and 1 onion, also 2 ounces of lean ham or bacon. Melt 1½ ounces of butter in saucepan, put in the ham and vegetables, cook slowly for 10 minutes, add

a saucepan with the stock and simmer gently for 1½ hours. Thicken with the flour a few minutes before serving.—MRS. T. T., Canada.

The meek and lowly onion is a mainstay among winter vegetables. When slightly browned onions give a delicious flavor to soups and stews.

* * *

Cream of Rice Soup

Boil one cupful of rice and one tablespoonful each of minced celery, onion and parsley in one quart of water until the rice is soft, then press through a sieve. Return to the stewpan, add two cupfuls of hot milk and one tablespoonful of butter. Let boil up once, season with salt and pepper.—MRS. R. C. DL., New York.

This is a very bland soup and you may like more butter for seasoning purposes. Then too, you may have to increase the quantity of water in cooking the rice until soft.

* * *

Cream of Lima Bean Soup

Soak one half pound of dried lima beans over night in warm water. In the morning drain well, then add three pints of cold water, bring slowly to a boil, then cook until tender enough to mash easily when pressed against the side of the stewpan. Press through a sieve, add two tablespoonfuls of dried carrots and two tablespoonfuls of minced onion that has been fried in butter, add one cupful of hot milk. Return to the stove and when the mixture boils, thicken with two tablespoonfuls of flour wet up with a little cold milk. Boil up again, season with salt and pepper.—MRS. R. C. DL., New York.

Any dry legumes may be used in soups but lima beans are especially "tasty" for this purpose. However, onion or bacon fat or some flavorful substance should be used. If you have stock it is always delicious for use in such soups.

Aunt Janet's Counsel Corner

Not All the Heroism Is of the Battle Field

TODAY we write as one bereft—bereft of a good friend whose place cannot be filled. Her passing was sudden; flu and double pneumonia did their work swiftly. Although I was not there to see, I know Florence went as she lived, gallant and unselfish to the last.

Her never-failing sense of humor even under the most depressing circumstances, made her a welcome visitor or carried people miles out of their way to chat with her for a few minutes. Hers was a ministry of cheer, not of gloom. It was none of this life-of-the-party sort of stuff but was a quick wit ready to see funny little traits or incidents and outline them to others. Above all, it was kindly and understanding—I never knew her to harbor an unkind thought or to do or say a thing harmful to others. She always worked hard—too hard, perhaps, but her living has brightened the lives of many. There were times when she rightfully could have claimed sympathy from others, but she went on with high courage and fell with banners flying.

Not all the heroism is of the battle field—the quiet, everyday kind that my friend had is the sort that makes the world a good place to live.—Aunt Janet.

Good Behavior No Accident

LUCK or hit-or-miss methods do not form the habits in children which make them a pleasure to have around or to develop them to the fullest extent.

Persistence on the parents' part and knowing how the child mind develops help toward getting right habits established at the natural time.

Eating begins at birth and right then correct food habits may be started; regular hours, a sense of composure and well-being rather than of nervousness or resistance to taking food—these help when more kinds of food must be taken. The parents' own food habits do much to influence the way a

and voice on the mother's part gets best results from the child.

Plenty of time must be allowed to dress himself, as he is not skilled in these processes. Clothing made simply enough for little fingers to manage, buttons large enough and placed within easy reach, low waistbands and elastic wherever possible, make children's clothing easier for them to manage. Clothes hooks and hangers low enough to reach make it possible for them to help keep things tidy.

All the little acts of a child's day can be guided so that he develops desirable habits, but it takes steady, slow and understanding treatment. Other habits than eating regularly and efficiently and dressing with more and more independence are sleeping regularly and well, playing alone happily, playing

A Favorite



COAT DRESS PATTERN 2580 is a favorite because of its combined comfort and smartness. Its side closing and cleverly arranged front pleating give it a decidedly original touch. Sheer tweed, wool jersey, or flat silk crepe would work up well in this design which comes in sizes 14, 16, 18 years, 36, 38, 40 and 42 inches bust. Size 36 requires 3 3/4 yards of 40-inch material. PRICE 13c.

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larger child takes his food. Making it pleasant to eat in desirable ways will do more to get good results than will scolding.

The matter of dressing also goes back to the first clothing a child uses. Making this a pleasant process rather than the stormy one we sometimes see makes the child more willing to learn how to dress himself as soon as possible. In early infancy, while dressing him the mother can attract the baby's attention to the process, at the same time guiding his random movement of arms and legs so as to get into his clothes. As soon as he can lace shoes, or even pull them on, he may be allowed to do it and then commended for doing so. A calm, unhurried manner

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with others contentedly, putting away his own toys, bathing, washing and cleaning teeth. Learning good behavior by practicing it and making it pleasant for him to do right seems to be the secret of a well-behaved child.

White Mites on Potted Plants

FROM your inquiry to the American Agriculturist regarding small white mites on your potted plants, I imagine that you have Sciata Maggots. The mature insect is a small black fly such as you describe which lays its eggs on the surface of damp, rich soil while the maggots feed on the roots. Suggestions for the control would be as follows:

1. Keep the top soil dry by watering at the bottom of the pot (setting in a saucer of water for a time but not long enough to draw water to the top) and by placing a layer of sand over the top soil.
2. Keep a trap pot of very rich soil among your plants, keeping it moist. This will induce the insects to lay their eggs there; then the pot can be scalded killing the maggots.

Plants badly infested now cannot be saved except by washing off all soil, cutting back severely and repotting in clean soil. This is hard on the plant and seldom worth while, and is not always sure to save it.—L. A. Minns.



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One-piece DRESS 3459 with its chemisette and pleated front is a very attractive design and yet simple to make. It is specially suited for rayon or cotton materials for housedresses or for the lighter silks for sports wear. The pattern cuts in sizes, 16, 18 years, 36, 38, 40 and 42 inches bust measure. Size 36 requires 2 3/4 yards of 40-inch material with 1/2 yard of 36-inch contrasting and 1 1/4 yards of binding as sketched. PRICE 13c.

The Little Shepherd of Kingdom Come *By John Fox, Jr.*

The Dillon hesitated.

"Turn!" Chad cried, savagely, raising his pistol. "Go back to that gun, an' if you turn your head I'll shoot you where you're sneakin' aroun' to shoot Rube or Uncle Joel—in the back, you cowardly feist. Pick up that gun! Now, let her off! See if you can hit that beech-tree in front of you. Just imagine that it's me."

The rifle cracked and Chad laughed.

"Well, you ain't much of a shot. I reckon you must have chills and fever. Now, come back here. Give me your powder-horn. You'll find it on top of the hill on the right-hand side of the road. Now, you trot—home!"

The Dillon stared.

"Double-quick!" shouted Chad. "You ought to know what that means if you are a soldier—a soldier!" he repeated, contemptuously.

The Dillon disappeared on a run.

Chad rode all that night. At dawn he reached the foot-hills, and by noon he drew up at the road which turned to Camp Dick Robinson. He sat there a long time thinking, and then pushed on toward Lexington. If he could, he would keep from fighting on Kentucky soil.

Next morning he was going at an easy "running-walk" along the old Maysville road toward the Ohio. Within three miles of Major Buford's, he leaped the fence and struck across the fields that he might go around and avoid the risk of a painful chance meeting with his old friend or any of the Deans.

What a land of peace and plenty it was—the woodlands, meadows, pasture lands! Fat cattle raised their noses from the thick grass and looked with mild inquiry at him. Sheep ran bleating toward him, as though he were come to salt them. A rabbit leaped from a thorn-bush and whisked his white flag into safety in a hemp-field. Squirrels barked in the big oaks, and a covey of young quail fluttered up from a fence corner and sailed bravely away. 'Possum signs were plentiful, and on the edge of the creek he saw a coon solemnly searching under a rock with one paw for crawfish. Every now and then Dixie would turn her head impatiently to the left, for she knew where home was. The Deans' house was just over the hill; he would have but the ride to the top to see it and, perhaps, Margaret. There was no need. As he sat looking up the hill, Margaret herself rode slowly over it, and down, through the sunlight slanting athwart the dreaming woods, straight toward him. Chad sat still. Above him the road curved, and she could not see him until she turned the little thicket just before him. Her pony was more startled than was she. A little leap of color to her face alone showed her surprise.

"Did you get my note?"

"I did. You got my mother's message?"

"I did." Chad paused. "That is why I am passing around you."

The girl said nothing.

"But I'm glad I came so near. I wanted to see you once more. I wish I could make you understand. But nobody understands. I hardly understand myself. But please try to believe that what I say is true. I'm just back from the mountains, and listen, Margaret—" He halted a moment to steady his voice. "The Turners down there took me in when I was a ragged outcast. They clothed me, fed me, educated me. The Major took me when I was little more; and he fed me, clothed me, educated me. The Turners scorned me—Melissa told me to go herd with the Dillons. The Major all but turned me from his door. Your father was bitter toward me, thinking that I had helped

turn Harry to the Union cause. But let me tell you! If the Turners died, believing me a traitor; if Lissy died with a curse on her lips for me; if the Major died without, as he believed, ever having polluted his lips again with my name; if Harry were brought back here dead, and your father died, believing that his blood was on my hands; and if I lost you and your love, and you died, believing the same thing—I must still go. Oh, Margaret, I can't understand—I have ceased to reason. I only know I must go!"

The girl in the mountains had let her rage and scorn loose like a storm, but the gentlewoman only grew more calm. Every vestige of color left her, but her eyes never for a moment wavered from his face. Her voice was quiet and even and passionless.

"Then, why don't you go?"

The lash of an overseer's whip across his face could not have made his soul so bleed. Even then he did not lose himself.

The Story Thus Far

CHAD leaves "Lonesome" with his dog "Jack." His foster parents are both dead from the plague and plans have been laid to bind Chad out to a hard fisted neighbor. After the funeral, Chad collects a rifle, some powder, and shot and a haversack and with "Jack" by his side, starts out for unknown parts. He meets the sons of Joel Turner from over the mountain who take him home. Chad's cleverness at school gains the admiration of Caleb Hazel, the schoolmaster. They become close friends. Hazel tells Chad of the "Bluegrass Country" beyond the hills. Logging operations take Chad to a distant city where he gets lost and starts home on foot. He is picked up by Major Calvin Buford. It appears that Chad is also a Buford and is believed to be a kinsman of his new found friend, who takes him to his home in Lexington in the heart of the "Bluegrass." Chad accepts the Major's offer of a home and an education. Chad enters into the social life and becomes very popular at school. He falls in love with Margaret Dean, daughter of General Dean, neighbor of the Bufords. Meanwhile feeling grows bitter between North and South and war clouds gather. Chad joins the Union forces. He returns to Kingdom Come to say good-bye and surprises Turner's neighbor's boy in ambush.

"I am in your way," he said, quietly. And backing Dixie from the road, and without bending his head or lowering his eyes, he waited, hat in hand, for Margaret to pass.

* * * * *

All that day Chad rode, and, next morning, Dixie climbed the Union bank of the Ohio and trotted into the recruiting camp of the Fourth Ohio Cavalry. The first man Chad saw was Harry Dean—grave, sombre, taciturn, though he smiled and thrust out his hand eagerly. Chad's eyes dropped to the sergeant's stripes on Harry's sleeves, and again Harry smiled.

"You'll have 'em yourself in a week. These fellows ride like a lot of meal-bags over here. Here's my captain," he added, in a lower voice.

A pompous officer rode slowly up. He pulled in his horse when he saw Chad.

"You want to join the army?"

"Yes," said Chad.

"All right. That's a fine horse you've got."

Chad said nothing.

"What's his name?"

"Her name is Dixie."

The captain stared. Some soldiers behind laughed in a smothered fashion, sobering their faces quickly when the captain turned upon them furious.

"Well, change her name!"

"I'll not change her name," said Chad quietly.

"What!" shouted the officer. "How dare you—" Chad's eyes looked ominous.

"Don't you give any orders to me—not yet. You haven't the right; and when you have, you can save your breath by not giving that one. This horse comes from Kentucky, and so do I; her name will stay Dixie as long as I straddle her, and I propose to straddle her until one of us dies, or"—he

smiled and nodded across the river—"somebody over there gets her who won't object to her name as much as you do."

"The astonished captain's lips opened, but a quiet voice behind interrupted him:

"Never mind, Captain." Chad turned and saw a short, thick-set man with a stubby brown beard, whose eyes were twinkling, though his face was grave. "A boy who wants to fight for the Union, and insists on calling his horse Dixie, must be all right. Come with me, my lad."

As Chad followed, he heard the man saluted as Colonel Grant, but he paid no heed. Few people at that time did pay heed to the name of Ulysses Grant.

* * *

XXII

MORGAN'S MEN

BOOTS and saddles at daybreak! Over the border, in Dixie, two videttes in gray trot briskly from out a leafy woodland, side by side, and look-

shots, a wild flight, a merry chase, a few riderless horses gathered in from the fleeing Yankees, and the incident is over.

Ten miles more, and many hostile bayonets gleam ahead. A serious fight, this, perhaps—so back drops the advance, this time as a reserve; up gallops the column into single rank and dismounts, while the flank companies, deploying as skirmishers, cover the whole front, one man out of each set of fours and the corporals holding the horses in the rear. The "Bull Pups" bark and the Rebel yell rings as the line—the files two yards apart—"a long flexible line curving forward at each extremity"—slips forward at a half run. This time the Yankees charge.

From every point of that curving line pours a merciless fire, and the charging men in blue recoil—all but one. (War is full of grim humor.) On comes one lone Yankee, hatless, red-headed, pulling on his reins with might and main, his horse beyond control, and not one of the enemy shoots as he sweeps helplessly into their line. A huge rebel grabs his bridle-rein.

"I don't know whether to kill you now," he says, with pretended ferocity, "or wait till the fight is over."

"For God's sake, don't kill me at all!" shouts the Yankee. "I'm a dissipated character, and not prepared to die."

Shots from the right flank and rear, and that line is thrown about like a rope. But the main body of the Yankees is to the left.

"Left face! Double-quick!" is the ringing order, and, by magic, the line concentrates in a solid phalanx and sweeps forward.

This was the way Morgan fought.

And thus, marching and fighting, he went his triumphant way into the land of the enemy, without sabres, without artillery, without even the "Bull Pups," sometimes—fighting infantry, cavalry, artillery with only muzzle-loading rifles, pistols, and shotguns; scattering Home Guards like turkeys; destroying railroads and bridges; taking towns and burning Government stores, and encompassed, usually, with forces treble his own.

This was what Morgan did on a raid, was what he had done, what he was starting out now to do again.

Darkness threatens, and the column halts to bivouac for the night on the very spot where, nearly a year before, Morgan's Men first joined Johnston's army, which, like a great, lean, hungry hawk, guarded the Southern border.

Daniel Dean was a war-worn veteran now. He could ride twenty hours out of the twenty-four; he could sleep in his saddle or anywhere but on picket duty, and there was no trick of the trade in camp, or on the march, that was not at his finger's end.

Fire first! Nobody had a match, the leaves were wet and the twigs soggy, but by some magic a tiny spark glows under some shadowy figure, bites at the twigs, snaps at the branches, and wraps a log in flames.

Water next! A tin cup rattles in a bucket, and another shadowy figure steals off into the darkness with an instinct as unerring as the skill of a water-witch with a willow wand. The Yankees chose open fields for camps, but your rebel took to the woods. Each man and his chum picked a tree for a home, hung up canteens and spread blankets at the foot of it. Supper—Heavens, what luck—fresh beef! One man broils it on coals, pinning pieces of fat to it to make gravy; another roasts it on a forked stick, for Morgan carried no cooking utensils on a raid.

Here, one man made up bread in an

(Continued on Page 30)



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ADVERTISING ORDERS must reach our office at 461 Fourth Avenue, New York City, not later than 14 days before the Saturday of publication date desired. Cancellation orders must reach us on the same schedule. Because of the low rate to subscribers and their friends, cash or money order must accompany your order.

Orders for these columns must be accompanied by bank references

POULTRY

AMERICAN MOTTLED ANCONAS—Record Layers. Lay large white eggs. Extra large type. Exceptional markings. Fine matings. Low prices. Catalogue. AMERICAN ANCONA FARMS, Gramplan, Pa.

PRODUCTION BRED CHICKS that live. Large type S.C.W. Leghorns, \$20-100; \$180-1000; Invest now and take profits in 1929. ADAM SEABURY, Sayville, L. I.

SUNNYFIELD EXTRA LARGE Single Comb Black Minorcas. Exclusively. Chicks. Eggs. Stock. Extraordinary layers. Lay exceptionally large white eggs. Two matings. Low prices. Catalogue. SUNNYFIELD MINORCA FARMS, Gramplan, Pa.

REGAL DORCAS WHITE WYANDOTTES—Eggs, chicks, stock. 256 egg record. Ledger. North American contest. Winter layers. Excellent type. Fine matings. Low prices. Catalogue. KEISER'S WHITE ACRES, Gramplan, Pa.

GIANT LIGHT BRAHMAS—chicks—eggs—extraordinary large breeders—fine color—record layers—standard bred—low price—Catalogue. GIANT BRAHMA FARMS, Gramplan, Pa.

BARRED ROCK COCKERELS, \$2.50 up. White Crested Black Polish, \$5.00 pair. Collie pups, eligible. \$10.00 up. PAINE, South Royalton, Vt.

SINGLE COMB WHITE Leghorn breeding cockerels. Also cock birds. Mostly N. Y. State Certified. A limited number of Certified cockerels from R.O.P. hens. Pedigree can be furnished with all pedigreed birds. We also have a few selected birds at \$2.50. CROCKETT'S POULTRY FARM, Sterling Station, N. Y.

ROSE COMB RHODE Island Red Cockerels, superb quality, \$2.50 and up, shipped on approval. ROBERT H. PURVES, Waddington, N. Y.

HEAVIEST LAYING BARRED Rock pen all eastern contests two consecutive years. Records to 2347. Circular. Chicks \$25 per hundred. Cockerels \$5. H. VAN WINKLE, Box A, Camden, N. Y.

POULTRY

BLUE ANDALUSIANS—Hatching eggs from two fine pens, \$2. per 15; \$6. per 50. Superb type and facing, coupled with high producing ability. L. J. VAN SCIVER, Closter, N. J.

Baby Chicks

BUCHER SUPER-QUALITY CHICKS from inspected free range money-making stock. Reds, White Wyandottes, White Barred Rocks, Giants, Black Minorcas, Anconas, White and Brown Leghorns. Booklet Free. Low Prices. Pure Breeds. BUCHER BROS., HATCHERY, Dept. C, Bucyrus, Ohio.

FOR SALE White Leghorn chicks from high producing hens mated to pedigree males up to 284 eggs. Disease free. \$18 per hundred for March. THE DANIELS POULTRY FARM, So. New Berlin, N. Y.

NEAL'S QUALITY CHICKS: Rocks, Reds and Leghorns priced right, 100% live delivery guaranteed. Write for price list. WINGATE NEAL, Denton, Maryland.

TANCRED STRAIN White Leghorn chicks \$12 per hundred, \$57.50 for 500, \$110 per 1000. Specials for March delivery. RICHFIELD HATCHERY, Richfield Pa.

SINGLE COMB WHITE Leghorn Chicks from certified supervised and flock matings. R. B. PEARSALE, Groton, N. Y.

500 CHICK size Brooder Stove given free with each 500 chick order. L. W. HAMBLIN, Wilson, N. Y.

SINGLE COMB WHITE Leghorn Chicks from two and three year hens, only 18c. Hatching eggs, 9c. RED RIDGE POULTRY FARM, Center Moriches, N. Y.

QUALITY CHICKS—S.C. White Leghorns per 100-\$11. S.C. Barred Rocks \$13. Light mix \$9 per 100. Heavy \$11. Special prices on larger lots. 100% live delivery, postpaid. New circular free. EDGAR C. LEISTER, McAlisterville, Pa.

LIVESTOCK ADVERTISING

After the issue of March 30th advertisements for livestock (cattle, swine, sheep, horses and goats) will not be accepted for the classified page.

All livestock advertising will be grouped together on one page under the heading "LIVESTOCK - BREEDERS". A special reduced rate of 50c per agate line, or \$7.00 per column inch, will be given this type of advertising.

In figuring the cost of your advertising seven words of type will average a line. Make some allowance of space for proper display.

This action is taken for the convenience of readers and also to make livestock advertising of greater value in the columns of AMERICAN AGRICULTURIST.

MINIMUM SPACE—Four lines averaging 28 words costing \$2.00 for each insertion is the smallest order accepted.

COPY must be received eleven days prior to the issue in which the advertisement is to appear.

TERMS—Cash must accompany all orders for less than \$10.

REFERENCES either from your bank or from two reputable business men in your community are required from new advertisers. These references are required for the protection of both our readers and other advertisers.

For further information in regard to livestock advertising write—Advertising Department, AMERICAN AGRICULTURIST, 461 Fourth Ave., New York City.

Baby Chicks

CHICKS—From Pedigreed Barron White Leghorns, Imported yearly from Barron, England; dams trapnest records to 313. Big females, long bodies, large eggs. Catalog free. BISHOP'S POULTRY FARM, New Washington, Ohio.

BIG VIGOROUS CHICKS from high egg producing, pure bred stock. Carefully selected for rapid growth and high vitality. Chicks that grow faster and lay more eggs. Leghorns, Barred Rocks. Free Brooder stove with order of 500 chicks. L. W. HAMBLIN, Wilson, N. Y.

TURKEYS—DUCKS—GEESE

TURKEYS MAMMOTH BRONZE Bourbon Red, Narragansett, White Holland hens, toms, unrelated pairs and trios, highest quality. Reasonable prices. WALTER BROS., Powhatan Point, Ohio.

TURKEYS—Large, purebred, Mammoth Bronze, vigorous, healthy birds, highest quality, splendid markings, satisfaction guaranteed. CLIFTON LEE, Lowville, N. Y.

MAMMOTH TOULOUSE, Embden, African and Chinese geese. Giant Pekin, Aylesbury, Rouen, Muscovy, Buff Orpington and Indian Runner Ducks. Baby Chicks of leading breeds. Catalog free. CHARLES McCLAVE, Box A, New London, Ohio.

TURKEYS—LARGE, PUREBRED, Mammoth Bronze. Dark colored. Very beautifully marked. Best strain. Yearlings and young stock. MRS. ARTHUR INGER-SOLL, Lowville, N. Y.

PUREBRED WHITE MUSCOVY DUCKS \$3, two for \$5.50. CHARLES E. HALLOCK, Mattituck, New York.

MAMMOTH BRONZE TURKEYS, Large, vigorous, healthy stock, free range. Prices reasonable. ELMER BERRY, Adams, N. Y.

BOURBON RED TURKEYS for sale. Toms \$15, and hens \$12 each. MRS. WALTER B. SEXTON, Venice Centre, N. Y.

WHITE HOLLAND TURKEYS, large, strong and extra heavy laying strain also Barred Rock Cockerels. MRS. D. H. MILLER, R-1, Adams, N. Y.

FEW GOOD ROULEN drakes and ducks at reasonable prices. ELMER L. DUTTERA, Littlestown, Pa.

MAMMOTH TOULOUSE GANDERS \$7. 9 White Rock pullets, 1 cockerel \$25. KENNETH STREETER, Halcott, N. Y.

MAMMOTH BRONZE Day old turkeys and hatching eggs. Place orders now for early delivery. PLYMOUTH TURKEY FARM, Plymouth, N. H.

DUCKLINGS \$30. Eggs \$12 per hundred. Mammoth White Pekins. L. W. HAMBLIN, Wilson, N. Y.

FARM EQUIPMENT

LIME AND FERTILIZER SPREADERS that will do the best of work. Made to attach to any cart or wagon \$15.00. J. S. GREENLEAF, Anson, Maine.

FARMS FOR SALE

FOR SALE—HOUSE and lot in south Sodus, N. Y. Inquire of NETTIE LAMSON, 223 South Main St., Fairport, Monroe Co., N. Y.

FOR SALE—FARM of 56 acres, 7 miles north of Lyons, N. Y. Inquire of NETTIE LAMSON, 223 South Main St., Fairport, Monroe Co., N. Y.

FOR RENT OR to work on shares; Chicken and truck farm. Hillsdale, N. Y. Accommodates 1000 chickens. Incubator and brooder like new. G. B. DIOGUARDI, 214 East 58th St., New York City.

ONE HUNDRED ELEVEN ACRES 15 room house 7 room tenant house, large barns, covered barnyard, henhouses for 200 hens. Acetylene lights, compressed air water system. Rolling land, well drained. Good pasture, watered by spring. Two good wells near buildings. Full particulars on request. ASA METZGER, Groton, N. Y.

Additional Classified Advertising

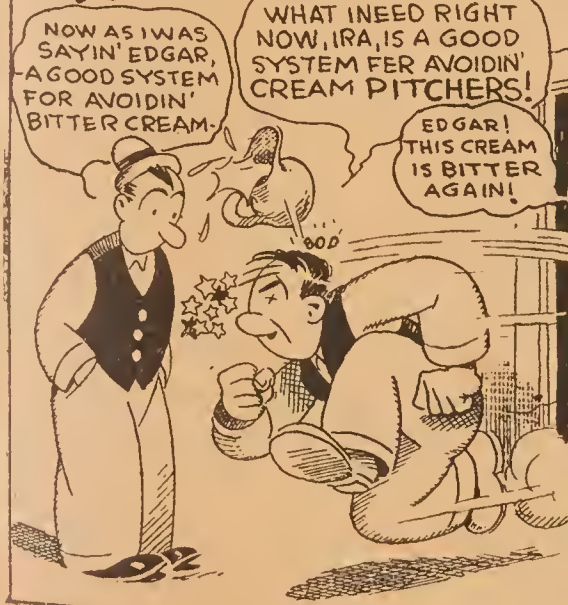
On Page 30

HANDY ANDY Says "Here's How"

To Avoid Bitter Cream

By Ray Inman

Here are several ways of avoiding Bitter Cream: ① Stir the cream occasionally, cool it, and market every few days.



② Never let it FREEZE ③ Don't use old cloths or disks for straining . . .




④ Don't use milk utensils plugged with rags or patent menders. ⑤ Keep dust from musty hay away . . .



⑥ Don't use cream from a "stripper" for several weeks before, nor one week after freshening.



Livestock Breeders



High Average Production Means Prosperity — Every Year!

The prosperous farmer or dairyman is the one who has a good cash income *all year and every year*. All of us make money some time, but real prosperity comes by steady accumulation.

The ability of the Jersey cow to maintain profitable production year after year is one of the greatest factors in stabilizing the farm income. This Jersey persistency in producing the very highest quality milk at low feed cost insures high average production and a growing bank balance.

Start today to build up a Jersey herd!

For valuable free booklets on Jersey cattle and Jersey milk write;

The American Jersey Cattle Club

324E West 23d St., New York City

FISHKILL FARMS offer the BULL CALVES

sired by that highly bred bull—KING PIEBE 19th, a grandson of the great K.P.O.P.

FISHKILL DEKOL JENNIE PIEBE

FISHKILL VEEMAN PIEBE

both born January 25, 1929

FISHKILL DEKOL JENNIE PIEBE is out of Fishkill Jennie DeKol, she being a granddaughter of that famous sire Dutchland Colantha Sir Inka, on her dam's side, and a great granddaughter of the same sire on her sire's side.

FISHKILL VEEMAN PIEBE is out of Fishkill Inka Veeman DeKol, another granddaughter of Dutchland Colantha Sir Inka on her dam's side, and a great granddaughter of the same eminent sire on her sire's side.

It will be difficult indeed to find a better buy than we offer here, considering the high breeding and price of each

\$75.00

F.O.B.

For full details of pedigree, terms of sale, etc., write

FISHKILL FARMS

HENRY MORGENTHAU, JR., Owner
461-4th Ave., New York, N. Y.

PIGS FOR SALE

OLD RELIABLE STOCK

Heavy legged, square backed, Chester and Yorkshire crossed, Poland China and Chester crossed, Barrows, boars or sows—8 to 10 weeks old, \$4.00 each. Fancy Berkshires, also Chester Whites, 2 months old Sows and unrelated Boars, \$5.00 each. 10 days trial or your money back. Shipped C.O.D. Crating free of charge. Yours for quality hogs.

ED. COLLINS, 35 Waltham Street, LEXINGTON, MASS.

FARMERS BUY FROM FARMERS

Let us suggest for you as breeders the best ages to breed. Chester White Cross, color white, Berkshire Cross, color black and white. Our prices may be a little more, but you will get good, large, healthy stock from our real type strain. Milk feeders 5 to 6 weeks old, \$3.50 each; 7 weeks old, \$3.75 each; 8 to 10 weeks old, \$4.00 each. Will ship C.O.D. from 2 to 50 at the above prices. These pigs will make large hogs in short time. If in any way dissatisfied with the pigs, return at our expense.

THE MISHAWUN FARM,

MISHAWUN ROAD, WOBURN, MASS. BOX 209
P. S. No pigs sold at the farm; only by appointment.

6 COWS,

11-2 year old heifers, 6 bulls 3 to 18 months old. 4 calves 3 months old, 2 registered guernsey calves 3 months old TB Tested.

SPOT FARM, TULLY, N. Y.

Pigs From Reliable Stock

Buy where quality is never sacrificed for quantity. We sell only high grade pigs, fast growers, that will prove a good investment—thrifty and rugged, having size and breeding. Will ship C.O.D.

Chester and Yorkshire—Berkshire & Chester
7 to 8 weeks old.....\$3.75
8 to 10 weeks old.....\$4.25

Satisfaction guaranteed, or money refunded. 10 days trial allowed. Crates supplied free. A. M. LUX, 206 Washington St., Woburn, Mass. Tel. Wob. 1415.

BEST GRADE Chester, Berkshire and Poland China Pigs. 3 months old, \$12.00 each; 6-8 weeks old, \$7.00 each. (Express Paid). Bred Sows and Boars. C. E. BOSSERMAN, York Springs, Pa.

Additional Classified Advertising

AVIATION

AVIATION—Salary while learning, \$18 to \$35 per week, while under instruction in our factory and at our airport. Call or write for information without obligation. WEEKS AIRCRAFT CORPORATION Department S, Plankinton Building, Milwaukee, Wisconsin.

TOBACCO

HOMESPUN TOBACCO: Chewing 5 lbs. \$1.50; ten \$2.50; Smoking 10 lbs. \$2.00; pay when received. FARMERS ASSOCIATION, West Paducah, Ky.

LUMBER—BUILDING SUPPLIES

ROOFING PAPER, 3-ply, \$1.35 per roll, 100 sq-ft. Prepaid. Asphalt shingles, roofing paint. Send for price list. WINIKER BROS., Millis, Mass.

WOMEN'S WANTS

SWITCHES—Combings made up. Booklet. Flamelette house dresses \$1.50. EVA MACK, Box 298, Ithaca, New York.

6 lbs. CLIPPINGS FOR PATCHWORK, \$1. 3 lbs. Silks, \$1. Extraordinary value! Send no money, pay postman \$1. plus postage. Satisfaction guaranteed or money refunded. SAFTLER MFG. CO., Dept. 27, Whitman, Mass.

AGENTS WANTED

A PAYING POSITION OPEN to representative of character. Take orders shoes—hosiery direct to wearer. Good income. Permanent. Write now for free book "Getting Ahead." TANNERS SHOE MFG. CO., 2081 C St., Boston, Mass.

AGENTS—Make \$25.—\$100 weekly, selling Comet Sprayers and Autowashers to farmers and Autoists. All brass. Throws continuous stream. Established 35 years. Particulars free. RUSLER CO., Johnstown, Ohio. Box C12.

FARMS FOR SALE

14 ACRES, 8 room house, electric, best farming section of Sunny South Jersey. OWNER 418 N. 2nd St., Camden, N. J.

LIVE GOOD WHILE MAKING A GOOD LIVING ON THE DEL-MAR-VA PENINSULA. Low-priced, productive land, Town and waterfront homes. Three to ten hours to largest Eastern markets by motor or Pennsylvania Railroad. Very little snow and freezing. Finest concrete highways. Good Schools, low taxes. Handsome descriptive booklet, FREE. Address 164 Del-Mar-Va Building, Salisbury, Md.

SEEDS—NURSERY STOCK

PEACH AND APPLE TREES \$5; \$7.50 per 100 and up. Complete assortment fruits, berries, vines, ornamental trees, vines, shrubs, evergreens. Catalog in colors free. TENNESSEE NURSERY COMPANY, Box 102, Cleveland, Tenn.

PEACH AND APPLE TREES \$5 per 100 and up. Fruits, ornamental trees, vines. TENNESSEE NURSERY CO., Box 202, Cleveland, Tenn.

PEDIGREE SEED POTATOES, Cobblers, Mountains, Russets, Peachblow. Write for catalogue. ROY HASTINGS, Malone, N. Y.

HIGH GRADE SEED Potatoes—Russets. Green Mountain, Gold Coin, Cobbler, Banner, Walter Raleighs and Carman No. 3. Prices right. Catalog free. THE KEYSTONE POTATO FARMS, Richfield, Pa.

GLADIOLUS BULBS—36-page illustrated Catalog free. 175 varieties. Thirty All Different \$1. postpaid. HOWARD GILLET, Box J, New Lebanon, N. Y.

COOK'S CERTIFIED POTATOES, Cobblers and Russets. Better than ever. Attractive prices. We pay freight. IRVING E. COOK, Munsville, N. Y.

Free Samples CLARAGE Seed Corn. CLARAGE produced WORLD'S HIGHEST YIELDS. Write Dunlap & Son, Williamsport, Ohio.

CERTIFIED HEAVYWEIGHT POTATOES—State test 99.5 free from disease, yield 324 bushel per acre. RATH BROS., Pittsford, Pa.

The Question Box

Safe Waterproofing for Shoes

NOT all the compounds used for waterproofing boots and shoes are entirely safe against drying, cracking, or otherwise damaging the leather, and at present prices we want our foot wear to give the longest wear possible. The agricultural chemists recommend any one of the following formulas as being both safe and effective for waterproofing shoes that must be used in snow and slush:

Formula 1. Neutral wool grease, 8 ounces; dark petrolatum, 4 ounces; paraffin wax, 2 ounces.

Formula 2. Petrolatum, 16 ounces; and beeswax, 2 ounces.

Formula 3. Petrolatum, 8 ounces; paraffin wax, 4 ounces; wool grease, 4 ounces; and crude turpentine gum (gum thus), 2 ounces.

Formula 4. Tallow, 12 ounces, and cod oil, 4 ounces.

The formula to use will depend on which ingredients are easiest to obtain in each case. Melt the ingredients together, mix thoroughly, apply warm (not hot) to all outside parts and rub in well. A little excess will do no harm, especially in winter. Grease particularly well the welt and edges of sole, then saturate the sole with the waterproofing by setting in a shallow pan holding enough melted grease to cover the soles. Rubber heels should never be put into grease, and rubber heeled shoes can be waterproofed by letting the heels hang over the edge.—I. W. D.

from any of our subscribers who have successfully broken coon dogs of this habit and we will be glad to forward the information to our reader.

Another reader asks for successful experiences in curing dogs of killing hens.

The Little Shepherd of Kingdom Come

(Continued from Page 28)

oilcloth (and every Morgan's man had one soon after they were issued to the Federals); another worked up cornmeal into dough in the scooped-out half of a pumpkin; one baked bread on a flat rock, another on a board, while a third had twisted his dough around his ram-rod; if it were spring-time, a fourth might be fitting his into a cornshuck to roast in ashes. All this Dan Dean could do.

He was a war-worn veteran now, but how vividly he could recall that first night in the camp of a big army, in the very woods where he now lay—dusk settling over the Green River country, which Morgan's Men grew to love so well; a mocking-bird singing a farewell song from the top of a stunted oak to the dead summer and the dying day; Morgan seated on a cracker-box in front of his tent, contemplatively chewing one end of his mustache; Lieutenant Hunt swinging from his horse, smiling grimly.

"It would make a horse laugh—a Yankee cavalry horse, anyhow—to see this army."

(To be Continued Next Week)

Treating Hogs for Mange

"My hogs have some trouble, either lice or mange, which causes them to continually rub against the wall. I would like to know if there is any way to cure this trouble."—T. R., New Jersey.

OCCASIONALLY hogs get mange, caused by the irritation of a small organism getting under their skin. It is the custom when this occurs, to paint the pigs with a mixture of crude oil and kerosene, in about the proportion of two to one. This may effect a temporary relief, but if your pigs have mange it will be necessary to move them to new quarters and to completely clean up or disinfect the old ones.

I have a suspicion that probably they have not been kept under the most sanitary conditions. See that they get out in the light and are given a clean dry bed. With this treatment and with the few applications of the crude oil and kerosene, you ought to be able to clear up your difficulty.—R. B. Hinman.

Will Covering Car Spoil Varnish?

"I have made a light cover for my car to keep the dust off it while in the garage, but have been told that it would spoil the varnish if used. Can you give me any information on this?"—J. O.

I DOUBT if there is anything to this idea that covering a car will spoil the varnish, if the car is dry and cold when the cover is put on. Alcohol is very injurious to varnish, and if the car is warm and has alcohol in the radiator, it is probable that enough of the fumes would collect under the cover to have some effect on the varnish. Likewise there might be some possible effect from gas and oil fumes from a hot car. Light or its absence has some effect on varnish, but enough light would filter through a light cover to prevent damage from lack of light.—I. W. D.

Wants Information on Training Dogs

ONE of our subscribers is having trouble with a coon dog which has recently acquired the habit of chasing rabbits. We would be glad to hear

Additional Classified Advertising

MISCELLANEOUS

USED CIVIL WAR ENVELOPES with flags, designs, etc., \$1 to \$15 paid. Other stamps on envelopes before 1871 bought. W. RICHMOND, Cold Spring, N. Y.

WANTED—HAY, GRAIN, Potatoes, Apples, Cabbage, Carloads. Pay highest market prices. THE HAMILTON CO., New Castle, Pa.

HONEY: 60 lbs. best clover \$6.00. Buckwheat \$5.40. Not prepaid. Satisfaction guaranteed. F. W. LESSER, Fayetteville, N. Y.

WANTED TO BUY old bags. We pay excellent prices. Write for prices. We pay freight. OWASCO BAG CO., Rochester, N. Y.

WANTED USED BURLAP bags or cotton bags any quantity all year round. HOFFMAN BROS. BAG CO., 39 Gorham St., Rochester, N. Y.

RADIO 5 TUBE cheap or exchange for raw furs. Write W. SIMMS, Lake, New York.

EXTENSION LADDERS, 20 to 32 ft. 25c per ft. 32 to 40 ft. 27c per ft. Freight prepaid. ARTHUR L. FERRIS, Box A, Interlaken, N. Y.

PEANUTS—Buy direct from growers. Roast them yourself. 10 lbs. \$1.50; 25 lbs. \$3.00; 100 lbs. \$10.00; 500 lbs. \$40.00; 2000 lbs. \$150.00. Now booking orders for "FROSTPROOF" Cabbage Plants. J. P. COUNTELL COMPANY, Franklin, Va.

POWER FEED BOLTER for sale cheap in A. one shape. A. PETRI, Rowe, Mass.

FOR SALE, 32 volt Westinghouse light plant, CHAS. D. OSBORN, care Crawshaw Carpet Co., Newburgh, N. Y.

LONG'S PURE HONEY—Direct from producer, clover or buckwheat, 5 lbs. pail \$1.15 postpaid, wholesale prices on request. Satisfaction guaranteed. W. C. LONG, Millville, Pa.

OUR 1929 CATALOG just from press. 84 pages showing Largest Line of Poultry Supplies in the world. (Over 350 items). Write today for your copy FREE. BROWER MFG. CO., Dept. H 1, Quincy, Ill.

HELP WANTED

SINGLE MAN WANTED on farm, must be a good milker and a good quick willing worker, no old men, boys or loafers answer. \$50. per mo. and board after April 1st. \$60. per mo. and board. Only first class worker wanted. CHESTER SMITH, Cold Spring-on-Hudson, N. Y.

MARRIED MAN to work in Dairy and care for calves. Wife to board two single men. ARTHUR D. HOOSE, Fishkill Farms, Hopewell Junction, N. Y.

PRINTING—STATIONERY

EVERYTHING PRINTED! FRANKLINPRESS, Milford, New Hampshire.

250 BUSINESS ENVELOPES printed postpaid \$1. 50 calling cards 10c. WALTER G. COLLINS, Croton, N. Y.

When writing Advertisers
Mention American Agriculturist



Swindlers in Tioga County

TWO men and their wives stopped at a Nichols Hotel under the pretense of buying F. M. Moore's telephone line and giving better service. They succeeded in getting the confidence of the people. They left in about two weeks paying for a radio, garage bill and hotel bill, with checks that were worthless, given on a New York bank. Between three and four hundred dollars was lost. The descriptions of the men follow: B. M. Ainsworth, weight 160 lbs., 5 ft. 8 in. tall, dark complexion. G. J. Willson, 5 ft. 4 in. tall, light complexion.

The above is published as a warning for our readers everywhere against these swindlers.

Government Investigates Reducing Tablets

MUCH has been said about "digging" our graves with our teeth" but the fair sex in recent years has followed the dictates of fashion by reducing—in many cases to the danger point.

Diet has a valuable place in any health program when used with common sense but there are always those who prefer to "reduce without effort." The medical profession claims that drugs have no place in weight reducing.

The advertising claims of "Marmola" a tablet described as "The pleasant way to reduce", have been the subject of Government investigation and are at the present time the subject of a complaint by the Federal Trade Commission.

The principal ingredient of "Marmola" is said to be desiccated Thyroid. For a number of years the American Medical Association has called attention to the fact that the use of desiccated thyroid, except under direct supervision of a physician, is dangerous and that thyroid has no place in the legitimate field of home remedies.

Post Office Investigates

On November 29, 1926, the Marmola Company, Detroit, Michigan, was called on by the Post Office Department to show cause why a fraud order should not be issued against the company. An agreement was reached by which the company agreed to discontinue operations and refuse all mail.

A few months later, however, the Radalam Company, also of Detroit, began to promote "Marmola" and some

of the officials of the new company appear to have been connected with the old one.

Recently, however, the Federal Trade Commission issued a complaint against the new concern calling attention to the dangers of thyroid in reducing as well as the advertising representations made, many of which are claimed to have "the tendency and capacity to mislead the purchasing public."

Sign Your Letters

It has been brought to my attention that you might possibly help us in our trouble. On January 3, 1928 a man came to work for us and the first week he was there, while we were away, two new tires were taken from the rear wheels of the car as well as a new spare that had never had the wrapper taken off. Since that time a number of things have disappeared as well as a number of chickens. Is there any way you could help us to recover this property.

WE are unable to answer this letter direct as the writer's address was not on the letter. It was originally sent to our Poughkeepsie address and during the transfer to the New York office, the envelope became detached. We are printing this for two reasons, the most important one being that we take this occasion to point out the importance of notifying the state troopers and local authorities immediately when such a loss is noted. The chance of recovering the stolen articles is very slight at this late date as compared with the chance had the state police been notified the next day after they were missed. Our second reason is to point out the importance of signing your full name and address to every letter sent to us.

We Cannot Recommend Home Work Schemes

ALTHOUGH we have frequently commented on the unreliability of home work schemes, we receive several letters every day asking for a report on a particular company. Often the concern mentioned has already received comment on the Service Bureau page.

We cannot emphasize too strongly that we cannot recommend any firm that offers work to be done at home. We say this again in order that our readers may avoid disappointment, and loss of time and money in writing to us about them.

Chicken Thief Reward Goes to Maryland

MR. ARNOLD L. BURDETTE, Germantown, Md., was awarded the \$25.00 reward offered by Mr. Henry Morgenthau, Jr., Publisher of American Agriculturist, to those who furnish evidence leading to the arrest, conviction and imprisonment of chicken thieves.

Last May 27th, Mr. Burdette noticed tracks about his premises, there having been a light rain the night before. The tracks led to the henroost and then for three-quarters of a mile further. He called the officers who investigated and found six chickens covered up in a coop at the house Mr. Burdette

had suspected. Two arrests were made, Ervin and Leonard Hoes, but the case was left to be tried at the November Court. The men were let loose and during hunting season were jailed for twenty days for hunting without license. Later they were tried again for stealing the chickens and were sentenced by Judge A. B. Peters at Rockville, Md., for a year each in the Maryland House of Correction. As previously announced, the A. A. chicken thief rewards have been discontinued. All rewards on cases where actual arrests occurred before January 1 will be paid.

NUMBER 20838

NEW YORK, N. Y., January 9th 1929

Manufacturers Trust Company

513 FIFTH AVENUE CORNER 43RD STREET

PAY Twenty-five Dollars

Arnold L. Burdette

Germantown

Md.

\$25.00

AMERICAN AGRICULTURIST, Inc.

Henry Morgenthau, Jr. PRES.

Just One Accident

with your automobile or truck
may take your lifetime savings

The bride and groom, setting up housekeeping, know it is only the commonest kind of common sense to insure their house and contents.

It's even more important to carry Public Liability and Property Damage insurance on your automobile or truck. Your house cannot suddenly launch itself into the middle of the road, causing a collision, but your automobile is a swift-moving piece of powerful machinery.

**Automobile Insurance Is a Necessity.
Even The Most Careful Drivers
Have Accidents!**

33 County Farm Bureaus of New York State insure 55 cars in the Merchants Mutual.

30,000 Farmers now save from \$4.00 to \$10.00 per car each year by insuring in Merchants Mutual.



**MERCHANTS MUTUAL
CASUALTY COMPANY**

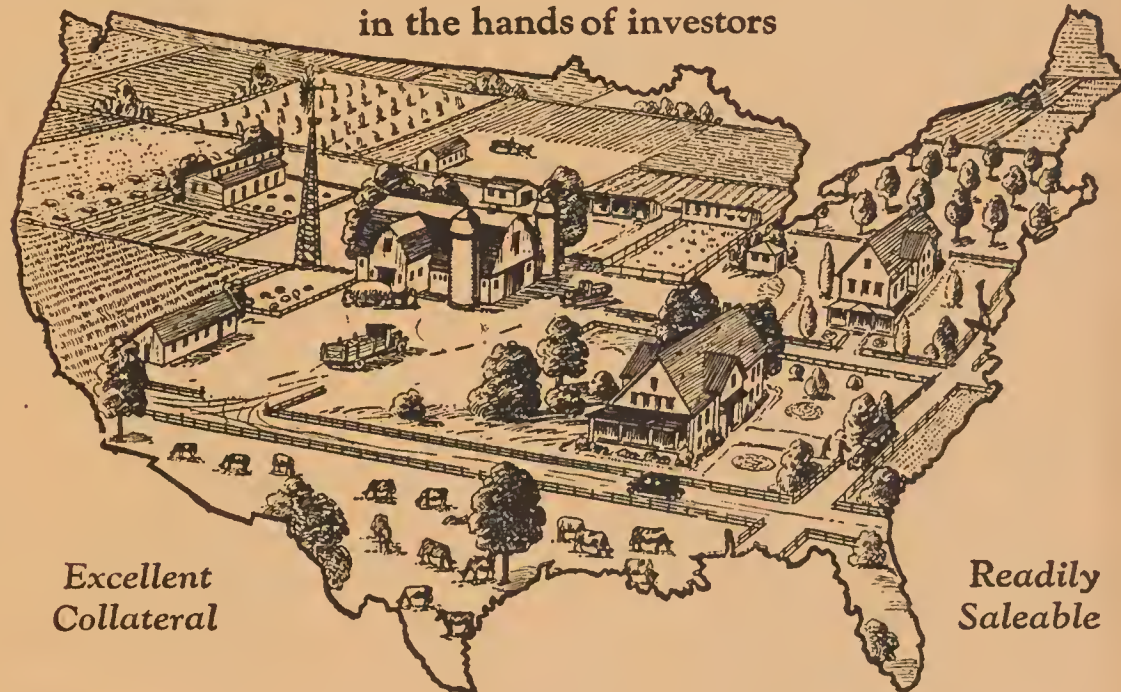
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GUARANTEED analysis—what does it guarantee? It guarantees the amount of plant food in the fertilizer bag. It does not guarantee the quality of the fertilizer.

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In the Certificate of Quality, Swift & Company now certifies that Red Steer Fertilizers are made from **BEST MATERIALS**—plant food from the most productive sources. That they have gone through two complete mixings—**DOUBLE MIXED**—to make sure of easy drilling and that each plant will get its share of plant food.

Furthermore, Swift & Company certifies that Red Steer Fertilizers have passed at least three rigid tests in fully equipped laboratories. **TRIPLE TESTED!** To assure the right *kind* of plant food, in the right *form* and correct amount.

Look for this Tag:

"Best Materials, Double Mixed, Triple Tested"

A plus value in fertilizers! On every bag of Red Steer Fertilizer you'll find the certification tag shown above. It says **BEST MATERIALS,**

Look for this tag



DOUBLE MIXED, TRIPLE TESTED.

Ask your A. S. A. (Authorized Swift Agent) for Red Steer. See that every bag carries this certification tag. It assures you quality in fertilizers.

Swift & Company
Fertilizer Works

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Did it ever occur to you that you can definitely help control the price you get for your crops?

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AMERICAN AGRICULTURIST

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Published Weekly

Who Pays For Your Roads?

Tax and Other Facts About New York Highways

EDITOR'S NOTE:—If you are interested in roads and taxes, you should study these figures for your county. In column No. 1 is the total for each county paid by the locality to the State for highway purposes. It includes one-tenth of the approximate cost to complete the State highway system. It includes the locality's share of building the bridges and the town's share for the maintenance of State highways.

In the second column is the total paid by the State to the locality. It includes the county's share of registration fees, the payment to counties of \$30 a mile, according to the Highway Law, Section 300-B, and also the payment by the State to towns according to Highway Law, Section 101.

In the third column is the net payment by the locality to the State, and in the fourth column the net payment by the State to the locality.

The chief point to note is that under the present system the more prosperous counties get more financial aid from the State than they pay, while the poorer counties pay more to the State than they receive. The plans now being considered and recommended by the Roosevelt Agricultural Advisory Commission and by the legislature would tend to equalize the highway tax and reduce the local tax burden in the counties and towns.

* * *

NEW YORK State has 80,116 miles of highway, of which 11,044 miles are in the state system.

Nearly all of the state system is hard surfaced. Outside of the state system there are 12,548 miles of hard surfaced roads, 6,698 miles of gravel roads and 49,826 miles of dirt. Of the total mileage in the State, 62 per cent is dirt.

The two great road problems are how to provide an adequate system of highways for the State, and how to distribute the cost.

At the present time the main sources of support are taxes on real estate, motor vehicle fees, and appropriations by the State. Formerly roads were considered to be purely a neighborhood question. The farmers were compelled to work on the highways a certain number of days in the year. Later roads were recognized as of use for a whole township. In 1858, a law was passed making it possible to levy taxes of \$250 per year in a township, or by special vote of the people, they might levy as much as \$750. Toll roads were common. Gradually more and more of the support was transferred to taxation rather than to compulsory labor. In 1890, a law was passed which made it possible for counties to aid in road support. Thirty years ago the state began to give support to highways. Step-by-step

By G. F. WARREN,
Farm Economist, New York State College of Agriculture

highway support has passed from the smaller to the larger unit, but support has always lagged far behind use. Each step in legislation came long after conditions were such as to have justified it. The first step in a vigorous state policy was taken 24 years ago when a fifty million dollar bond issue was voted.

How the Roads are Supported

The present highway laws are published in a book of 500 pages. They cannot be briefly

summarized. The more important features are here given, but many limitations and exceptions are omitted in order to give a general idea of the situation briefly.

The state builds certain roads. On these roads, the township pays the state \$50 per mile per year for maintenance. Thirty-five per cent of the cost of bridges is paid by the county. Rights of way are purchased by the county and snow removal is at county expense. It is generally agreed that bridges should be paid for in the same manner as the highway on which they occur, and that towns should not be called on to pay the \$50 per mile. The questions as to whether the state should pay for all, or part, of the right-of-way and snow removal are being vigorously discussed.

Certain roads are built at the joint expense of the state and county. The county pays 35 per cent of the cost of construction of both roads and bridges. This 35 per cent is regardless of the value of the road to the county, or of the wealth of the county. The serious injustice of this is shown later.

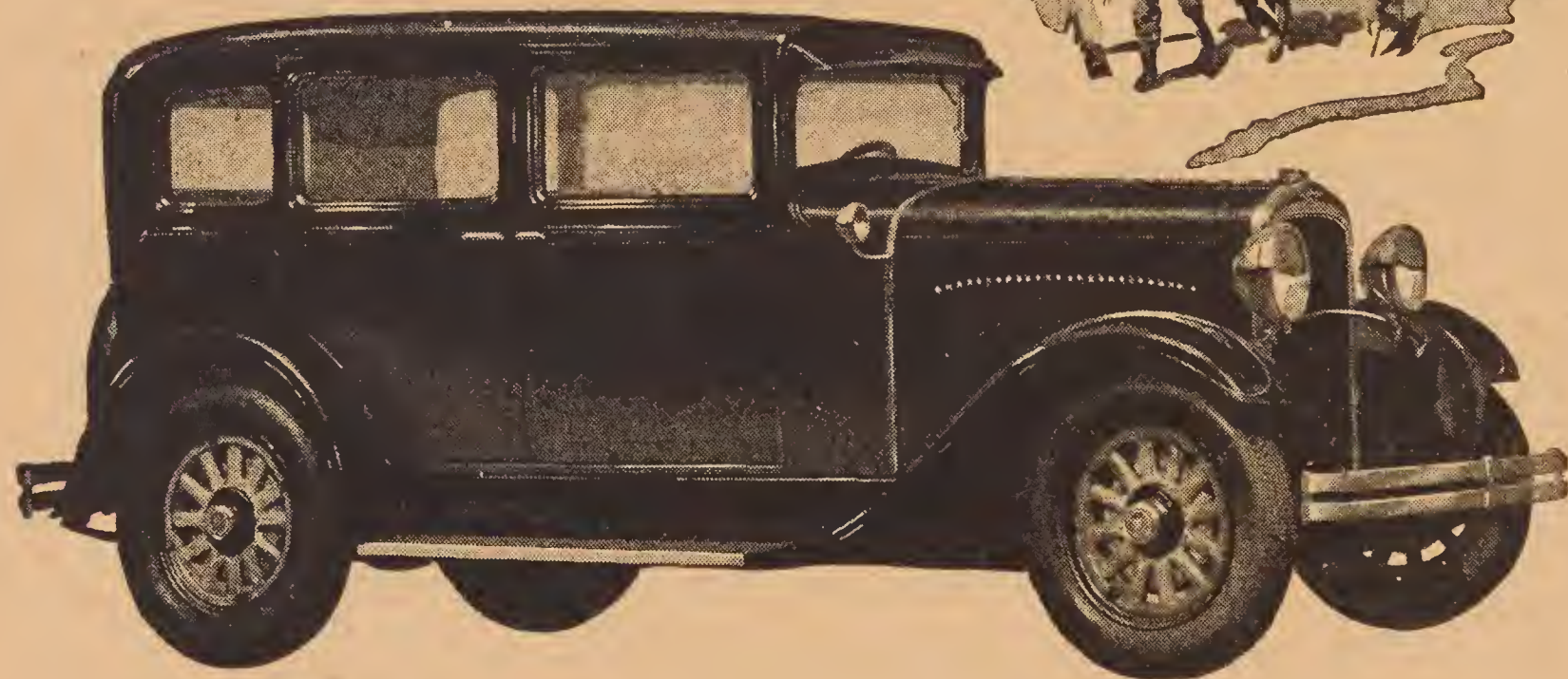
The state pays to each county one-fourth of the motor vehicle fees collected in that county, and under the Lowman act pays to the county \$30 per mile of highway to aid in the improvement and construction of lateral roads.

Under an old law originally passed in 1898 and practically unchanged in the past 30 years, the state pays \$25 per mile to the poorer townships, and pays one-tenth of one per cent of the assessed valuation per mile to the wealthy townships. Under the provisions of this law, a few townships now receive over \$500 per mile of road. The law is not now functioning in accordance with the original intent. Costs have risen so that the poor townships are not awarded as much as was intended. Valuations have risen so that wealthy townships are given much more than was anticipated. In its report three years ago the Committee on Taxation and Retrenchment called attention to the extent to which this favored the wealthy towns. It is generally agreed that this law should be amended. A number of different proposals have been made. All of them would give more to the poorer townships and place a limit on the amount given the wealthy ones. The present law, and all proposed revisions of it

(Continued on Page 20)

PAYMENTS TO THE STATE FROM LOCALITIES AND PAYMENTS FROM LOCALITIES TO THE STATE

County	Payments by Localities to State	Payment by State to Localities	Net Payment by Localities to State	Net Payment by State to Locality
Albany	\$ 116,886	\$ 261,538		\$ 144,652
Allegany	212,070	145,914	\$ 66,156	
Broome	166,235	209,371		43,136
Cattaraugus	234,810	176,077	58,733	
Cayuga	187,709	136,646	51,063	
Chautauqua	183,035	236,491		53,456
Chemung	85,255	114,165		28,910
Chenango	155,735	135,235	20,500	
Clinton	132,294	106,441	25,853	
Columbia	305,169	123,134	182,035	
Cortland	126,339	89,778	36,561	
Delaware	265,721	173,710	92,011	
Dutchess	204,231	204,387		156
Erie	267,854	872,618		604,764
Essex	160,782	104,583	56,199	
Franklin	220,940	117,115	103,825	
Fulton	69,658	82,882		13,224
Genesee	151,890	105,872	46,018	
Greene	133,793	92,994	40,799	
Hamilton	95,224	31,439	63,785	
Herkimer	192,340	140,675	51,665	
Jefferson	212,575	202,437	10,138	
Lewis	114,146	102,875	11,271	
Livingston	228,872	113,183	115,689	
Madison	73,015	117,828		44,813
Monroe	255,831	518,489		262,658
Montgomery	134,601	96,367	38,234	
Nassau	49,600	751,443		701,843
Niagara	115,094	205,162		90,068
Oneida	259,164	299,633		40,469
Onondaga	246,770	370,652		123,882
Ontario	118,582	134,283		15,701
Orange	173,918	235,450		61,532
Orleans	114,804	76,677	38,127	
Oswego	165,308	150,701	14,607	
Otsego	160,193	163,231		3,038
Putnam	61,280	60,913	367	
Rensselaer	166,735	179,354		12,619
Rockland	74,303	104,308		30,005
St. Lawrence	346,091	250,271	95,820	
Saratoga	106,916	135,538		28,622
Schenectady	70,242	136,388		66,146
Schoharie	129,359	89,201	40,158	
Schuyler	63,803	53,609	10,194	
Seneca	108,089	60,596	47,493	
Stueben	330,274	242,733	87,541	
Suffolk	258,514	433,138		174,624
Sullivan	279,874	153,427	126,447	
Tioga	188,389	80,613	107,776	
Tompkins	95,130	102,016		6,886
Ulster	238,681	193,441	45,240	
Warren	164,182	91,278	72,904	
Washington	213,004	119,253	93,751	
Wayne	107,961	141,081		33,120
Westchester	257,647	704,286		446,639
Wyoming	161,281	88,600	72,681	
Yates	140,247	61,916	78,331	
Total	\$9,652,445	\$10,681,436	\$2,001,972	\$3,030,963



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The QUESTION BOX

Connecting High-Line Power On 32-Volt Wiring

"Would it be safe to connect 110-volt high line power onto my wiring now carrying 32-volt current? The main wires were soldered at all joints, but a few of the connections were not soldered, although they were given a long tight wrap and then were thoroughly taped. Any suggestions will be appreciated."—J. W. L.

SO far as size of wire and ability to carry the current without heating is concerned, your 32-volt wiring will be entirely satisfactory, since for the same amount of light or heat or power the 110-volt current will be less than one-third as great as with 32-volt current.

So far as spacing and insulation is concerned, the inside wiring as put in for 32 volts is entirely satisfactory for 110-volt service. Special care must be taken, however to see that a well insulated and well protected entrance switch is put in, that the proper fuses are installed, that joints are soldered and taped, and that conduits are grounded. Where your unsoldered joints can be reached conveniently, it might be well to solder and tape them; but it is hardly worth while tearing out anything to do so. Finally you should have some experienced wiring man check over the wiring to be sure that everything is safe and that nothing has been overlooked which might later cause a fire hazard.—I. W. D.

Nutritional Paralysis Does Not Damage Pork

I have a hog that has broken down behind. I have called a veterinarian and he gave it a long name, saying it came from feeding and gave some medicine. He said it would recover but it won't rise behind. She eats all we give her and seems well in every other way, is fat and nice. Would it be all right to kill her for the meat.

YOUR pig probably is bothered with what is commonly known as a posterior paralysis. It is due probably to a nutritional deficiency which could be taken care of by proper access to sunlight and by the feeding of feeds which are rich in available bone materials.

I am very doubtful of the advisability of spending much money on this pig for medicine and if it is in condition to kill I would certainly slaughter it at once. The meat will be all right to use but the hams will probably be rather difficult to cure because of the softness of the bone. I would recommend that you use all the meat up in the fresh stage and do not attempt to smoke or cure it in any way.—R. B. HINMAN.

Feeding Value of Apple Pomace

Can you give us any figures on the feeding value of Apple Pomace?

THIS material can be safely fed to dairy cows and is about equal to corn silage in feeding value. It is heavier than silage and should be weighed rather than measured. About twenty-five to thirty-five pounds can be fed per day and the best results will follow if it is fed just after milking. It is important to keep the manger clean when apple pomace is fed.

Another "Largest" Hog

OUR subscriber, B. F. Clem of Headsville, W. Va., has called our attention to a hog even larger than the one mentioned in the January 12th issue of American Agriculturist. That hog was owned by William Deichmann of Lehigh, Neb., and weighed 1,320 pounds. Mr. Clem sends us a clipping commenting on a hog owned by Wilson Brothers of West Virginia, weighing exactly 1,682 pounds. The hog was about three years old.

What Other States Think of the Gas Tax

How It Is Collected and Distributed

IF you believe that New York State should have a gasoline tax of two cents a gallon, and if you believe that that tax should be devoted to highway purposes, and a fair part of it returned to the localities for building and maintaining roads within your counties, thus keeping down road taxes, and if you believe that gasoline not used for motor cars, automobiles or trucks on the highways should be exempted from the gasoline tax, then write or telegraph immediately to your State assemblyman and senator, Governor Franklin D. Roosevelt, Hon. Joseph A. McGinnes, speaker of the Assembly, and the Hon. John Knight, majority leader in the Senate.

New York State is the only state which does not now have a gasoline tax. It is the only state that does not tax those who travel the roads in proportion to the amount that they use the roads. A gasoline tax entirely devoted to highway purposes with a fair proportion distributed to relieve local highway taxes is the only way that farmers can hope to get any relief from road taxes.

Some time ago the Vermont State Chamber of Commerce tried to find out some facts from other states which had been operating with the gasoline tax for some time. Questions were addressed chiefly to highway officials in the different states.

The first question was:

What was the general attitude of the public toward a gasoline tax?

Here are some of the replies to this question:

Arizona: "We believe that the one-cent gasoline tax levied by the State of Arizona has worked out very well and that there is no general complaint in regard to it."

Arkansas: "The present attitude of the public towards this tax is one of approval."

Colorado: "The present attitude of the public is very decidedly in favor of it."

Connecticut: "Naturally some adverse criticism

has been made in this matter. The general public, however, has no complaint to make, the amount of the tax for a year being comparatively small for the average car user."

Kentucky: "On a whole it appears that the citizens of the State have recognized the justness of the gasoline tax."

Pennsylvania: "Strange as it may appear, little or no protest was made against the passage of this Act. This, no doubt, is due to the fact that 50 per cent of the tax was returned to the several counties for the purposes indicated in the Act and referred to above."

None of the replies to this question were unfavorable.

Another question was:

Why Did You Adopt a Gasoline Tax?

Here are some of the answers:

Arizona: "In this State, the tax on gasoline has proved a very satisfactory means of raising money for road purposes. In our opinion, the gasoline tax will shortly be nearly universal, and that State lines will not interfere with its operation."

Arkansas: "The principal argument for the adoption of the gasoline tax is the fact that this tax is the most equitable one that can be devised to force the users of our roads to bear a part of the cost."

Maryland: "In the little State of Maryland, we are collecting about \$2,500,000 from motor vehicles in direct taxes and it certainly has become a real business, and should be treated in a business way. By this we mean that every user of the road should pay for the service which he receives, no more, no less."

Mississippi: "The biggest argument used in favor of this tax in this State was that inasmuch as the automobile is the most destructive agent of the roads, the automobile owners should pay a larger part of the cost of maintenance."

Oregon: "It has the advantage of procuring some revenue from the tourist who is exempt from motor vehicle fees, and it is also an equitable tax from the fact that the tax is in proportion to the use of the roads."

Still another question asked of the different

states in regard to the gasoline tax was:

How Do You Distribute Your Funds Received from the Tax?

Arizona: "The revenues go into both highway maintenance and construction. We believe this is equitable as there is a tremendous saving to the motorist from the construction of pavings."

Arkansas: "To credit one-half of the amount to the General Road Fund of the County and to transmit the remaining fifty per cent to the Treasurer of the State of Arkansas to the credit of the Highway Improvement Fund."

Kentucky: "The total amount of gasoline tax is credited directly to the State Road Funds."

Maryland: "The entire fund derived from the gas tax is used for the maintenance of roads. It is our theory of road service that the construction of the roads is a benefit to the community and the community should pay; that the maintenance of roads is a liability against the user, and the user should pay. Carrying this further, we feel that if the user is to pay, he should pay in proportion to the benefits derived, and that the tax on gasoline is the correct measure of the amount of service which the user receives from the road. Large vehicles using much gasoline, do much damage; small vehicles using little gasoline, do little damage. A small or large vehicle standing in the garage burns no fuel and does no damage, while when it is operating over the roads, it burns a definite amount of fuel, and does a definite amount of damage."

Question:

How is the Gasoline Tax Collected in Your State?

Arizona: "The tax is made at the wholesalers which means that the cost of collection is very small."

Arkansas: "The retailer is required on or before the 10th of each month to file with the County Clerk of the County in which he is operating, a statement showing the amount of gasoline sold during the preceding month and he shall pay the Treasurer of the County the amount of tax due. In my opinion,

(Continued on Page 18)

Retail Egg Grading Law Hurts Local Market

Grocers Now Buy from Dealers Rather Than from Nearby Producers

By C. E. LEE

EDITORS' NOTE—There is little or no doubt but that some changes will be made in the New York State Egg Grading Law. Now is the proper time to discuss the matter and to let your wishes in the matter be known. Mr. Lee knows the poultry business from the ground up and we are glad to present his views to our readers.

I WAS very much interested in the article on the Egg Grading Law in the January Twelfth issue. It seems to me that the common idea that cold storage is of great benefit to the poultryman, because of raising the price of eggs during the Spring and Summer, needs some modification. As you say in your article, "years ago before cold storage was developed, the price of eggs was exceedingly low during the Summer and exceedingly high during the Winter. However, this helped the producer little as he had few, if any, to sell at the high prices." The situation at present, however, is much different for the producer in the East, particularly on the commercial poultry farm. He expects and receives as a rule fairly high production throughout the Fall and Winter. The development of cod liver oil, feeding better rations and better equipment, made possible earlier and earlier brooding until many poultrymen now get their pullets laying in July and August and are getting 50 to 70 percent or better throughout the Fall and early Winter months. This means that the commercial poultrymen in the East, as a whole, do have eggs to sell during the season of high prices and if prices warrant, they can easily manage so that they will have more eggs to sell at this time of the year.

However, they find now that as soon as prices begin to climb in the Fall, generally about September first, they begin to be faced with overwhelming competition of the so-called "fresh eggs" marketed under "Grade A" or "B", and which are actually storage eggs, many of them from the Pacific Coast or Middle West farms.

EDITORS' NOTE—It is still true, however, that

WE have yet to find the person either producer, dealer or official who is entirely satisfied with the present retail egg grades. Before changes are made it is important that all the conditions be known. We believe that the following statements are true and that they have an important bearing on the question of changes in the present grades.

1. The present law is not satisfactory.
2. It is possible that the present unsatisfactory condition may come from failure to enforce the law rather than from the law itself.
3. No appropriation was made to enforce the law when it was passed so officials can hardly be blamed for poor enforcement.
4. The old law requiring that cold storage eggs be marked was never enforced effectively.
5. Present unsatisfactory prices are resulting in part, at least from heavy cold storage holdings.

on the majority of New York State farms, poultry keeping is still a side line. On general farms the bulk of production still comes in the Spring.

A friend of mine happens to be District Sales Manager for a group of chain stores. In talking the matter over with him, I find that he has discontinued buying eggs from local poultrymen entirely, because he does not wish to sell unclassified eggs, and if he did, could not offer local producers a satisfactory price for their product to be sold under this classification. The condition would be greatly improved if stores could buy the

eggs from local producers and sell them under the proper grade, but this they are afraid to do. The above sales manager tells me, as a matter of fact, that very few candlers employed by stores are expert enough to grade eggs to suit the State Inspectors.

Another cause of complaint is that when an inspector finds eggs which he declares do not come up to the standard, he takes the offending carton of eggs away with him. The store then has no recourse. With commercial feeds a duplicate sample is always retained by the dealer or manufacturer. This duplicate sample is sealed by the State Inspector, who carries away the other sample. In case of any controversy over the ruling of the inspector, the dealer or manufacturer always has this duplicate sample to produce as evidence. The store however, has no duplicate and therefore, must submit to the inspectors ruling, regardless of what they may be. Under these conditions, naturally, the stores take no chances and therefore buy eggs which come all packed and graded. This means an ever-expanding market for the Pacific Coast producers with their elaborate organization for packing and marketing.

Whatever the benefits of the law may be, it seems to me personally that the people who are most benefited by it are the Pacific Coast producers.

Regardless of all that may be said about the law, one way or another, the fact remains that when you cross the line into Connecticut, you find better prices for eggs and a more cheerful

(Continued on Page 22)

Editorial Page of the American Agriculturist

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A Thought for the Week—

Gather the crumbs of happiness and they will make you a loaf of contentment.

He Loved Common Folks

IT is good that one day each year is set aside to honor the memory of America's greatest man, Abraham Lincoln. It is now sixty-eight years since the beginning of the tragedy of the Civil War, and with each added year the memory of the conflict fades further in the dimness and obscurity of the past. The number of those who took part grows rapidly and pathetically smaller. Even most of those who dimly remember the mighty struggle which took place when they were little children are now gone.

But the memory of Abraham Lincoln lives on and will continue to live while history is written. Why? Because in addition to abilities of mind possessed by few men, he had an understanding heart and loved the plain, common people as no great leader has loved before or since. So, naturally, we, the common people, will always love him. Read the letter to Mrs. Bixby on the next page and understand something of the kind heart of Lincoln. Seldom did he make a speech or write an article that he did not show his confidence in plain folks and his desire to help them.

Lincoln in his first inaugural address stated: "Why should there not be a patient confidence in the ultimate justice of the people? Is there any better or equal hope in the world?"

"You can fool some of the people all of the time," said Lincoln, "and all of the people some of the time, but you cannot fool all of the people all of the time."

And then in that imperishable piece of prose, the Gettysburg address, note again the emphasis upon "the people":

"That this nation, under God, shall have a new birth of freedom, and that government of the people, by the people, for the people, shall not perish from the earth."

What other man in all history, having gone through what Lincoln suffered from his enemies and even from the people themselves, could have written this:

"With malice toward none; with charity for all; with firmness in the right, as God gives us to see the right, let us strive on to finish the work we are in; to bind up the nation's wounds, to care for him who shall have borne the battle, and

for his widow and his orphan—to do all which may achieve and cherish a just and lasting peace among ourselves and with all nations."

Agans Should Be Appointed to Highway Commission

OUR New Jersey readers are much interested in what Governor Morgan Larson is going to do for the farmers of his state. In the election campaign, the Governor promised that he would give especial consideration to agriculture in general, and in particular that he would consider appointments of real farmers on the various New Jersey governmental boards and commissions. There are twelve of these commissions in all.

Farmers are especially interested in obtaining appointments on the State Highway Commission, the Board of Taxation, and the Board of Education. The next appointment which will come up is to fill a vacancy on the State Highway Commission.

The farmers of the state very much want to see the Honorable David Agans, master of the Grange, appointed to this position. AMERICAN AGRICULTURIST hopes that Governor Larson will appoint Senator Agans for we know of no farmer in New Jersey better able to represent the agricultural interests of his state nor one who is more sincerely determined to see that New Jersey farmers get a square deal.

We Are Opposed to Compulsory Contagious Abortion Campaign

MOVEMENT is on foot in New Jersey to inaugurate a compulsory campaign against contagious abortion. Contagious abortion is just about the worst scourge that attacks cattle. It causes millions of dollars' loss every year. The disease is spreading and it is hard to control. Nevertheless, in spite of all this, we are opposed to making the campaign or clean-up compulsory. The situation is different than it is with tuberculosis in cattle, for the general consuming public is insisting more and more on milk from tested cattle, even to the extent that the consumer is willing to pay his share of the indemnities for the cows that are condemned for TB. He would not be willing, in our opinion, to pay indemnities for cattle condemned for abortion.

More than this, the less we try to compel people to do things here in America and the more we try to show them through education and facts, the further we will get in the long run.

"As a Man Thinketh"

HEREDITY may determine a man's features; taste and income may decide what clothes he wears, but a man's thoughts determine what he really is.

Why do some men prosper while others plod along year after year just getting by? Some give the credit to a good financial start in life or to natural ability or training. In our opinion no one single factor has so much influence on a man's success as his thoughts.

In the first place, we need to have a certain amount of unrest or dissatisfaction, not the variety that makes those who come in contact with us miserable, but the kind that inquires into the causes of lack of progress and corrects them. Then we need to think in terms of progress. What chance has the man who believes that all success is the result of "pull", that every man's hand is against him and that opportunity always passes him by?

Not all of us can be famous or rich but in our opinion every man in this land of plenty can prosper in a small way. We all have a chance, we all have ability in varying degrees and we all have opportunities to get more training. A college degree is fine but not essential. Books, bulletins, farm papers, Farmers' Week, farm meet-

ings and personal contacts with neighbors are available to us all.

Let us:

1. Be moderately dissatisfied.
2. Think in terms of success.
3. Plan ahead.
4. Study our business.
5. Believe the world is getting better.
6. Increase our knowledge.

Hard work kills few people. Discouragement is far deadlier. Few things are more important to happiness than "getting ahead". Some maintain that it cannot be done on the farm under present conditions. Others are doing it.—H. L. C.

Here Is Where You Get the Farm News

WE ask you, where else but in the columns of AMERICAN AGRICULTURIST can you find the up-to-the-minute and full, clear discussions and explanations of the farm news that we have been giving you lately? In particular, we call the attention of farmers of New York State to this and other recent issues of AMERICAN AGRICULTURIST giving what is going on in Albany. Not in a long time, if ever, has there been such important news from the farmer's standpoint as is taking place in the present session of the State legislature, and this news is reported to you fully and promptly in these columns each week.

It is our determination that our readers shall have all of the facts inside and out on the different proposals that are now under consideration by the State government for the relief and adjustment of the farmers' school and road taxes and on other propositions that vitally affect the welfare of every farm family. We ask you to follow these articles closely and to feel free to write us your suggestions.

Want Something? Try A.A. Advertisers

NOW is the time of the year when farmers are especially interested in laying out plans for the coming season and in making arrangements for their supplies of fertilizers, feeds, seeds, machinery and all the other many supplies necessary to carry on the farm business. In this connection, may we suggest that you leaf over the pages of this issue of the AMERICAN AGRICULTURIST and see how the whole farm and home field—is covered by the advertisements as well as by the editorial matter. The advertising columns of any reputable paper or magazine are interesting and instructive, and this is especially true of the farm paper for the farmer who wants to keep up with the latest developments in his business.

AMERICAN AGRICULTURIST advertisements are guaranteed. We investigate every advertiser to be sure that those who go in are reliable and then we go further in safeguarding your interests by assuring you that if the advertiser does not make good, we will.

Therefore, why not keep our advertisers in mind and support them as well as the old reliable AMERICAN AGRICULTURIST itself when you are in need of something for the farm or home?

Eastman's Chestnut

"DEACON WHITE," said Parson Jackson softly, "will you lead us in prayer?" There was no answer. "Deacon White", this time a little louder—"will you lead?"

Still no response. Evidently the deacon was slumbering. Parson Jackson made a third appeal and raised his voice to a high pitch that succeeded in arousing the drowsy man.

"Deacon White, will you lead?"

The deacon, in bewilderment, rubbed his heavy eyes and blurted out: "Lead yourself—I just dealt!"

What Our Readers Are Thinking

Letters With Views from Hired Men to Farm Relief

REGARDING your article, "For Better Rural Fire Fighting", the first requisite, to be sure, is water. Will give you a plan that is to be inaugurated on this place as soon as an adequate supply of water can be stored.

There are small air-compressors made up, one cylinder gas engine and a tank on a small truck, possibly three feet in height and four to four foot six inches over all in length. They will whirl you a head of compressed air of nearly 100 pounds a minute.

If a syphon is made to go down into the water supply, a stream can be thrown with the force of the air the compressor generates. You need enough hose to reach all buildings, of course, with patent couplers.

The small compressors, are not expensive. Judging from their appearance, they should not cost over \$125.

When a frame house ignites, it is gone, unless there is water in sudden, copious quantities. The quickest fire department is for a man to go out and whirl an engine and let it "throw its mud". These compressors are built to drive rivets on small jobs. They always turn over.—J. J. M., *New York*.

* * *

How Long Should a Hired Man Work

HOW many hours is a year man supposed to work for a day's work on a farm? I have a friend who goes to work at five o'clock in the morning and it is seven or after when he gets through. He works until six o'clock and after sometimes at night, and then does chores. When he hired out, he was to have time to take care of his garden and be through his work by 6:30 at the latest, except in hay and harvest if they had a few loads out. He might have to work a little later sometimes, but it seems the longer he stays the worse it gets. They think it is hay and harvest all the time. He is docked for every minute lost time, and if he gets time to work in his garden it is after six o'clock.—W. S. M., *New York*.

* * *

Is This Man Right?

AFEW weeks ago Mr. Morgenthau had a piece in the *AMERICAN AGRICULTURIST* in regard to the government lending money to farmers at a low rate of interest which struck me as being one of the most essential things in starting and maintaining the reconstruction of the many now abandoned farms and giving new life to those still on the farm and burdened with heavy interest. Canada used this method to build up her northwest territories and I believe Australia is now undertaking the same policy. Why not America?

America can lend money to foreign nations at 2½ and 3 per cent. Why not to her dirt farmers, who are the backbone of our country? I am sure it would not be long before you would again see our rural districts thriving if reliable farmers could get a loan quickly at a low rate of interest and without a lot of expensive red tape as at present.

I hope the above may be one of many who favor a very low rate of interest for farmers.—C. W., *New York*.

* * *

More Milk in the Winter

IREAD your article on the way to get more milk, also the serious problem and cannot help but write you my feelings and opinion of the milk problem. Now my idea of how to get more milk is the same

as a Mr. Rosarco of Poland, who was an independent buyer. He offered a twenty-five cent premium to patrons who raised their November and December production over that in October. I myself produced more pounds of milk in December than in June. Now to change the breeding period of cows means something; a loss and shortage of milk while doing so, but if the League or Bordens or Sheffields or all, would say to the producers, "We will pay a premium to those who raise their November and December production over October or even December over November" and would guarantee it for a time to come they would get the milk.

"They are not paying one cent too much for June or any other month but they are not paying enough for December milk and they don't get it. One great trouble is we don't know what we will get for milk until we get our check and then it is too late to produce."—J. D. M., *New York*.

* * *

Says Farmers Trespass Also

IHAVE just finished reading your article, "The Farmer and the Trespass Problem", and must say I enjoyed reading it very much as I know the conditions to be exactly as you have stated.

I was born and raised on a farm and am still living on one, and I know that nearly all damages done to farmers' property in this section are done by their neighbors or their neighbors' children, and are blamed on the city sportsmen, when in fact all the city sportsmen that I have met here (and I have met quite a few) are much more considerate of the farmers' property than ninety-nine per cent of the country people.

I congratulate you on your broad views of the trespass problem.—R. R. C., *New York*.

* * *

Back to Old Times

IWAS glad to know that you learned who the author of "Sing Me A Song of the South" was through asking for the information in your truly great paper.

I have read *AMERICAN AGRICULTURIST* almost from the days when it was first started. I read about John Brown's home at North Elba, New York. Harper's Ferry is less than one hundred miles from York. This county claims to have sent the first armed soldiers to Washington in

1861, just as she sent the first soldiers to Boston, west and south of the Hudson in 1775. Last year we celebrated the sesquicentennial of the time that York was the capital of the nation. When Congress was driven out of Philadelphia by the British in 1787, those brave men met here for nine months. I wrote of those days in a local paper as follows:

Sing a song of Yorktown,
In the white rose land of Penn,
That entertained the Congress,
And all those mighty men
Who carved a nation from the wilderness
By throwing off the British yoke.
And now, behold, she has grown to be
A strong and sturdy oak.
So sing a song of Yorktown
In the white rose land of Penn.
Like a diamond in its setting,
She gleams like a rare old gem.

—V. K. F., *Pennsylvania*.

* * *

We Like to Make You Laugh

ITHOUGHT I would tell you that Mother enjoys your chestnuts immensely and looks for them the first thing.—Mrs. H. S., *New York*.

* * *

We Know These Conditions Are True

TODAY I have enjoyed hearing our new Governor express himself on rural taxation. It is very encouraging. We who have the interest of the rural people at heart should do all we can to see that some real relief comes from it. I am, therefore, going to make the suggestion that either you or Mr. Morgenthau send a man whose observations would be taken at full value by the Governor, into this territory to see and understand just what we are getting through the present tax system.

He could see the tremendous inequality and hardship caused by the lack of coordination between the two state offices of education and taxation. He would see the effect of the long term bonding system that has been saddled on to us through the improper functioning of these two departments.

He would also see the farms that are being taxed for more than their annual gross incomes, when they are entirely occupied and being forced into abandonment. It is this system that should receive the attention—a system that was established over one hundred years ago, which is entirely out of step with our present conditions.—M. L. S., *New York*.

* * *

Likes Van Wagenen's Stories

DEAR Mr. Van Wagenen: On reading your last article in the *AMERICAN AGRICULTURIST*, entitled "A Farmer Goes Vacationing", I could not resist writing you my appreciation of it. Both my wife and I and our forefathers were raised in this country of which you write. Your article rather took me back to the days of the old Farmers' Institute in the old Grange hall at Brushton. There was a rather large, fat boy with glasses sitting by his father, who took in every word you or Dean Cook uttered, and still remembers most of them. I think your comments on your lectures of that day far too modest, as many of them have stood the test of time. I find in my work today that I am using many fundamentals laid down by you and the dean in those days. Hope to read many more articles from your pen in the old reliable *AMERICAN AGRICULTURIST*.—R. W., *New Jersey*.

One of the Finest Letters Ever Written

Executive Mansion,
Washington, November 21, 1864.

To Mrs. Bixby, Boston, Mass.

Dear Madam:

I have been shown in the file of the War Department a statement of the Adjutant General of Massachusetts that you are the mother of five sons who have died gloriously on the field of battle. I feel how weak and fruitless must be any word of mine which should attempt to beguile you from the grief of a loss so overwhelming. But I cannot refrain from tendering you the consolation that may be found in the thanks of the republic they died to save. I pray that our Heavenly Father may assuage the anguish of your bereavement, and leave you only the cherished memory of the loved and lost, and the solemn pride that must be yours to have laid so costly a sacrifice upon the altar of freedom.

Yours very sincerely and respectfully,

A. LINCOLN.

To the Farmers of America:

DECREASING yields, poorer quality and later maturity are noticeable tendencies in field crop production in many sections of the United States.

These trends make for higher producing costs and increase the hazards of agriculture.

Many soils are losing their power to produce healthy, profitable crops. Loss of necessary soil constituents has caused this unfortunate condition.

A considerable portion of the available nitrogen, phosphorus and potassium necessary for large crop production has been shipped off in crops or carried away by erosion or other agencies active in tilled fields.

Soil lime losses are heavy and continuous. Lime shortage reduces the power of the soil to make available the plant food already in the soil, and to best utilize applied fertilizers. Lime makes soil alums insoluble and corrects soil acidity. Any fertile soil is filled with beneficial bacteria. Plants and soil bacteria require lime and the same foods. In case of a shortage the bacteria get theirs first and hold out on the plants. On certain crops—potatoes, for example—best grown in acid soils, the application of excess lime is detrimental. The quantity of lime should be decided by the state college or experiment station.

All of which means that in order to carry on a proud and profitable agriculture, these losses must be made good by materials brought in from the outside and placed within reach of the roots of the growing crop. Crops should be fed an ample balanced ration—the livestock method of feeding.

Properly made, correct-ratio fertilizers, liberally applied, increase yields and decrease growing costs. They improve quality and increase the feeding and sales value of the crop.

Liberal application is an important phase of successful plant feeding. Better amply fertilize a smaller acreage than half feed a larger.

Best quality fertilizers, properly used, return better than three dollars in crop value per dollar invested in plant food.

There is an appreciable difference in makes of fertilizers of the same analysis as to their ability to grow crops on varied soil types, their crop-producing power, and their influence on the time of maturity. There is also a great difference in their mechanical and chemical condition. Coarse, lumpy, sticky goods do not drill evenly and produce uneven growth.

Much money is wasted in preparing, shipping, hauling and applying fertilizers filled with filler. We are using the word "filler" in the sense of adding sand or similar "no good" substances to high-grade fertilizer ingredients merely to reduce the analysis of the finished fertilizer from what it would be were sand not added.

All of these factors have had full consideration in the preparation of Armour's Higher Analysis "Big Crop" Fertilizers for spring application. They are manufactured under the most careful scientific direction and control. They are so made as to give a quick, vigorous, ample, early growth of stalk or vine while moisture conditions are good, and then turn to the main business—the growing and quick maturing of a well-fed crop. In the corn belt their use has shortened the time between planting and silking from two to three weeks; under cotton, between seeding and blossoming, fully two weeks, decreasing frost and other weather risks.

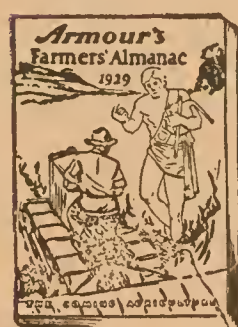
Armour's Higher Analysis "Big Crop" Fertilizers are filler free; are in fine mechanical condition, dry, friable, drillable; are made from the highest grade plant food materials. There is more plant food in each bag; there is less freight to pay on each pound of plant food; less handling and a cheaper plant food cost on the farm than with the lower, slower "horse and buggy" grades of fertilizer.

Charles H. MacDowell
President

Armour Fertilizer Works
Chicago, U. S. A.

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A.A.'s Western New York Farm and Home Talk

We Break Even on Stored Cabbage

SOUTHERN cabbage was coming

By M. C. BURRITT

more attention will be given to health.

in strong by the last of January, Texas shipping 60 cars on January 30 and Florida 52. It has been coming since early December but as the crop was



M. C. Burritt

late, northern growers were able to get off most of their crop before southern shipments became heavy. This is fortunate because the southern cabbage acreage is nearly 25 per cent greater than last year and the crop prospect nearly 30 per cent larger. Northern cabbage holdings were only 6,795 cars on January 1st as compared with 16,897 cars in 1928. The price which was held up well all through the storage season has now fallen from the high point of \$45.00 per ton F.O.B. to about \$38.00.

Returns Not High for Storing Cabbage

Where there have been no material losses from storing cabbage this year the gains have not been great. In fact cabbage sold out of the field at \$30.00 last fall made the grower more money than stored cabbage. Our average net F.O.B. price for Danish cabbage sold from the field was \$29.12 and for that sold from storage was \$36.34. We sold some from the field as high as \$31.50 bulk and out of storage as high as \$44.00 per ton sacked. But shrinkage on stored cabbage was 17.3 per cent or \$6.10 per ton on the tonnage sold. It cost \$1.68 per ton to trim and load over the cost of handling in the fall and storage (\$3.00 per ton) amounted to \$3.62 per ton shipped. This total of \$11.40 per ton cost of storage, as compared with the \$7.22 advance in price showed a loss of \$4.18 per ton on stored cabbage if the entire crop could have been sold and moved at harvest at the average price received for what we did sell. This could not have been done, however, as the prevailing net F.O.B. price during most of the period of harvest was about \$25.00 per ton. We therefore consider that we just about broke even by storing.

Topworking Undesirable Varieties

In accordance with what seems to me to be good policy we have been grafting over odd and poor apple varieties during the past two or three years. In all we have probably grafted about 60 trees all to Rhode Island Greening. Some of these already have good tops and are about ready to yield a crop. The pruning of grafted trees is important. In grafting of course we never take off all the top at once, leaving one or two small branches on each grafted limb to help take up growth and to afford some shade. These branches we take off gradually in two to three years according to growth, a part each year, so as to regulate growth of scions, prevent too rapid growth and secure a balanced top.

We always put in about double the number of scions necessary and then thin them out, as a good top is more certain this way and warrants the little increased cost. It is important not to retain too many scions, however, because this makes for a thin, high top. Careful watching and good judgment are required to get a real good, balanced top.

Tax paying time brings up this unpleasant subject again, in general it is probably doubtful if we shall ever have materially lower taxes. State, county and town taxes go mainly for education, highways, health and regulatory matters. The chances are that we shall have more and better schools, more and

It is hardly thinkable that we shall have less regulation as population grows. All this means more, not less, taxes and wisely expended they will make our country a better place in which to live.

A question which is very important to us countrymen, however, is the distribution of taxes. Farm property being in sight has all been taxed. We are just beginning to realize, too, that perhaps a majority of our children educated in the country, later go to live in the cities and that city people—there are twice as many of them—use our country roads more than we do ourselves. This being true, those who get the benefit of the schools and who have the use of roads should pay and in proportion as they receive. If this principle is applied it will mean a shift of a part of the tax burden from the farms to the cities—taxes should follow earning power. It seems probable now that some progress in this respect will be made at Albany this winter with particular reference to schools and highways.

Winter Sports

Skiing is a winter sport that ought to be more popular in the country than it is. It belongs with sliding down hill and skating. And yet there is comparatively little of it. Even in this level country where hills are relatively scarce, our children have great sport with the skis, by driving a horse ahead to pull them. Spills are frequent but that only adds to the fun. And occasional evening skiing parties on a neighborhood hill are good substitutes for the old sleigh ride parties which are now almost a thing of the past.

Delays Pruning Till Late Winter

I WOULD make one suggestion about "When to Trim Apple Trees" after reading your short article in a recent issue of American Agriculturist.

As you say, pruning can be done any time during dormant season, but if done in fall or early winter rain water sometimes enters between bark and wood and subsequent freezing causes the bark to be thrown off causing death of the tree. I have had such experience with early pruning. Weather conditions are not always the same. Sometimes no harm is noticeable. After the hard winter freezing is past and until trees are in bloom, I have found is the best time in this locality. Cuttings quickly heal.

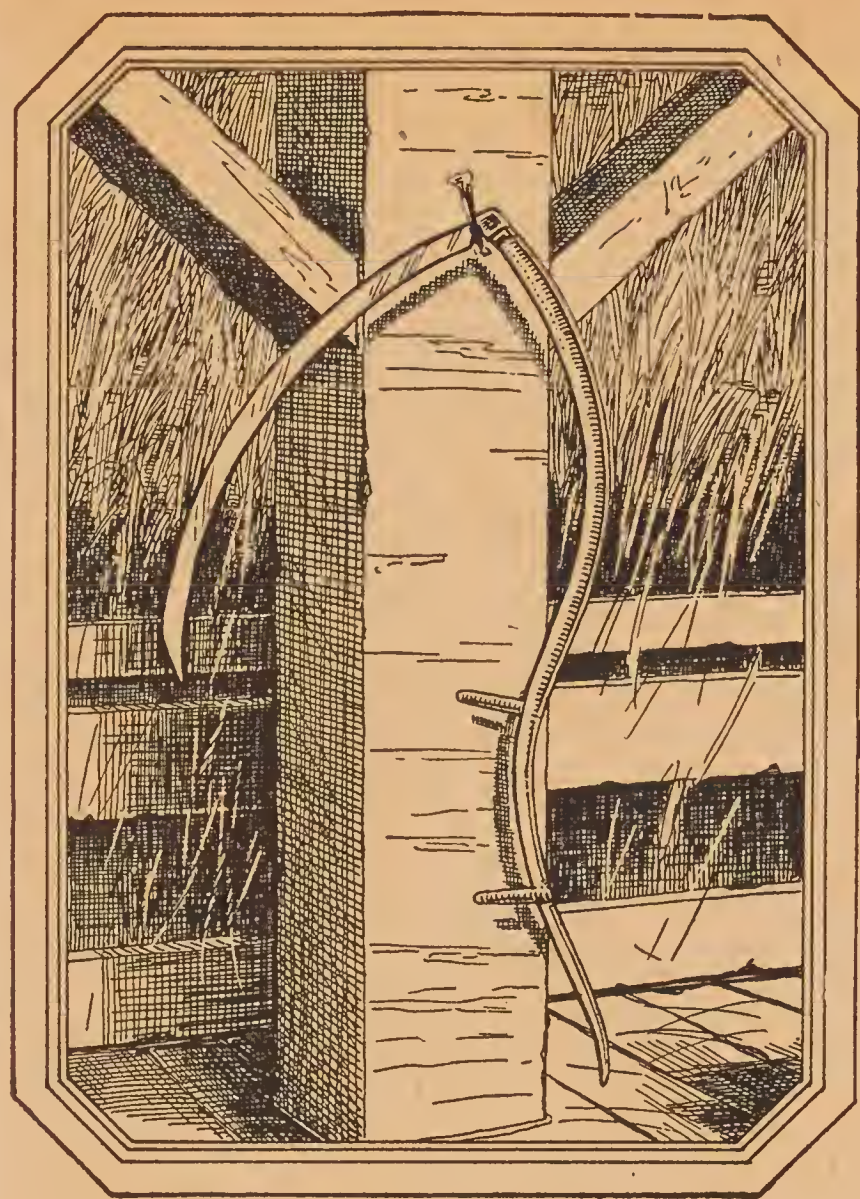
Your caution about pruning too much is good. Under no condition allow any dead wood to remain on the tree. Dead wood seems to draw on the tree's vitality. Trees sometimes have a tendency to grow too much wood and not fruit. This condition I correct by reducing the top some during August. Then the tree does not produce so much strength for next year's growth and has a tendency to produce fruit. The above is my experience after nearly 70 years of pruning and grafting.—J. H. P., New York.

57 Varieties of Apples

An apple tree growing on the farm of J. Cole Alpaugh, Califon, Hunterdon County, will soon rank with the 57 variety firm. On this one tree are 53 varieties of apples, and last year 28 of them produced fruit of very high quality.

This is explained by the fact that the owner, Mr. Alpaugh, has for a number of years grafted new varieties on this one tree. With the result that last year he picked the 28 varieties of fruit. This tree is somewhat of a pet with Mr. Alpaugh and as he is a very successful fruit grower he has taken to the grafting as a hobby.

It is reported that it is now almost possible to pick fruit every week in the year from this particular tree.



The scythe . . . the old oaken bucket . . . the brick oven . . . oxen . . . home mixed fertilizer . . . home grown seeds . . . all were familiar on the farms of the land. And all have gone their way. They have passed . . . not because they were not good, but because something better has been found to replace them.

The Old Order passeth . . . *in scythes and in feeds*

AS WITH the scythe, so it is with the mixed feed. Years ago, before the present discoveries regarding animal nutrition had been made, the farmer could approximate with a home-mixed feed the results obtainable by a commercial feed. But that was long ago.

Science and rigid economy have since entered the picture. The nutritional discoveries that have been made in the laboratory have been proven on the experimental farms. The mixing of feeds to the new, better, proven formulae is now a highly specialized business. Individual feeders could not possibly afford to enter upon the tremendous research necessary to the creation of a feed that goes after profits in a scientific manner.

Many of the ingredients essential to such a complete ration are practically unobtainable at dealers. Substitutions would have to be made that might do actual harm. Then, the home mixer can never hope to build a feed that is uniform. The different ingredients will vary in quality from time to time. This variation the manufacturer controls by careful buying and careful testing.

The manufacturer has the benefit of an immense buying power, and can command the choicest ingredients at the lowest prices. His machinery is up-to-date and efficient, carefully blending the various feeds with a minimum of labor. The home mixer has not these advantages, and must pay a good deal for labor—either his own or that of his helpers.

That is why the commercial feed yields profits far in excess of its moderate cost. The greater profits coming from maximum health, production and breeding efficiency are the supreme justification of commercial feeds based upon laboratory research and continual testing.

To be sure of profit-making feeds—look for a Park & Pollard Dealer!

The Park & Pollard Co

Boston, Mass. — Buffalo, N. Y.

POULTRY FEEDS

Lay or Bust Dry Mash
Red Ribbon Scratch
Growing Feed
Intermediate Chick Feed
P & P Chick Scratch
P & P Chick Starter

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Overall 24%
Milk-Maid 24%
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Milkade Calf Meal

OTHER FEEDS

P & P Stock Feed
Bison Stock Feed
Go-Tu-It Pig and Hog Ration
Pigeon Feed
P & P Horse Feed
Pocahontas Table Corn Meal

Grow More Dollars on your APPLE TREES

TO produce a profitable crop, apple trees must be well fed. A tree fed with plenty of nitrogen is a healthy, vigorous tree. Fruit production and tree vigor go hand in hand.

Chilean Nitrate of Soda is the quick-acting nitrogen fertilizer for apple trees. It helps set a heavier crop. Aids bud formation the following year.

Chilean Nitrate grows firm, large, juicy apples. Flavor is improved. Yield is greatly increased—sometimes threefold. Your crop ships better and brings top price on the market.

Chilean Nitrate of Soda is the standard nitrogen fertilizer, used by successful growers for 50 years. It is the natural product, not artificial. Easy to handle. It is highly soluble—available to your trees as soon as you apply it.

FOR OFF-YEAR TREES

Several varieties of apple trees have a tendency to bear only in alternate years. Horticulturists have found that this is frequently due to a deficiency of nitrogen. Chilean Nitrate helps to correct this tendency and restore trees to regular bearing.

FREE—New Fertilizer Book

"Profitable Apple Orchards." Sent free on request. Ask for Book No. 5. Write the office nearest to you or tear out this ad and mail with your name and address on the margin.

Chilean Nitrate of Soda

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57 William Street New York, N. Y.

In writing please refer to ad No. F-18

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PEACH TREES

Elberta, Hale, Rochester, Yel. St. John, 3 to 4 ft., 20c each; 2 to 3 1/2 ft., 15c each; \$10.00 per 100.

CONCORD GRAPE VINES

1 yr., 10c each, \$5.00 per 100
2 yrs., 15c each, \$8.00 per 100

HARDY HYDRANGEA BUSHES

2 to 3 feet..... 25c each
Many other items at special prices. All stock offered strictly first-class, fresh dug and guaranteed absolutely true to name. Catalog free.

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Biggest and best of late Strawberries. Has sold at \$1. a quart. Heavy yielder; perfect flower. A big money-maker. Write for FREE catalog of Berry Fruits, also Trees, Shrubs, etc. L. J. Farmer, Box 241, Pulaski, N. Y.

Grow Better Fruit

This lead seal of the Massachusetts Fruit Growers' Association certifies that the Kelly trees you buy are true-to-name. It remains on the tree until it fruits. You take no chances.

Write for 1929 Catalog and price list. We have no agents—you deal direct.

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Certified
True to Name Fruit Trees

GROW YOUR OWN STRAWBERRIES



Big delicious berries, 80 days after planting. Plenty berries all summer and fall. Another big crop next year. New lower prices.

MASTODON is the big winner for home or market. Special Get Acquainted Offer.

25 MASTODON	\$ 1.00
50 MASTODON	1.75
100 MASTODON	2.50
200 MASTODON	4.75
500 MASTODON	8.00
1000 MASTODON	15.00

OUR BIG 20TH CENTURY CATALOG MAILED ON REQUEST. Fully describes our big stock of Strawberry, Raspberry, Blackberry, Grape Vines, Asparagus, Flowering Bulbs, Vegetable Plants, etc. Everything sold at wholesale prices, direct to growers. You will be delighted, a postal will bring it.

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OLD RELIABLE NURSERIES
30 Vine St., Salisbury, Md.

An Important School Bill

To Help Schools of Less Than Five Teachers

LAST week we explained how the Webb-Rice rural school bill, now in the legislature, would, if passed, aid the one-room schools and help to reduce the local school taxes. Let us repeat again the main provisions of this important proposed legislation. In brief, the Webb-Rice bill as it stands now, without amendment, provides \$1500 annually with which to run the local one-room district school. Of this amount, the local district would raise a four-mill tax on its true or actual valuation, and the State would pay all of the rest of the difference between what is raised by the four-mill tax locally and the \$1500. The bill also provides that no one-room school district will receive less than it does now.

If put into effect, this school bill will do more to relieve local taxes than any other legislation that has been passed in a generation. For example, suppose the true or actual valuation in your district is \$60,000. Your district would raise an annual tax of four mills on this

we said above, it places the small graded school on a basis of financial equality with the larger schools.

Let us see how it would actually work out. Suppose you have a small village district employing two teachers with a full valuation of \$200,000. Under the proposed bill this district would receive from the State \$1,400 for each teacher, or \$2,800, less, however, 60 cents a thousand for each thousand of full valuation. As this district has \$200,000, 60 cents a thousand would make \$120. Subtract this from the \$2,800, and you have \$2,680 of State aid.

However, the law provides that every one of the districts must raise locally at least a five-mill tax. Five mills on the \$200,000 valuation would give \$1,000 to be raised in that district locally, which, with the \$2,680 received from the State, gives a total for the school expenses for the year of \$3,680.

If however, the district should spend less than this amount of \$3,680, it

THE OPERATION OF THE PROPOSED BILL (1929) IN THE APPORTIONMENT OF STATE AID TO TWO, THREE AND FOUR TEACHER DISTRICTS

	Full Valuation	Total Expenditure	State Aid (1928-29)	Average Daily Attendance	Number of Teachers Employed	Estimated Amount the District Could Receive Under Proposed Bill	Estimated Amount to be Apportioned
Case 1—	\$998,976	\$6,277.10	\$2,133.40	93	3	\$4,519.10	\$2,133.40
Case 2—	549,384	5,803.37	2,576.95	62	3	3,433.57	3,056.46
Case 3—	310,920	4,683.02	1,434.30	38	2	2,613.45	2,613.45
Case 4—	594,103	3,368.91	1,436.00	28	2	2,443.54	1,436.00
Case 5—	125,065	2,826.49	1,441.00	31	2	2,724.96	2,201.49

valuation, or \$240. The State would pay all the rest of the \$1500, or \$1260. We see no place where there can be any controversy on this proposed legislation. It should have the enthusiastic support of everybody who is interested in the welfare of country children and in the reduction of rural taxes.

Now we wish to call attention to a companion bill also introduced by J. Griswold Webb in the Senate and Irving F. Rice in the Assembly which would help the small graded schools employing two, three and four teachers. Not all of the school tax problem is confined to the one-room district school. Those living in districts or small villages trying to maintain good grade schools with more than one teacher have been having a hard struggle to pay the taxes for the support of these schools. In fact, the tax rate in many such districts is just as much out of proportion to what it should be as it is in many of the one-teacher districts.

So it was felt by members in the legislature interested in rural education that when the one-room school was taken care of by more State aid it was equally necessary to pass another bill to help the small graded schools.

This second bill would amend the Education Law to make an appropriation for the benefit of the schools employing two, three and four teachers. The present law provides for certain apportionments and State financial aid for districts maintaining a high school department and for other districts employing not less than five elementary teachers. This new bill places the two, three and four teacher districts on the same basis of State support now used in apportioning State funds to districts employing five or more teachers. If the bill is passed, each district will receive the sum of \$1400 less 60 cents on each thousand of full valuation for each elementary school teacher employed during the next school year and this sum will be increased to \$1500 less 60 cents on each thousand of full valuation for the school year of 1930 and thereafter, provided that much is expended for school purposes in addition to a five mill tax on full valuation which the district must raise.

The number of elementary teachers, however, for which the State makes these appropriations must be based on the average daily attendance.

The bill itself repeats much of the old law and is rather difficult to understand, but summed up, and to repeat again for the sake of emphasis what

would lessen the amount that it receives from the State.

We give on this page a little table showing how the proposed bill would work out in a few cases in present districts where there are two, three and four teachers.

The bill provides for an appropriation of \$1,500,000 for making these additional appropriations to the smaller schools. The other Webb-Rice bill for the relief of the one-teacher schools makes an appropriation of \$4,500,000, or such part thereof as may be needed to carry out its provisions.

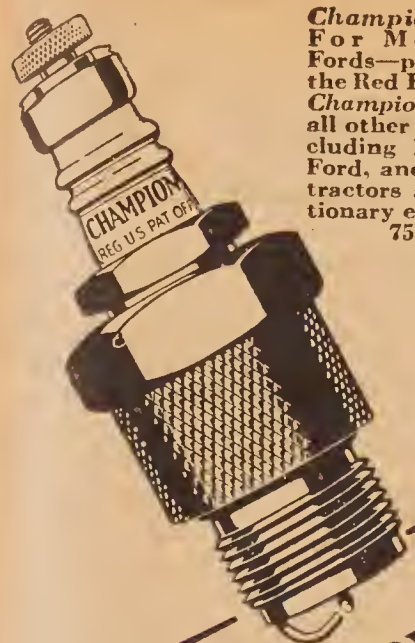
Both of these bills may be amended to lessen somewhat these appropriations, but it seems now that they are likely to be passed in some form, for they have the support of Governor Roosevelt's Advisory Commission, all the farm organizations of the State, the Education Department, and AMERICAN AGRICULTURIST.

For many years now AMERICAN AGRICULTURIST has been working with other constructive individuals and organizations to help our people to improve their schools and at the same time to reduce the burden of local school taxes. It has been a hard fight. We have been opposed at times by those who misunderstood what we were trying to do, because they had been misinformed by those who had other axes to grind instead of the best interests of rural school children and taxpayers at heart. But the opposition from well-informed country people has ceased as they have understood better and better the real goals and ideals that we were after.

Results of the constructive efforts that have been made on the school problem are now beginning to show. The Nine Million Dollar Cole School Bill, giving more aid to the poorer districts of the State, is now working and these districts are receiving this aid. The Central Rural School Act, a purely voluntary plan giving those districts that wish it the privilege of consolidating their districts but not necessarily their one-room schools, is also working. There are now over fifty central school districts in New York State.

Owing to the larger aid received by these central districts from the State, each of them is able to maintain a high school and instruction for all of the children above the sixth grade in the district, and at the same time maintain the one-room school for the little children up to the sixth grade if it so desires. (Continued on Page 21)

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FRUIT GROWER

N. Y. Horticultural Society Meets at Poughkeepsie

THE eastern meeting of the New York State Horticultural Society at Poughkeepsie during the past week was marked by good attendance and decided interest in the program. Many problems of vital interest to the welfare of the fruit growing industry were discussed and growers departed for their homes with expressions that the annual gathering had been helpful in many ways.

Judging by the reactions of the audience, which at all of the three day sessions filled the Vassar Institute, the chief interest was in the remarks of President Paul Judson of Kinderhook, on the suggestion that unclassified apples be barred from the large markets; in a discussion of pollination by Prof. L. H. MacDaniels and a review of orchard soil management by Prof. Joseph Oskamp, both of the State College of Agriculture, Cornell University. The barrage of questions on these subjects indicated quite definitely that growers considered them of paramount interest.

Resolution Favors Control of Unclassified Apples

President Judson in his opening address asked the society to give consideration to some means by which unclassified apples might be barred from the markets, where they are a detriment to the best sales of fruit of the good grades. Later in the meeting the resolutions committee headed by K. B. Lewis, presented a resolution placing the society on record as favoring such control. After spirited debate the resolution was tabled. Expression indicated that growers are not ready for such a move.

Mr. Judson also called attention to the fact that New England apple growers have successfully won the Boston market from Western competition. He said that a few years ago most of the apples shipped into this market were from the West, but New England growers by packing good varieties in attractive packages, generally of one style, have practically been able to dominate their market. "New England growers have shown the way; what they have done New York growers can do", Mr. Judson said.

The Problem of Pollination

Prof. MacDaniels spoke on "Some Apple Varieties That Have Proved Good Pollinizers" and discussed the whole range of pollinizing problems. Evident interest quickly indicated that many of those present are facing such problems and the speaker was able to answer numerous questions. His observations of the pollinizing values of certain varieties and of the work of bees were presented in effective manner.

Lessons of past years in cultivation of orchards formed the basis of Prof. Oskamp's talk. On one point he was emphatic: That the soil is a controlling factor in successful production of good apples. He said that where proper drainage was impossible or the soil unsuited to growing apples it would be better to take drastic steps, even to pulling out the orchard. He advised early cultivation where it is practical, but where it is not permissible, said that it would be better to put the orchard in sod and rely upon fertilizers. The tendency to change from the intensive cultivation of past years to modified cultivation or to sod was reflected in questions, indicating that growers want information on the crop results and lowered costs.

Apple Packing Improves

H. S. Duncan of the state-federal inspection service said that New York growers are packing a better pack of apples, but that there are more viola-

(Continued on Page 13)

Back of the Formulas —the COLLEGES

Back of the Mixed Fertilizers —the G. L. F.

THE same farmer-controlled policies, purchasing power, manufacturing experience, financial resources, and genius for building distribution that have made the G. L. F. a powerful factor in the field of farm supplies, are applied to G. L. F. Fertilizer Service.

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for field and garden vegetables and corn

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an all-around fertilizer for canning crops, vegetables, and grains

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for Spring grain crops

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for potatoes, where large amounts of potash are needed

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for potatoes on Long Island and in New Jersey

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for cabbage, beans, and Spring grains

10-10-10
for heavy applications of plant food on potatoes

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FIRST PRIZE—AGAIN



Mr. de Jong's prize winning cauliflower at the Convention of the Vegetable Growers' Assn. of America, South Bend, Ind., Sept. 10-15, 1928.

for
Mr. de Jong's

CAULIFLOWER

BLUE ribbon cauliflower is getting to be an old story for Mr. Klaas de Jong, of East Kildonan, Manitoba. His cauliflower has won again at the Convention of the Vegetable Growers' Association, held this year at South Bend, Indiana. The Cauliflower Champion uses Sulphate of Ammonia, of course. The prize

heads were cut from the field on which he used Sulphate of Ammonia at the rate of 200 lbs. to the acre.

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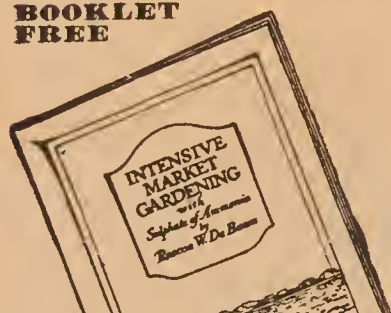
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With the A.A. Vegetable Grower



New York's Premier Potato Growers

FOR the first time in history, New York has awarded signal honors to some of its most successful potato growers. At an overflow banquet held at the Hotel Utica, Utica, N. Y., on January 22nd, the Empire State Potato Club designated the following as Premier Potato Growers for 1928:

Edward T. Reeves	Lysander
L. T. Dunn & Son	West Henrietta
Earl Coye	Cohocton
A. G. Allen	Waterville
W. G. Miller & Son	Pittsford
Porter & Bonney	Elba
George C. Schoen	Pittsford
L. A. Toan	Perry
E. A. Weeks	Locke
Lee Edmonds	Cohocton
L. W. Sheldon & Son	Fulton

J. M. Hurley, Agriculturist for the O. & W. R. R., and well known among the potato growers of the state, presented each of these men with gold watch charms, each bearing on the front a potato tuber surrounded by the words, "Empire State Potato Club."

These awards were well earned on the basis of a growers' contest in which low cost of production per bushel, high yield of U. S. No. 1 grade potatoes and high total yield per acre were taken into consideration. Detailed cost of production records and cultural reports were required, these being analyzed by a committee on awards who determined the final ratings.

Fifty per cent of this rating was allotted to cost of production per bushel. Of the 26 growers submitting complete records, the cost per bushel ranged from 33 to 76 cents. Bearing in mind that these growers represent a select group, the importance of studying cost and efficiency factors is especially evident when one considers that this year's prices have averaged below 60 cents at shipping point. Thousands of potato growers who know very little about actual cost of production are admittedly less efficient than this group and are, therefore, marketing potatoes this year at less than cost of production.

Quality Also Considered

Forty per cent of the final rating of these men was allotted to yield of U. S. No. 1 grade potatoes. These yields ranged from 203 to 374 bushels per acre. Low market quality constitutes one of the most serious problems confronting the potato grower in New York. Many times large yields are obtained at relatively high cost while the resulting crop can be sold only at a discount because of poor quality. With these select growers the percentage of total yield which proved to be marketable ranged from 65 to 99. These percentages were determined by inspection of a five-bushel field-run sample made by a member of the Shipping Point Inspection staff of the State Department of Agriculture and Markets. Cuts and bruises proved to be distinctly more common than any other of the several defects listed. Wireworm injury and potato scab were also prominent. Rough handling of potatoes is a wholly inexcusable and avoidable market defect and one which this growers' contest is likely to demonstrate as worthy the serious consideration of growers generally.

High Yield Not Most Important

Finally, ten per cent of the rating given these Premier Growers was allotted to total yield per acre. Right here it should be said that this is not a 300 bushel potato club. This in spite of the fact that the eleven Premier Growers averaged considerably higher total yields and lower cost than did their less successful competitors. Ten of the eleven Premier Growers obtained over 300 bushels per acre, the range being from 285 to 397.

The Empire State Potato Club, as an

organization affiliated with the New York State Vegetable Growers' Association, held its annual meeting at Utica on January 22-23 at the completion of its first year. Plans are already under way to strengthen the organization and to continue the Premier Potato Growers' project. The Club is at present the only state-wide organization open to all interested in the industry at an annual membership fee of \$1.00. Membership does not require participation in the Premier Growers' contest. The Club does, however, hope to sponsor two of the essential requirements for successful potato production under present economic conditions; namely, lower cost of production and better market quality. Surely this project merits the best support of the producers and consumers alike. Its objectives are worthy, while its methods of honoring its most successful exponents are not unlike those recently evolved in the Master Farmer idea.

Fertilizer For Lettuce and Cabbage

Will you kindly advise me as to what time I should sow lettuce in order that I might set in open about March; also what kind would you advise and what grade of fertilizer would you use where the ground was manured in fall and plowed under. I also have a lot of early cabbage plants that I intend to transplant in cold frames and when they freeze up good I will cover with leaves until the weather opens and then take the leaves off and get them ready for setting in the field. What do you think of it as this is new to me. I would also like your advice on what kind of commercial fertilizer you would use in order to get early cabbage. The ground is dark loose loam, grown good corn and I expect to give it a coat of lime before setting out cabbage. I also would like to know what kind of fertilizer you would advise to use on second early tomatoes. The land is loose, dark, stony loam. Would you advise liming for tomatoes.—P. O. L., Pennsylvania.

I SHOULD sow lettuce seed in hot-beds or greenhouse six or eight weeks before you would be ready to set it outdoors. I do not imagine you could put it out in your climate very much before the last of March. The usual variety of leaf lettuce is Grand Rapids which grows very well and is much frilled and makes a nice appearance. For quality, Black Seeded Simpson is better, but a good deal would depend on what your market prefers. For an early head lettuce, I would use May King and it would be worth while to try Salamander and Black Seeded Tennisball.

If your land has been pretty heavily manured year after year you may not have to use commercial fertilizer. If, however, you have only applied 10 or 15 tons and it has not had much before, I should use commercial fertilizer of about the 1-2-1 ratio; that is, a 4-8-4 or a 5-10-5. Not very much work has been done for fertilizer requirement for lettuce on upland and an experience may show that some other combination may serve you better. I should fertilize the cabbage in about the same way.

Some Danger of Going to Seed

I think likely you will get along all right with the wintered cabbage plants, although there is more danger of their running to seed than if you start them in a little greenhouse or a hotbed about eight weeks before you set them outdoors. If you expect to raise some early vegetables, it would be very well worth while for you to have a little greenhouse. W. B. Nissley, the Extension Specialist in Vegetable Gardening at the Pennsylvania State College, State College, Penna., can supply you with blue prints for a sash house which will not cost over \$100 to build, making



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use of your own help and nearby materials.

If your land is pretty rich your tomatoes would likely do very well with superphosphate (acid phosphate) alone, applying perhaps 1200 pounds per acre. If the soil is not in such good fertility, I should use 1000 to 1600 pounds of a 5-10-5 or even a 4-12-4. Liming does not seem to be particularly beneficial for tomatoes. Write to the Pennsylvania State College, State College, Penna., for their recent bulletins on fertilizers for vegetables.—P. W.

Asparagus Tops Add Humus

THE New Jersey Experiment Station is advising asparagus growers not to burn the old top growth in the fall as it has considerable value in maintaining a humus content of the soil. Recent experiments conducted in that station during the past year show that the brush has a value of \$50.00 an acre from a humus standpoint. It has been estimated that the brush is equivalent to ten tons of stable manure to the acre. It is a common practice among certain growers to disc the dead brush into the ground late in the fall. On farms where the brush has made an especially heavy growth, it is advised to break the growth down with a heavy roller on a plank drag. If this operation is performed on a frosty morning, the brush is crumbled into the very small particles and requires but little discing. The late discing of asparagus fields also kills clumps of weeds or grass that might otherwise live over into the spring.

How to Store Vegetables

STORAGE offers advantages to both the home and commercial gardener. To the former it increases his garden efficiency by a period of three or four months. To the commercial man, storage is a means of increasing his business to a considerable extent. He is able to hold over, past the period of glutted markets in the fall, large amounts of many crops which he can dispose of profitably throughout the winter. Further than this he can maintain a contact with his customers throughout the year and he has his revenue more evenly distributed through these sales.

Storage Principles.

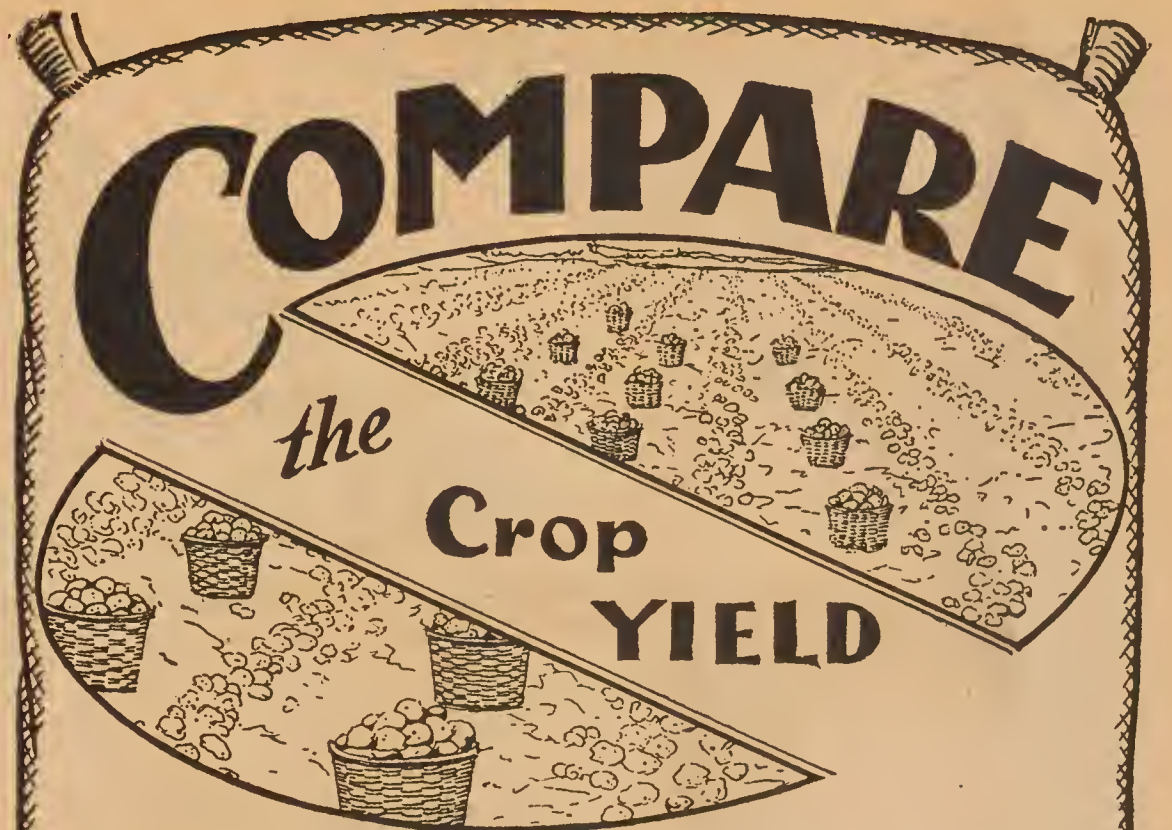
1. A good quality, sound, not over-ripe product free from disease or mechanical injury is necessary.
2. The proper temperature and moisture requirements for the particular product to be maintained uniformly at all times.
3. Release of stagnant air and the circulation of fresh air—proper ventilation.

Crop Requirements

1. Low temperature and fairly moist atmosphere. Temperature 31 degrees F. to 35 degrees F. Beets, carrots, cabbage and cauliflower (medium moisture), celery, horse radish, leek, parsnip, potato, salsify, turnips.
2. Low temperature and a dry atmosphere. Temperature 32 degrees F. to 35 degrees F. Onions, garlic.
3. High temperature and a dry atmosphere. Temperature 48 degrees F. to 56 degrees F. Peppers (medium dry), pumpkins, squash, sweet potatoes.

For the home gardener a part of the dwelling house cellar, partitioned off and provided with a means of fresh air ventilation is probably the most satisfactory storage room. The market gardener may make use of this form of storage, of special cellars, of above-ground storage buildings or of outside storage pits built in well-drained locations.

The root crops and cabbage can be stored in cellars or pits. The above ground storage is suited to such crops as onions, cauliflower and celery. The root crops, when stored in small quantities, are kept in good condition by packing in slightly moist sand. Celery, with the roots on, is packed around the bottom with moist soil. Cabbage may be lifted, roots left on and planted again in soil in the cellar. An attic or spare room is useful for storing squash and pumpkins.—Ontario Dept. of Agriculture.



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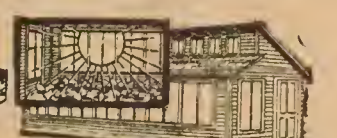
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return it and you will refund my money with-
out question.

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Town.....State.....

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Keeps baby chicks warm and healthy indoors. Prevents rickets (weak legs) diseases and deaths. Gives hens June sunshine full of egg-making Ultra-Violet Rays, all winter long, while prices are high. Makes plants grow much stronger and faster when used in place of glass on hot beds. Transforms porch into a warm dry, sunlit health-room in which to work, read, rest—or ideal children's winter playroom. Saves fuel and doctor bills. Approved by thousands of users and all leading authorities. Just cut with shears and nail on ordinary window frames. Lasts for years.

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With the A.A.
Crop Grower



Hardy Red Clover Strains

I AM of the opinion that few of us fully realize the value of common red clover. We are all having many failures in getting a seeding to catch and when we do get a stand it is often lost by winter-killing. What are the reasons for these failures? This is just what I wish to know, so I am going to give the subject a little airing to see if some other readers have any suggestions along this line or have been doing some selecting and breeding work on certain hardy strains.

We all read that we must sow only hardy northern grown seed but northern grown seed does not seem to remedy most of the failures. If we are in the alfalfa section and are intending to sow alfalfa we don't stop with northern grown seed, but have learned that there are certain hardy strains such as Canadian variegated or Grimm. Now when we get northern grown seed from these strains and use proper seeding methods we usually get alfalfa. However, a large part of the country is not adapted to alfalfa and with many rotations the red clover fits in better.

A Crop from Four Quarts Per Acre

I am going to relate a few observations I have made. Several years ago a man from one of our near western states came to Cortland, N. Y., wishing to buy a farm. After looking around a bit he finally purchased one of our hill farms 8 or 9 miles from this city. I might say here that Cortland has the highest altitude of any city in the state. The farm was all dry land but so run out that no grass was growing except a little white fuzz, called by most of us moonshine.

This man proceeded to plow up part of the farm and plant it to our common cultivated crops. The following spring he gave the land a little lime and seeded it to red clover in spring-sowed grain. This is a common practice here. However, he only used 4 quarts per acre, while many of us are using from 6 to 10. The following year such a stand of red clover came as I have seldom seen. It stood just as thick as hair on a dog and every stalk had a large red blossom the size of a walnut. What a fine aftercrop he had in the fall too. Each year since his red clover has looked the same, including 1928. His success does not seem to be any special method he is following and I know it is not because of rich soil. He says it is the strain of clover he is using.

A Fine Stand of Clover

I persuaded him to get me some of this seed which I sowed in the spring of 1928 alongside of some other hardy seed secured from northern Montana. At present it is too early for me to

brag much but I must say I have just as fine a stand of clover as I ever had or ever have seen.

Several other neighbors are also testing out this seed and if it winters successfully, as I think it will, it seems to me that some one who has an eye for the seed business should take hold of this strain and propagate it for commercial purposes. Growers of clover seed might just as well produce a strain which is hardy and adapted to our northern conditions as to be passing us such stuff as we are now getting.

Only once in my twenty-five years of farming have I ever had such clover as this man is growing. This time my crop looked just as I have described his. Come on, boys, and tell what you know about good clover seed. Let's get this "better seed" ball to rolling. I sure have had enough of the stuff now on the market even if it is northern grown and a seed staining law is in effect. From the looks of most of the clover around the country I think you are in the same boat.

I am a firm believer in strains of good seed. I believe this man's success is in his strain and not in some hidden method. If this is so it would seem that here is one of the largest openings in developing good hardy clover of any line to help agriculture today.

Cabbage Strain Has Been Improved

I have had twenty years experience in cabbage development work and know such work is possible. Ten years ago I tackled the job of improving a strain of red cabbage. To start with the very best I could make this strain yield was eight or nine tons per acre. In 1927 from two acres I cut forty tons of market cabbage. I have not written this article because I am boosting some strain of clover or red cabbage as I have seed of neither for sale. Clover is one of our most important agricultural crops and I am sure it is worthy of much more attention than it is receiving.

Next fall I will try and get time to tell how this strain came out and in the meantime can't we have some other reports?

Seed Treatment for Corn Smut

Is there any cure for corn smut? We seem to be troubled quite a bit by this disease and so far have been unable to control it.

THE Illinois Experiment Station recently tried out the effect of dusting seed with chemical dust. This was mixed with dry shell seed corn at the

(Continued on Opposite Page)



COLLEGE STUDENT—What is the meaning of this outrage, Father? This last thousand-dollar check was returned stamped "Insufficient Funds."
—JUDGE.



What Your Cows pay!

How big are your cream checks? While breeds of cows and methods of feeding are the most important factors that determine the amount of profits that come from your butterfat, there are other considerations too, that will add to or subtract from your cream checks. These considerations are the ways in which you care for your fresh cream, how you cool it and the utensils you use for straining, handling and delivering. Any expert will tell you that it pays to have the very best of dairy equipment, good pails, strainers, cans, etc., as well as proper cooling equipment and a milking machine if you have cows enough. Check up your dairy equipment and if there are things that need replacing or additional equipment is required, come to a "Farm Service" Hardware Store where your money goes further in quality buying and the things you get are always dependable. You will find one of our stores near you.

Your "Farm Service" Hardware Men



(Continued from Opposite Page)
rate of two ounces a bushel. In a test, seed that was known to be diseased yielded 47.5 bushels when not treated and 59.5 bushels after it was treated.

Storing Endive

Can you give me information about endive. I would like to know when to dig it and how to store it for the winter. Is it a good plan to bleach it before it is removed from the garden.—C. E. P., New York.

YOU do not indicate whether you are growing the ordinary endive or the Witloof Chicory. If the former, it ought to be tied up and blanched. I do not believe that you could keep it very long without putting it in cold storage, and then probably only for a few weeks. If you have in mind the Witloof Chicory or French Endive, I would suggest that you write to the American Produce Grower of 53 West Jackson Blvd., Chicago, Ill., for a copy of their September, 1927, issue which contains a good article on this subject. If you do not succeed in getting this, let me hear from you again.—P. Work.

Testing Cabbage For Blackleg Paid

THE New Jersey State College reports an interesting case to prove the value of treating cabbage seed for blackleg.

A grower had only enough plants to set a half acre so he bought enough plants to set an equal area. These purchased plants were grown from untreated seed. Although the two areas were handled exactly alike, the half acre grown from treated seed produced a good crop and the other half acre produced practically nothing. The loss was estimated as approximately \$2,400.

N. Y. Horticultural Society Meets at Poughkeepsie

(Continued from Page 9)

tions of the grading law in the Hudson River section than in Western New York. A commercial exhibit of packages selected at random from storages attracted many to the exhibition at the armory. These packages, minus names of packers, were opened to ascertain how they conformed to the grading laws. Mr. Duncan reported an improvement of more than 100 per cent over last year.

The armory was filled to capacity with an interesting variety of exhibits and many growers took advantage of the opportunity to contract for their year's supplies.

The banquet on Thursday evening was well attended and enjoyed. Henry Morgenthau, Jr., was present and was called upon to explain the recommendations of Governor Roosevelt's Agricultural Advisory Commission. After a brief explanation, he answered questions from those present, who were very much interested in the various plans for farm relief.

Growers May Visit Virginia

Particular interest was manifest in plans for a trip of New York fruit growers to the Cumberland-Shenandoah section next summer. Last summer about 25 Western New York growers under the leadership of President M. C. Burritt of Hilton, went to Virginia at the invitation of Governor Harry F. Byrd. Their experience proved so valuable that wide sentiment has grown for a larger delegation this year. Officers of the society look for a delegation of up to 200, from present reports.

Plans for the tour will be worked out by a committee to be headed by Mr. Burritt. Assisting will be Roger C. Coombs, assistant county agent in Monroe; Ralph Palmer, Orleans county agent; Leo A. Muckle, Niagara county agent, and E. E. Frame, assistant county agent in Wayne. In the eastern section President Judson will take charge of arrangements, assisted by E. S. Shepard, Dutchess County agent, and A. B. Buckholtz, Columbia County agent. Secretary Roy P. McPherson, of LeRoy, will work with the two groups.



200,000,000 bushels lost each year to grain diseases

This new seed treatment will **SAVE** your share

EVERY year, seed diseases steal 200,000,000 bushels of grain from American farmers. Many seed-borne organisms rob them of millions of dollars, in fields and at market.

After years of research, here and abroad, chemists of the Bayer-Semesan Company have developed a new and amazing dust disinfectant for seed, by which grain diseases may be effectively controlled and our staggering losses reduced.

The name of this new disinfectant is Du Bay Ceresan. Use it to control 9 important diseases of grains:

WHEAT—Bunt or stinking smut, and seed-borne flag smut.

OATS—Both loose and covered smut.

BARLEY—Stripe disease and covered smut and loose smut in certain six-row winter varieties.

SORGHUM—Kernel smuts.

RYE—Seed-borne stem smut.

Although Du Bay Ceresan is new, it has been tested for two years by many authorities, including state agricultural colleges, experiment stations and U. S. Dept. of Agriculture. Dr. Benjamin Koehler, of the Illinois Station, recently released the statement that Ceresan gave perfect control of oats smut and a yield increase of two times that obtained with formaldehyde.

Ceresan also gave first satisfactory control of barley stripe.

Ceresan does not clog the drill or rust metal parts. Cheaply and easily applied. Harmless to seed.

Diseases of many other crops can be controlled with Du Bay Seed Disinfectants. Mail the coupon below for information, or ask your seedsman, druggist, hardware dealer or general merchant for pamphlets on Semesan Jr., the dust disinfectant for seed corn; Semesan Bel, the instantaneous potato dip, and Semesan for vegetable and flower seed and bulbs. Bayer-Semesan Co., Inc., 105 Hudson St., New York, N. Y. Successors to Seed Disinfectants Divisions of The Bayer Company and E. I. du Pont de Nemours & Company.



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With the A. A.
DAIRYMAN



Holstein Association Will Recognize Proven Sires

LAST June the Holstein-Friesian Association at its annual convention in Milwaukee gave authorization to a special committee to work out a plan for recognition of proven sires and classification of Holstein herds. The plan was worked out by the committee and adopted by the Board of Directors at its meeting on December 19 and will be put into operation by Superintendent Norton as soon as possible. The inspectors who have been appointed by the Board are as follows: T. E. Elder of Massachusetts; Ward Stevens of New York; Clair I. Miller of Ohio; H. H. Kildee of Iowa; J. B. Fitch of Kansas; W. S. Moscrip of Minnesota; R. J.

A Correction

IN our Dairy Department of the February 2nd issue, in the last paragraph of the article on the Chicago milk strike, we made the statement as follows:

"The sympathy of American Agriculturist, of course, is with the DAIRYMEN, although we doubt whether the large amount of violence used in this strike in the actual dumping of milk helped their cause any."

In telephoning the article over long distance wire to our plant, a misunderstanding occurred so that the article read:

"The sympathy of American Agriculturist, of course, is with the DEALERS * * *"

Of course, this was a mistake, and just the opposite of what we meant.

Schaefer of Wisconsin; F. W. Atkeson of Idaho, and Frank L. Morris of California.

The plan as worked out is entirely voluntary on the part of the breeder and is intended to help him in culling his herd and in recognizing the superiority of certain individuals in the herd as well as providing recognition for those sires that demonstrate ability through production of their daughters. The Superintendent of Advanced Registry has general supervision over the inspection and classification of these herds under the following rules and regulations:

Animals must be registered in the Holstein-Friesian Herd Book to be eligible for inspection and classification.

Females shall be eligible for inspection and classification at any time after first freshening.

Males shall be eligible for inspection and classification at any time after reaching the age of two years.

Animals shall be classified in five main groups as follows:

"Excellent" (Animals which, in the judgment of the inspector, would be entitled to a score of 85 points or more according to the official scale of points.)

"Very Good" (Animals which, in the judgment of the inspector, would be entitled to a score of 75 points but less than 85 points according to the official scale of points.)

"Good" (Animals which, in the judgment of the inspector, would be entitled to a score of 67.5 points but less than 75 points according to the official scale of points.)

"Fair" (Animals which, in the judgment of the inspector, would be entitled to a score of 60 points but less than 67.5 points according to the official scale of points.)

"Poor" (Animals which, in the judgment of the inspector, would be entitled to a score of less than 60 points according to the official scale of points.)

Inspection and classification may be

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THE Universal Milker has the perfect teat cup. It combines a gentle massaging action of the teat with low-vacuum suction — just like the calf! It's easy on the cow—she gives down her milk freely to this teat cup. That's why cows like to be milked with the Universal. One size cup fits any normal size teat. Easy to take apart for cleaning the soft rubber liner.

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Because of its perfect, air-tight, water-tight and frost repelling construction, the Unadilla preserves every pound of green corn or other silage put into it. The valuable juices are retained and there is never any risk of mouldy silage.

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made only by inspectors appointed by the Superintendent of Advanced Registry from the list of Official Inspectors, but no inspector shall inspect or classify cattle of which he has charge or in which he has any pecuniary interest whatsoever. Inspections shall be made at convenient intervals and inspectors routed so as to reach all herds in a given territory where inspection is desired, in so far as may be practical.

Herd Inspection and Classification

Applications for herd inspection and classification shall be made on regular forms furnished by the Superintendent of Advanced Registry and shall include name and address of owner and location of herd and name and number, sex and date of birth of all animals eligible for inspection in the herd.

Applicant shall agree to surrender Certificates of Registry for all animals classified as "Poor" to the inspector, such certificates to be forwarded to the Secretary's office for cancellation.

Applicant shall further agree not to offer for registration any male calves from any of his cows past four years of age which may be classified as "Fair" and to turn over Certificates of Registry for such cows to the inspector to be sent to the Secretary's office for endorsement as follows: "Male calves from this cow not eligible for registry."

Fees amounting to \$1.50 per head for each animal to be inspected shall accompany the application for herd inspection, provided that the minimum total fee shall be \$10.00.

Classifications shall be recorded in the Advanced Registry office and a certificate shall be issued showing name and address of owner of herd and name, number, sex and classification of each inspected animal in the herd.

Recognition of Preferred Sires

Applications for inspection of the daughters of certain sires shall be made on regular forms furnished by the Superintendent of Advanced Registry and shall include name, and address of owner, location of herd and name and number of sire whose daughters are to be inspected and the total number of such daughters in the herd.

Inspectors shall be supplied with lists, furnished by the Secretary, showing all daughters of such sires which are eligible for inspection, together with names and addresses of owners.

At least six daughters must be available for inspection.

The fee for inspection of the daughters of a sire shall be \$15.00 and shall be sent in with the applications to the Superintendent of Advanced Registry.

Inspections made as a basis for recognition of sires shall include all available daughters of the sire in question, which must be not less than six daughters which have freshened and the dams of such daughters in so far as they may be available.

Bulls, which, in the judgment of the inspectors, are entitled to recognition as preferred sires, shall be designated as Bronze Medal Preferred Sires or Silver Medal Preferred Sires.

A Bronze Medal Preferred Sire shall be one whose prepotency for the improvement of the breed is demonstrated by his daughters, particularly in comparison with their dams.

A Silver Medal Preferred Sire shall be one which demonstrates through his daughters a very striking prepotency for the improvement of the breed.

Certificates for Preferred Sires shall give name and address of owner and the name and number of the sire and his designation as a Bronze Medal Preferred Sire or a Silver Medal Preferred Sire, together with a list of his inspected daughters with their respective classifications. A fee of \$5.00 shall be charged for each Preferred Sire Certificate.

Proven Sires

Whenever 50% of the daughters of a Silver Medal Preferred Sire that have completed tests in the Ten-Months or Yearly Division of the Advanced Register shall have qualified with productions exceeding age requirements by 50%, or if tested for Herd Improvement Registry and exceeding age requirements in the

(Continued on Page 18)

\$420

EXTRA IN TEN MONTHS

Long time production records on 57,462 average herd cows show Cow Chow made 7 cents extra profit per cow per day. In a herd of 20, through an ordinary lactation period, *this is an extra net profit of \$420!*

The figures tell the story in no uncertain manner. Here they are in detail:

	COW CHOW	OTHER FEEDS
Milk per cow per day	25.89 lbs.	22.75 lbs.
Value @ 3¢ per lb.	\$.77	\$.68
Cost per cwt. of feed	\$2.68	\$2.37
Profit over feed cost		
per cow per day	\$.52	\$.45
Extra profit with Cow Chow		
Chow	\$.07	

These records are still coming from hundreds of milk producers, all over the country. They are telling Purina field men their costs, no matter what feed they may be using. Adding these up and averaging them, we have the most astonishing and most valuable feeding information ever placed before American dairymen.

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Write today for free trial bottle—convince yourself at our expense.

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Reviewing the Latest Eastern Markets

Milk Prices

The following are the February prices for milk in the basic zone of 201-210 miles from New York City.

Dairymen's League prices are based on milk testing 3.5%. Sheffield on the basis of 3%.

Class	Dairymen's League	Sheffield Producers
1 Fluid Milk...	3.37	3.17
2 Fluid Cream		2.30
2A Fluid Cream	2.46	
2B Cond. Milk..		
Soft Cheese..	2.71	2.30
3 Evap. Cond. Milk Powder		
Hard Cheese	2.50	
4 Butter and American cheese. Based on New York City Market quotations on butter and American cheese.		

The Class 1 League price for February 1928 was \$3.37 for 3.5% milk and Sheffield's \$3.27 for 3%.

The above prices in each class are not the final prices the farmer receives. The final price received from the dealer is the result of the weighted average.

Butter in Up and Down Market

CREAMERY	Feb. 6	Jan. 30	Feb. 8, 1928
SALTED			
Higher than extra....	50 -50 1/2	50 1/2-51	47 1/2-48
Extra (92sc).....	49 1/2-	50	47 -
84-91 score.....	45 1/2-49	45 -49 1/2	41 1/2-46 1/2
Lower Grades.....	-45	44 -45	40 -41

The butter market has been an up and down affair since our last report. By Saturday, Feb. 2, the market had gained sufficient strength to warrant a half cent increase on creamery extras. Apparently this strained the situation somewhat for by Monday, Feb. 4, the condition of the market was slightly unsettled, with the result that prices slipped back to 50c on extras. At the same time posted receipts were not heavy and street stocks were at a comparatively low level. There was no indication at that time of full supplies. As the week passed, however, the uncertainty in the market gradually developed, and it became increasingly difficult for the receivers to maintain previous price levels. The market became extremely sensitive to any minor changes in sentiment. Moderate arrivals were posted for Wednesday and the feeling was fairly steady. However, when Wednesday rolled around supplies ran heavier than expected with the result that receivers began to show some anxiety lest they be compelled to carry over heavy stocks. The buyers were quick to sense the situation and it was not long before prices slipped another half cent at which time the buying element was again quick to take the advantage and considerable butter changed hands.

At this writing the market seems fairly steady, more so than yesterday. The lower grades of butter have been moving with as much freedom as the more choice lines. At the same time there has been a free movement of storage butter out of the refrigerators. In contrast to the movement of butter a few weeks ago general consumption seems to be more satisfactory.

The holdings in the four largest cities

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Oldest Live Poultry house in New York City. Established 1883, offers you an unlimited outlet for your live poultry. Write for shipping tags and free holiday calendar folder K 27.
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SERVICE BUREAU OF AMERICAN AGRICULTURIST,
461 Fourth Ave., New York City

on February 1, were reported at 10,010,788 pounds compared with 13,346,251 pounds on February 1, 1928. From January 25 to February 1, these cities reduced their cold storage holdings 2,135,452 pounds compared with 1,418,521 pounds, the reduction during the same period last year in these same cities.

Cheese Trend Unchanged

STATE	Feb. 6	Jan. 30	Feb. 8, 1928
FLATS			
Fresh Fancy	24 -25	24 -25	24 1/2-25
Fresh Average.....			
Held Fancy	27 1/2-29	27 1/2-29	29 -29 1/2
Held Average			

Last week we expressed the opinion that the fresh cheese market was showing so much weakness that we would not be surprised to see a further price reduction. We are glad to say that there has been sufficient business at the above quoted rates to warrant the official agencies naming them as the level of the market. However, on February 6, fresh state flats are selling

Market Reports Daily by Radio

Up-to-the minute market information and prices are broadcast daily for your benefit by American Agriculturist co-operating with the New York State and Federal Departments of Agriculture, through station WEAf. The reports are broadcast at 12:30 standard time.

slowly and some strictly fresh are available at 24c. In order to bring 25c cheese has got to show a little curing. As a consequence the market is actually hardly up to the level that the quotations would indicate. It is indeed unfortunate that these conditions should exist, but there is too much cheese available to enable the market to hold up.

Well cured New York State flats, on the other hand, are well supported there being a very satisfactory demand for those lines. Pet marks bring 28 1/2 to 29c while average fancy bring from 27 1/2 to 28c. Short held goods generally are quoted at 25 to 25 1/2.

The out-of-storage movement during the last week in January fell slightly behind the same period a year ago. From January 24 to 31, 564,000 pounds came out of storage in the ten largest cities making daily reports. Whereas during the same period a year ago 611,000 pounds came out. On January 31 there were 14,547,000 pounds of cheese on hand compared with 10,355,000 pounds a year ago.

Uncertainty Hurts Egg Market

	Feb. 6	Jan. 30	Feb. 8, 1928
NEARBY WHITE			
Hen'y Sel. Extras....	42-43	46-47	42 -43
Hen'y Av'ge Extras....	41-	45-	40 -41
Extra Firsts.....	40-	43-44	39 -39 1/2
Firsts	39-	41-42	38 -38 1/2
Undergrades		-40	
Pullets	37-	38-40	
Pewees			
NEARBY BROWNS			
Hennery	44-45	47-48	40 -43
Gathered	39-43 1/2	39-46	38 1/2-39

The uncertainty of the immediate outlook is doing more to hurt the egg market these days than any other factor, with the possible exception of the extremely burdensome supplies that we are receiving from the Pacific Coast. These far western eggs have cramped the market for nearbys to a marked degree. Naturally at this time of the year receivers are anxious to keep their floors fairly clear, to avoid any burdensome accumulations. The Pacific Coast producers have been sending more eggs to New York than the trade readily absorbed. This flood has backed up into the market on nearbys with the result that values all along the line have been reduced to effect more satisfactory outlets. Obviously this has undermined any confidence that the market might have shown heretofore. At the same time another disturbing element has entered the trade to add to the uncertainty of the situation. It is reported that conditions in the west are not favorable for much of any increase in the lay. The northwest reports colder weather.

The Chicago market has advanced above a par with the lower prices ruling here, therefore, the outlook becomes very uncertain. If some of the eggs destined for New York are diverted to Chicago this will relieve the heavy influx here and possibly give us a chance to get a breath. Certainly the egg market needs something.

Live Poultry Holds Steady

	Feb. 6	Jan. 30	Feb. 8, 1928
FOWLS			
Colored	-32	30-31	28-29
Leghorn	-31	30-31	27-28
CHICKENS			
Colored	29-31	26-28	26-35
Leghorn	29-31	26-28	26-30
BROILERS			
Colored		33-40	42-45
Leghorn		33-37	40-42
CAPONS			
TURKEYS			
DUCKS, Nearby	-28	-28	29-33
GEES	20-22	20-30	25-32

As a whole the live poultry market can be called a fairly steady affair. Comparatively few fowls have been arriving by express, and they have been selling well. Express chickens have been short of the demand, although staggy stock is not doing so well. Broilers are rather unsettled at the moment and we omit quotations. In general trading is at the same level as a week ago although a few receivers are holding fancy Rocks at 42c with no takers. Leghorn broilers are showing a slightly easier trend, their supply being on the increase.

Potatoes a Shade Easier

STATE	Feb. 6	Jan. 30	Feb. 8, 1928
150 lb. sack ..	1.75-2.00	1.85-2.00	
Bulk, 180 lbs.	2.00-2.25	2.00-2.25	
MAINE			
150 lb. sack ..	2.00-2.35	2.00-2.35	3.25-3.60
Bulk, 180 lbs.	2.25-2.60	2.35-2.65	4.00-4.25
PENNA.			
150 lb. sack ..			
No. 1	2.00-2.25	2.00-2.25	
Bulk, 180 lbs.			
LONG ISLAND			
150 lb. sack ..			
No. 1	2.50-2.75	2.50-2.75	4.00-4.25
Bulk, 180 lbs.	2.75-3.10	2.75-3.10	4.50-4.90

The potato market is just a shade off compared with a week ago. Sentiment is a little easier on Long Islands. Maines in bulk have slipped and States are not quite as strong as they were in our last report. This situation may change however, before very long for we are experiencing some heavy weather and this may stimulate the market.

Feeds and Grains

FUTURES	Feb. 6	Jan. 30	Feb. 4, 1928
(At Chicago)			
Wheat (Mar.)	1.24 3/4	1.24 3/8	1.29 1/4
Corn (Mar.) .....	.96 3/4	.97 3/8	.91 3/4
Oats (Mar.) .....	.52 1/4	.53 1/8	.55
CASH GRAINS			
(At New York)			
Wheat, No. 2 Red		1.62 3/4	
Corn, No. 2 Yel.		1.16 3/4	
Oats, No. 2 .....		.63 1/2	
FEEDS			
(At Buffalo)			
Grade Oats	39.50	39.50	36.50
Spring Bran	33.50	34.00	36.00
Hard Bran	36.00	37.00	38.00
Standard Mids	32.00	33.00	36.00
Soft W. Mids	41.00	42.00	44.00
Flour Mids	37.00	38.00	39.00
Red Dog	40.50	41.00	40.50
Wh. Hominy	40.00	40.50	38.50
Yel. Hominy	40.00	40.50	38.00
Corn Meal	41.50	41.00	47.00
Gluten Feed			
Gluten Meal			
36% C. S. Meal	46.00	47.00	
41% C. S. Meal	50.50	51.00	51.00
43% C. S. Meal	52.50	53.50	53.50
34% O. P. Linseed Meal	57.50	58.00	51.00

The above quotations are those of the local Buffalo market and are F. O. B. They are reported in the weekly letter of the N. Y. State Department of Agriculture and Markets.

Meats and Live Stock

Live calves (vealers) are a little lower than last week, the best generally bringing \$19 although a few choice have been reported at \$19.50. Others selling anywhere from \$12 up depending on size and condition.

Live lambs are a shade easier, the best bringing \$17.25, but only the best. Most of the tops have brought \$16.50, others selling down to \$10 for culls and commons. The steer market is lower but steady. The best generally bring \$12.75 although occasionally we hear of a sale at \$13.

Bulls are a little higher, a few good ones have brought \$10. Others range

down to \$7.50 for common stock.

Cows are unchanged, a few bringing \$8.25, others ranging down to \$4.

Hog prices have improved, 85 to 110 pounds, \$9.25 to \$10; 130 to 160 pounds, \$10 to \$10.25; 165 to 220 pounds \$10.25 to \$10.75.

Country dressed veal has moved in sympathy with live stock, top prices easing off a cent.

Hothouse lambs are doing better, the best bringing from \$14.50 to \$15 which is about a \$2 increase.

Rabbits continue firm at 23 to 28c.

No Change in Hay

There is not much to report on the hay market for the situation remains the same as it was last week. There is a good demand for No. 1 timothy which is scarce. Medium and lower grades are moving slowly, No. 2 timothy ranging from \$23 to \$25; No. 3, \$19 to \$21; sample, \$14 to \$16. Timothy containing light mixtures of grass or clover generally brings \$24 to \$25 for No. 1; \$20 to \$22 for No. 2 and \$16 to \$18 for No. 3.

Bean Market Holds Firm

The bean market remains the same as was reported last week. Trade is rather quiet but as a whole the situation remains steady. Marrows are still from \$10 to \$12.50 depending on size and quality. Peas hold steady at \$10.50 to \$11, which by the way is just a shade better than last week, and red kidneys are unchanged from \$8.25 to \$8.75.

Dairy Imports Increasing

THE tariff commission, which has just completed its milk and cream investigations, found that imports of milk had increased from 1,520,000 gallons, valued at \$342,000, to 7,366,000 gallons, valued at \$1,225,000 in 1926. Imports of cream had increased from 704,000 gallons valued at \$737,000, to 5,374,000 gallons valued at \$8,051,000. Nearly all of the milk and cream was received in the Boston, New York and Philadelphia milk sheds, and crowded out of these markets an equal quantity of milk produced on this side of the line that was made into cheese and butter. It therefore had a depressing effect on the entire dairy industry.

Miscellaneous Bulletins on Farm Engineering

New York State College of Agriculture, Ithaca, N. Y.

- E 57—Soldering
- E 72—Transmission of Power by Pulleys, Belts and Shafts
- E 94—Fitting the Farm Saws
- E 108—The Farm Shop and Tool Equipment
- E 51—The Farm Water Supply
- E 145—The Farm Water Supply (Part 2)

Harness Repairing

Bulletins on Concrete

New York State College of Agriculture, Ithaca, N. Y.

- E 140—The Construction of Concrete Floors for Dairy Stables
- U. S. Department of Agriculture, Washington, D. C.
- F 1279—Concrete for Farm Use
- F 1480—Small Concrete Construction

Portland Cement Association—New York City

This association publishes a number of valuable bulletins on concrete as well as blue prints and plans.

Toe picking in chicks may be caused by a lack of some essential in the ration or to an overcrowded condition in the brooder house. Provide a well-balanced ration with plenty of protein and get the chicks out of doors. Smearing the toes and bleeding parts with coal tar is an effective treatment.

Farm News from New York and Pennsylvania

Governor Roosevelt's Agricultural Advisory Committee Makes Report

To Honorable Franklin D. Roosevelt:

The following members of your Agricultural Advisory Commission met on January 30th and continued in session until noon on January 31st: Commissioner Berne A. Pyrke, Senator Seabury C. Mastick, Assemblyman Walter L. Pratt, Senator Leigh G. Kirkland, Assemblyman D. P. Witter, Mr. M. S. Holliday, Miss Martha Van Rensselaer, Mrs. Edward Young, Mr. C. R. White, Mr. Fred Sexauer, Mr. E. E. Boisseau, Mr. John Fallon, Mr. Henry Talmadge, Mr. I. D. Carr, Mr. M. C. Burritt, J. R. Stevenson and Henry Morgenthau, Jr.

We gave careful consideration to the question of the unequal tax burden as it affects the one-room, one-teacher schools and also the two, three and four-teacher schools.

Your commission felt that the burden of taxation for the support of these schools was in many instances decidedly unequal and unfair. We found the school tax rates in one-room, one teacher districts, of which there are 7350 in the state, to range from less than one dollar per thousand of true valuation to as high as \$24.00 per thousand. In two, three and four teacher schools the range was less than one dollar per thousand to more than \$25.00 per thousand.

In considering this problem, Commissioner Mark Graves, representing the Tax Department, Commissioner Frank P. Graves and Ernest E. Cole, representing the Department of Education, and Dr. G. F. Warren, representing the College of Agriculture, gave us invaluable information and advice based on years of experience in this field.

Your commission, after careful deliberation, came to the conclusion that the principles as laid down in the Webb-Rice bills (Senate 70 and 71) would greatly help to remedy the inequalities of taxes for the schools in the rural districts. These bills provide for a uniform tax in the one-room districts of four mills (\$4.00 per thousand of actual valuation) and guarantees to such districts a school of acceptable standard, with the assurance that the state will pay the difference between the four-mill tax and the standard of \$1500 as stated in the bill. For instance, a school district having an actual valuation of taxable property of \$100,000 (and there are 3500 districts having a \$100,000 valuation or less) would under these bills raise a tax of four hundred dollars and the state would give such a district the difference, or \$1100.

Under existing conditions rural schools are actually discriminated

against and are not given the same measure of support as are the school districts (usually in larger communities and cities) employing five teachers or more. The Webb-Rice bills simply carry the principles of the so-called Friedsam Act for school districts employing five teachers or more to one, two, three and four teacher districts and establish a consistent policy of the State in that regard.

Your commission feels very strongly that there is a decided need for tax equalization not only for the rural schools but also, but not less so, for the highways as pointed out in our previous report.

Your commission has under consideration the question of rights of way, snow removal and distribution of moneys for maintenance of town roads.

Your commission continues of the opinion that there is no justification for making direct application of any part of the proceeds of a gas tax to any purpose other than the construction, reconstruction and maintenance of highways and bridges.

A sub-committee will meet next Thursday, February 7, at ten o'clock to further consider the question of rights of way, snow removal and maintenance of town highways.

Your commission has adjourned to meet again on Thursday, February twenty-first at 9:30 A. M.

Respectfully submitted,
Henry Morgenthau, Jr.
Chairman.

January 31, 1929.

New York County Notes

Saratoga County—The farmers have filled a number of their ice houses during the past week from the ice ponds of Frank Bean and Robinson Brothers. Each year more are having their ice trucked. Some are waiting for the ice in the Hudson River to get thicker. We are having beautiful days with just enough snow to draw wood across fields easily. The epidemic is passing on with only a few deaths reported in this section, but few families escaped illness. The ones who have been ill are not getting wood and logs cut or work done as quickly and will have more hurry later. The snow plow has not been needed yet.—Mrs. L. W. P.

Washington County—Dairymen are now filling their ice houses with a fine quality of ice. A large number of people are having the grippe. The retail price of milk in Cambridge has been reduced from 14 cents to 12 cents per quart delivered. Eggs are 35 cents to 40 cents per dozen. There is no market for potatoes. Walter Perry is cutting logs and prepar-

are carriers of poultry cholera. Dr. Frank Hare, pathologist of the Delaware State Board of Agriculture, is performing the tests to discover if the disease can be carried from poultry flocks to other flocks through the medium of rabbits.

A post mortem performed on a rabbit brought in from a farm showed that it had the cholera. The laboratory prepared a culture and injected it into two chickens which since then have developed the cholera symptoms. A recheck is being made and attempts are to be performed to isolate the cholera germ if possible. It developed that the rabbit was found dead on a farm where cholera is known to have existed for some time in a mild form.

Further announcements are to be made just as soon as the test is completed and the germ isolated.

Pedestrians to Carry Lights

Under the terms of a bill now before the Delaware legislature, it will be compulsory for all pedestrians walking along the highways at night to carry a light. Such a measure has been approved by the Kent County Pomona Grange. This requirement would apply only to state highways and not to county and township roads. In asking for such a law, the grangers recognize the fact that too many pedestrians are killed by automobile drivers who fail to see the foot traffic until it is too late to avoid an accident.

ing to build a barn in the spring.—H. C. C.

Oswego County—We have had a mild winter and no ice cut yet. We have had all kinds of weather with very sudden and extreme changes on January 18th. A number of roofs were blown off. We have not had much snow and cars run every day. Every season has its problems to solve and it is tax time now. It is a real problem with potatoes at 50 cents per bushel. Oswego county has 47 incorporated companies of which the taxes amount to \$244,641. Prices are: carrots \$1.50 a bushel, onions \$2.00 to \$2.50 a bushel, eggs 40 cents to 50 cents a dozen. A neighbor is getting 400 eggs a day. Dairies are doing well and cows are selling at \$100 to \$125. No hay moving to speak of. On February 2nd you should have half your wood and half your hay.—J. S. M.

In Western New York

Clinton County—Here in the Champlain Valley we have had fine weather so far this winter. Very little snow and the roads are open every day which is something unusual here in the North country. However, February and March may give us plenty of winter yet. The annual ice harvest is now on from the lake and ponds. There is considerable hay being baled and shipped and prices, while better than last year, are still low.—R. J. M.

Sullivan County—Collectors are busy collecting taxes now and the rates are high. There are about 4 inches of snow and the ice on the ponds and lakes is reported excellent. Many are busy gathering their ice for the summer supply. There is a great deal of sickness and colds prevailing. Feed remains about the same but eggs and butter have taken a drop. Beef is selling from 15 cents to 20 cents a pound by the quarter and hide 9 and 10 cents a pound. Now seems to be the time for parties and mostly every night some one is entertaining.—P. E.

Genesee County—The Genesee County Baby Beef Club held a meeting at the Farm Bureau office Friday evening. John Willman of the animal husbandry department of the State College of Agriculture discussed the winter care of baby beefs. Good horses will bring a good price. Dressed beef is bringing from 12 to 18 cents a pound. Pork which gave promise of bringing a good price last fall is cheap. Mixed hay is finding a fair market and so is alfalfa. Poor hay is scarcely salable. A number of Hungarian pheasants have been turned loose in the county.—Mrs. R. E. G.

Allegany County—Good sleighing is being enjoyed for the first time this winter. Farmers are taking advantage of it by hauling wood, manure and fertilizer. A series of dairy meetings are being held January 28th to February 1st under the auspices of the Farm Bureau. This being one of the principal farm enterprises of the county, farmers demand up to date, practical information. Mr. S. N. Stinson, who owns one of the finest pure bred herds in the state, will be the speaker and discuss feeding, breeding and dairy records. Lloyd Sanford of Almond, was critically injured recently by a prize bull which was being loaded into a truck when the animal suddenly attacked him, lacerated him internally and threw him completely out of the truck on the ground. He is in the Hornell Hospital and not expected to recover. Beef cattle is 14 cents per pound and potatoes are 45 cents a bushel.—Mrs. O. H.

Pennsylvania Farm News

ORNITHOLOGICAL observers are noting the almost phenomenal increase in the number of starling who nightly assemble on the magnificent Pennsylvania State Capitol at Harrisburg. Three years ago several hundred of these birds would appear regularly towards evening every afternoon. This fall season, the facades, ornamental ledges, etc., and the mammoth dome itself, beautifully illuminated by the aid of powerful searchlights of high power, harbor as many as 10,000 starlings, attracting general attention. They deposit excreta of a sticky, white lime-like character, thus becoming a veritable nuisance, which appears to be a difficult problem to solve in this age of bird lovers.

So-called "county" or rural newspapers have crowded columns advertising farm ventures including live stock and implements. Inquiries made, indicate very clearly that the number of farm tenants rather than actual owners has again shown a trend towards increase, rather than to diminish. Productive and profitable farms still exist in these same localities and present a practicable object

lesson to show the better way. The best thought and the best way and distinctive training for country life will surely triumph.—Oliver D. Schock.

Lowry Still Leads at Storrs

TOUGH New England weather, which stopped the hens laying last year according to the report, did not seem to have any effect upon this year's birds, for the weekly production was the highest since the contest started. The birds laid 4,241 eggs or a yield of 60.6 per cent. This is a little over 6 per cent more than last year's production and 127 eggs more than last week's. The total to date is 50,680 eggs or an average of almost 51 eggs per bird.

The Leading Pens in each of the Principal Breeds

Barred Rocks	
R. C. Cobb, Old Pickard Farm, Littleton, Mass.	708
R. Walter Bishop, Guilford, Conn.	653
Hawes Bros., Union, Maine	610
White Rocks	
E. A. Hirt, South Weymouth, Mass.	593
Granite Springs Farm, Granite Springs, N. Y.	427
White Wyandottes	
Ebenwood Farm, West Bridgewater, Mass.	696
The Locusts, West Cornwall, Conn.	614
Fisher Poultry Farm, Ayton, Ont.	620
Rhode Island Red	
John Z. LaBelle, Ballouville, Conn.	679
Charlescote Farm, Sherborn, Mass.	667
Homer R. Rowell, Groveland, Mass.	657
White Leghorns	
George Lowry, West Willington, Conn.	844
Granite Springs Farm, Granite Springs, N. Y.	794
Hanson's Leghorn Farm, Corvallis, Ore.	729

Running Water

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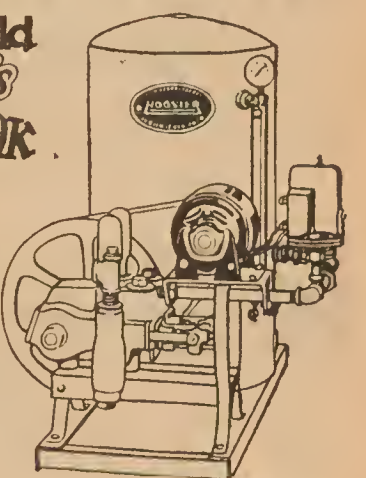
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News Items of Interest from Delaware

THIS week finds the Peninsula Horticultural Society in session at Camden, Delaware, for a three day conference. This year's conference outstrips former meetings in the wide range of topics up for discussion and the extent of its commercial fruit and vegetable display.

Among the most important problems before the fruit growers is a discussion of the operation of the Delaware Apple Grading Law, by W. T. Derickson, Director of Markets, and control measures on the Mexican Bean Beetle and the Red Mite of the Strawberry by E. N. Cory, Entomologist, University of Maryland. The meetings closed on Thursday afternoon with a record attendance.

Seek Beetle Appropriation

The State Legislature will be asked to appropriate \$12,000 this year for the Japanese Beetle Quarantine. This is \$2,000 more than last year and has been made imperative by the extension of the quarantine lines to include the entire state for 1929. Recent tests made in lower Delaware shows the presence of sufficient beetle larvae to warrant the Federal Horticultural Board in extending the quarantine lines.

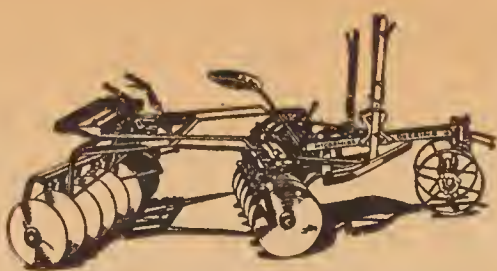
Find Cholera Carrier?

An interesting experiment is now being performed to determine whether rabbits

SEND FOR OUR CATALOG "Unlock Your Soil"

It shows tillage tools that will fit the requirements of your farm and save you time, labor, and money. A post card will bring you this helpful catalog, without obligation.

The McCormick-Deering Disk Harrow line is complete, and offers a big selection of types suitable for either horse or tractor operation.

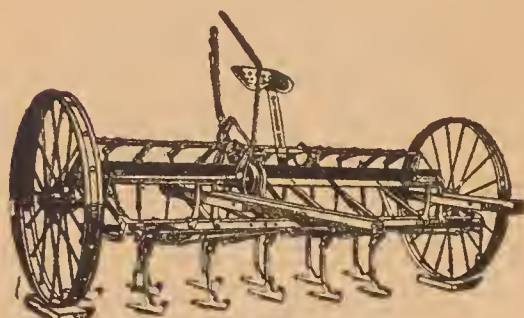


If you are using tractor power you will find the No. 3, the No. 4 Double Disk, the No. 5 Light Tractor Disk, or the sturdy Wide-Type Tractor Disk Harrow of special interest.

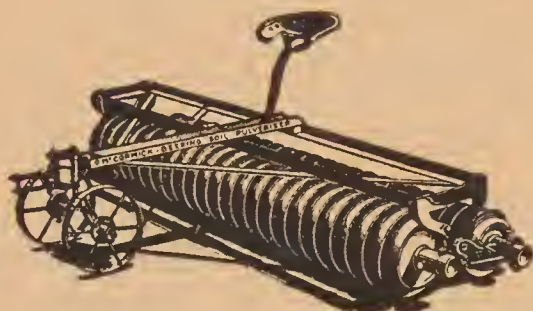


Peg and Spring-tooth Harrows, in horse and tractor sizes are available in many diversified types. The line includes a special harrow for killing weeds and quack grass.

You Can Get the Tools for Any Tillage Job from the McCORMICK-DEERING Dealer



The McCormick-Deering Field Cultivator is ideal for work in summer fallow and can't be beat for killing weeds. Sizes range from 6 to 12 feet for tractor or horse.



The McCormick-Deering Soil Pulverizer. Makes finely mulched, deep, mellow seed beds at a fast rate, pulverizes crusts and lumps, keeps weeds down and conserves moisture.



If you have not seen a McCormick-Deering Rotary Hoe at work breaking crusts, cultivating young crops and mulching, you cannot possibly appreciate its value. Ask the dealer for a demonstration.

The wood bar, peg-tooth, lever harrow is an "old reliable" in the McCormick-Deering line of tillage tools. Comes equipped with 9-16-inch square teeth. Riding attachments that take the drudgery out of harrowing can be supplied.



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POWER MILKER \$35 COMPLETE READY TO USE

Milk 2 to 4 cows at a time—18 to 40 an hour. Clean, convenient. Easy to use. Sold on 30 days Free Trial. Satisfaction Guaranteed.

Comes With 2 H. P. Engine or Electric Motor. Ready to use when uncrated—no installation cost—no pipes—no special equipment needed. Does the work of four milk hands. Self-cleaning.

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Holstein Association Will Recognize Proven Sires

(Continuing from Page 15)

Yearly Division of the Advanced Register by 50%, with a minimum of six daughters so qualifying, and provided that the average percent butterfat shown is not less than three nor more than five per cent, such sire shall be designated as a Gold Medal Proven Sire.

The certificate for a Gold Medal Proven Sire shall give his name and number and the classification of all his inspected daughters, together with the age requirement and the record of each of such daughter as may be credited with a production of 50% above Advanced Registry requirements.

The Gold Medal Proven Sire Certificate shall be issued to the owner without charge.

Allegany County Ayrshire Herd Makes Good Record

THE Ayrshire herd of Harry Perry of Almond, N. Y., averaged 8,092 pounds of milk testing 4.34 per cent and 351 pounds of butterfat in 1928. This herd consisting of five cows, returned \$761.55 above feed costs during the year and produced 100 pounds of 4 per cent milk at an average cost of \$1.09. Mr. Perry states that practical business principles applied to dairy farming will yield good returns.

Mr. Perry has a breeding plan which is carefully worked out and adds new animals to his herd only when he is certain that they will increase the efficiency of the herd. The milking cows are fed 1 pound of 24 per cent grain ration to every 4 pounds of milk and the roughage consists of alfalfa hay and ensilage.

For More Tariff on Vegetable Oils

DUTIES on vegetable oils to afford protection to the dairy, livestock and domestic vegetable oil industries are being urged by the dairy organizations. Some oils now on the free list, such as copra and palm oil, compete directly with domestic vegetable oils and dairy fats. The American Farm Bureau Federation is backing the dairy organizations in their demand, but has a large program for tariff increases, insisting that all plant food be admitted duty free. Some fertilizer materials at present are on the protected list.

What Other States Think of the Gas Tax

(Continued from Page 3)

there are no arguments in favor of this method of collection and the principal objection is that this method does not collect all of the revenue which should be derived from this source, and in addition is lax and not thoroughly enforced. An effort is going to be made by the next Legislature to change this law so that the taxes will be collected from the wholesaler and in this way collected at the source. This will eliminate a great deal of unnecessary bookkeeping and will prevent the loss of a good part of the tax.

Kentucky: "The one cent gasoline tax imposed upon each gallon of gasoline consumed in the State of Kentucky was formerly collected through the retail dealers, but there seemed to be doubt in the minds of some of our people as to whether the State was receiving from the retailer the amount of tax due. For this reason the State Tax Commission secured agreement from the wholesale dealers and refiners whereby the wholesaler pays to the State Treasurer total amount of tax due on each consignment of gasoline sold within Kentucky. This appears to have relieved the situation and to have eliminated the doubt about amount of taxes received."

Maryland: "Our gasoline tax is collected from the importer or refiner before it is offered for sale in this State. By this method, we have only about 20 'dealers' in the State, and the question of collection is greatly simplified. This method has

given eminent satisfaction, and there seems to be no objections whatever to it, and really there seems to be no other logical place at which the tax can be collected. If, as in one or two states, it is collected by the state from the filling stations, the general seller to the ultimate consumer, your 'dealers' run into the thousands with the attendant extra expense because of the smaller quantities sold, and the attendant loss from the percentage of dishonest dealers."

These answers will give you some indication of the gasoline tax situation in some other states. Of course, it would not help farmers any just simply to add another tax, but if that tax is properly distributed and used, then that may alter the whole situation. As we have pointed out time and again, the burden of building and maintaining the roads is a tremendous one and it falls especially heavy on farmers. Under the present system, it is certainly unfair for farmers to pay so much more than their just share of road support. This applies especially to those farmers who do not live on the state road.

The only way the State can relieve the situation is to get more revenue, and it is certainly fair to collect that additional revenue from those who use the roads. On the other hand, we do not believe it fair to collect a tax on gasoline which is not used on the highways, and gasoline used to operate farm machinery and for other non-road purposes should be exempt. This exemption, however, so far as it will affect farmers, is rather small. Most tractors are operated with kerosene and the amount of gasoline used by the average small engine on the farm is not large. Records of the New York State College of Agriculture for 181 tractors in the season of 1926 show that they used a total of 61,268.5 gallons of kerosene and 36,181.9 gallons of gasoline. Therefore, while we believe that in fairness such gasoline should be exempt from tax, if obtaining such an exemption will prevent the passage of the law, we would rather see the law passed without it, for the benefit that the average farmer will receive from a gasoline tax even without the exemption, if that tax is used to reduce road taxes, will be much greater than the gasoline tax this average farmer will pay.

Apparently progress is being made at Albany in favor of legislation that will relieve both local road and school taxes. Whether or not this legislation is passed depends to a considerable extent, however, on you folks back home. That is the reason we are trying to give you each week in these columns the latest developments and facts on the different proposals now before the legislature.

If you show no interest, by not even talking with or writing to your representatives and the legislative leaders, they may very justly conclude that you are not interested in the passage of any of this legislation.

In our opinion, most of these proposals are at least a start in bringing about adjustments and equalizations in the present unfair farm tax situation.

Let us not allow this opportunity to go by without, first, studying the proposals so as to understand them thoroughly, and, second, registering your wishes in regard to them with the leaders of the State government at Albany.

Distance Hauling

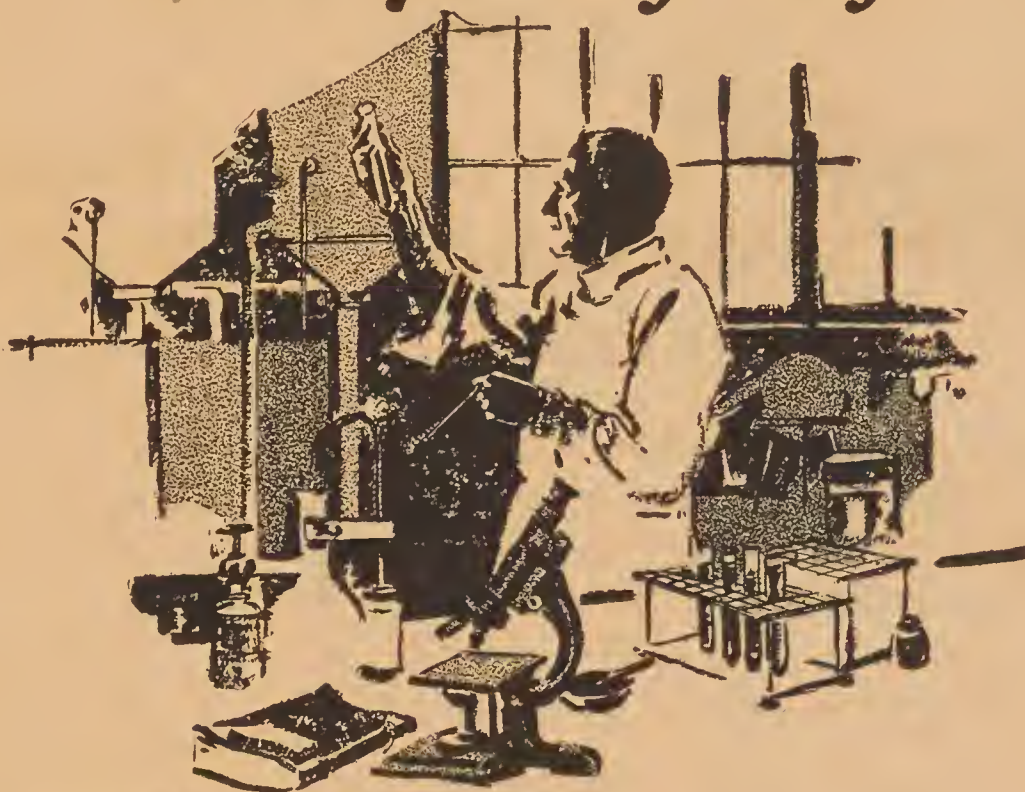
FIGURES given out by the department of economics of Cornell University show that horses are more expensive than trucks for hauling milk in the country, for distances greater than four miles. Dairy men who used trucks saved 1.1 cents on each trip, and in addition the trips were .06 miles longer with larger loads. The average cost of hauling 100 pounds of milk was 28 cents with horses and 22.1 cents with trucks.

In concrete work, the proportion of cement to clean hard sand should vary from 1-2 to 1-3. There should never be more than 3 parts of sand to one of cement. This mixture would be all right for rough work such as foundations. Water-tight work should have the proportions of one part of cement to 2 parts of sand.

Oil facts for farmers

(No. 11)

How specialization will save you money every day



Make this chart your guide

The winter recommendations specified on this chart should be followed from freezing (32° F.) to 0° F. Below 0° F. use Gargoyle Mobiloil Arctic (except Ford Model T use "E").

If your car is not listed here, see at your dealer's, the complete Mobiloil Chart, which recommends the correct grades for all cars, trucks, tractors, etc.

NAMES OF PASSENGER CARS	1929		1928		1927		1926	
	Engine		Engine		Engine		Engine	
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
Auburn, 6-66.....	BB	Arc.	BB	Arc.	BB	Arc.	A	A
" 8-cyl.....	BB	Arc.	BB	Arc.	BB	Arc.	A	A
" other models	A	Arc.	A	Arc.	A	Arc.	A	A
Buick.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Cadillac.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Chandler Special Six	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Chevrolet.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Chrysler, 4-cyl.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" Imperial.....	BB	Arc.	BB	Arc.	A	Arc.	A	A
" other models	A	Arc.	A	Arc.	A	Arc.	A	A
De Soto.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Dodge Brothers.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Durant.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Erskine.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Essex.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Ford, Model A.....	A	Arc.	A	Arc.	E	E	E	E
Model T.....					E	E	E	E
Franklin.....	BB	Arc.	BB	Arc.	BB	BB	BB	BB
Gardner, 8-cyl.....	BB	Arc.	BB	Arc.	BB	Arc.	A	Arc.
" other models							A	A
Graham-Paige.....	BB	Arc.	BB	Arc.	A	Arc.	A	Arc.
Hudson.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Hupmobile.....	BB	Arc.	BB	Arc.	A	Arc.	A	Arc.
La Salle.....	BB	Arc.	BB	Arc.	BB	Arc.		
Marmon, 8-cyl.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" other models			BB	A	A	A	A	A
Moon.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Nash, Adv. & Sp. 6.....	BB	Arc.	BB	Arc.	BB	Arc.	A	Arc.
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Oakland.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Packard.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Peerless, 72, 90, 91.....	BB	A	BB	A	BB	A	BB	A
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Plymouth.....	A	Arc.	A	Arc.				
Pontiac.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Stearns Knight, 6-80.....	BB	Arc.	BB	Arc.	BB	A	BB	A
" other models	BB	A	BB	A	BB	A	BB	A
Studebaker.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Velie, 8-cyl.....	BB	Arc.	BB	Arc.				
" 6-cyl.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.



Mobiloil

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3—has 3 times as many steps in its manufacture as many oils offered you.

4—costs twice as much to make as many oils.

5—is accurately determined as to body and character for your own car or tractor—through the Mobiloil Chart—whose recommendations are approved by 609 makers of cars, trucks, tractors and other automotive equipment.

Many farmers say that Mobiloil cuts their oil consumption anywhere from 15% to 50%. They have less carbon. They find their repair bills smaller and less frequent.

How to buy

For a season's supply we recommend the 55-gallon and 30-gallon drums with convenient faucets. On containers of these sizes your Mobiloil dealer will give you a *substantial discount*. His complete Mobiloil Chart tells the correct grade of Mobiloil for your car, tractor and truck. You are always sure with

The World's Quality Oil

Mobiloil

VACUUM OIL COMPANY

Who Pays for Your Roads?

(Continued from Page 1)

call for certain amounts to be raised by the township itself. The townships are raising so much money that these limits have little significance and are not discussed here.

One proposal is to retain the general plan but to increase the lower limit, and place an upper limit.

Another proposal is to give \$50 per mile or some other definite amount to each town.

Another proposal is that if the township will raise a tax of a certain number of mills, the state will provide the balance up to \$100 per mile. This is on the same general plan as the proposed school legislation. It provides tax equalization on a state-wide basis.

Payments to and from the State

Approximate payments under the provisions of the various laws are shown for a few counties in the table. The costs of roads and bridges to complete the state system, of course, can be only approximately estimated. Since about ten years is the estimated time required to complete the system, one-tenth of the total cost is used in the table so as to put the figures on a yearly basis. Any county might be called on for more or less than this in a given year, depending on the time when the construction is done in that county.

Columbia County receives from the state about \$123,134 per year. Its average payment to the state plus its approximate share of the cost of the state system is \$305,169 per year, or Columbia County would, on the average, have to pay the state about \$182,035 per year above the amount which it receives. Columbia County would have to purchase rights-of-way, take care of snow removal, furnish enough money to maintain all roads outside the state system, and in addition would be called on for about \$182,000 per year. Expressed in another way, her budget would have to be large enough to buy rights-of-way, pay for snow removal, completely take care of the county system of roads outside the state system, and furnish a sum equivalent to \$148 per mile in addition.

Calculated in the same manner, Albany County would receive from the state about \$144,652 per year more than she would be required to pay on state highways. This county would have to pay for rights-of-way, and snow removal, but would receive a net payment of \$165 per mile to help in support of roads within the county outside of the state system.

It happens that there are large expenses for construction to be done in Columbia County. It happens also that this county does not have a large number of automobiles registered in it. Therefore, its payments to the state will be high and the receipts from the state low. The need for a road across a county and the physical obstacles in the way of making the road are not dependent on the richness of the county. The present system of support is very unjust to a county that does not happen to have large cities in it.

According to these estimates 33 counties must pay the state for the support of the state highways more

than they receive from the State. The total net payment by them amounts to about \$2,000,000 per year, whereas 24 counties receive from the State a total of about \$3,000,000 per year more than they will have to spend for their share of the cost of completing the state system.

The major factors in causing such wide differences are that each county has to pay 35 per cent of the cost of state and county roads, regardless of the wealth of the county; and that registration fees are sent back to the counties on the basis of registrations in the county rather than travel in the county. The latter difficulty can be helped by returning a portion of the gasoline tax on the basis of miles of road.

A number of methods of adjustment have been proposed. Some proposals call for the state to take over the entire cost of roads and bridges in the state system. Other proposals would vary the percentage that the counties pay in accordance with the wealth of the counties, or their wealth per mile of highway.

A New Epoch in Transportation

There have been three great epochs in the development of New York State; the completion of the Erie canal, the introduction of railroads, and the automobile and road period.

Before the Erie Canal was completed, there was a serious congestion of population in the Eastern States. The opening of the canal caused a great industrial expansion. The canal was so important that the state financed it and reimbursed itself in part through tolls.

When the steam engine was perfected, railroads were so important that they were given aid by the state, counties, townships, cities and villages. The federal government gave them vast areas of land. The quick development of this new means of transportation was so vital that we did not wait to build a little railroad and then extend it out of the income from freight, but various units of government taxed themselves to help. Rights to streets and highways were also granted. Mistakes may have been made, but the policy of quick development was amply justified. Before the railroads were built only the land along the water could readily market its produce. Railroads extended transportation to lands away from the water.

The sudden development of motor vehicles brought a new era in industrial development. Transportation is now open to all the land where stone roads penetrate. Some persons think that the men who use the roads should pay the entire cost, but this policy would cause too slow a development. Just as in the case of the railroads, we need such a rapid extension of the system that we cannot afford to wait for the system to pay for itself out of tolls.

It is the opinion of the writer that a gasoline tax should be levied, but that all the money so collected should be spent on roads and that a sound policy of State development calls for an expenditure by the State through direct appropriations as large as are now be-



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* * *

Should farmers use Saturday afternoon as a half holiday?

* * *

Is prohibition under present conditions a damage rather than a benefit?

* * *

Does poor cooking cause more misery than strong drink?

* * *

Should farmers adopt an 8 hour day.

* * *

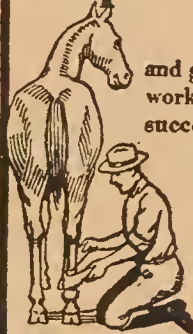
Is it more economical to buy concentrates for the dairy than to grow them?

Any one of the following debate outlines will be sent to Granges, Farmers' Clubs or others who will make use of them on receipt of 2 cents each to cover mailing costs.

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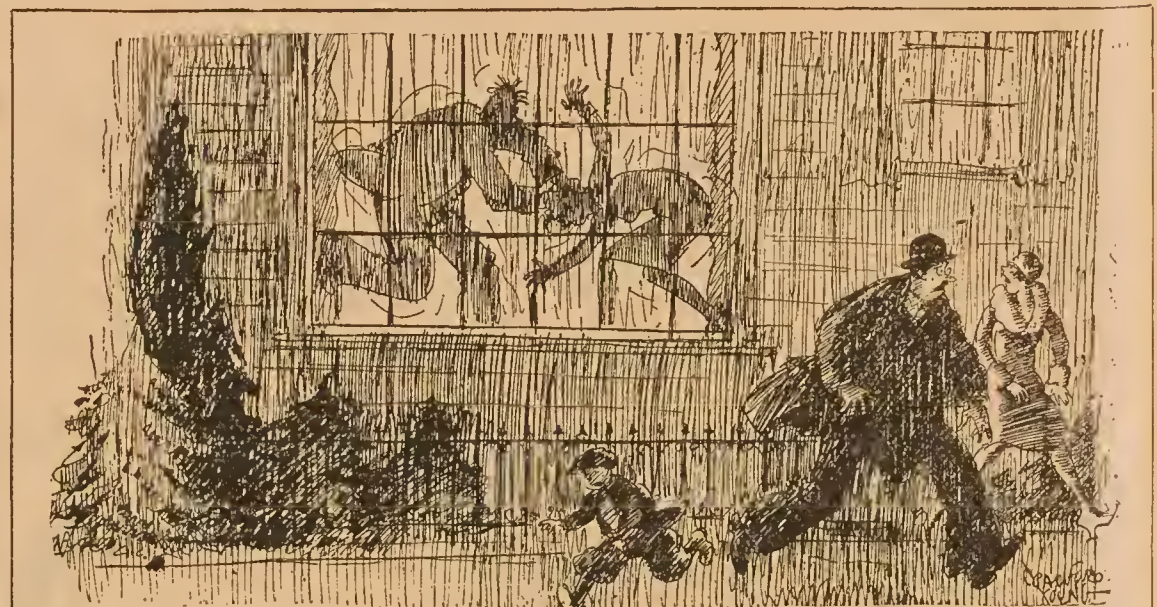
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The neighbors called the police to stop the Joneses' awful fight, but he was only helping her pull off one of those tight jerseys.—JUDGE.

ing made. The movement to widen the base of support has lagged behind the use of roads. At the present time our roads are used by other states which give no direct support. Local roads are used by vehicles from all parts of the state in much greater proportion than the state contributes to the support. Even if no gasoline tax were levied, the state should take over a larger part of the cost of roads and bridges. If a gasoline tax is levied, it would provide means of doing this without necessarily increasing the appropriation for roads out of general funds. It would also make possible a more rapid development of the state highways.

A Lateral Road System

No sound policy of development can be had without giving consideration to the necessity for a rapid development of lateral roads. It is generally believed that this can best be done by the counties under state supervision. If the lateral roads are to be developed as rapidly as they should be, a considerable percentage of the gasoline tax will have to be spent on these roads. A share of the registration fees now goes to counties on the basis of registration within the county. This greatly favors the urban counties. Oil companies, telephone companies, chain stores, and many other agencies that use fleets of automobiles or trucks usually register them in a single city or a few cities, although these vehicles are for state wide use. The travel by private citizens within a county is not in proportion to the vehicles registered there. Near a large city a large part of the travel is from the county. In rural counties most of the travel is from cities outside the county. This method of distribution sends the money where the garage is rather than where the car is used.

If the portion of the gasoline tax that is to go to counties is distributed on road mileage, or on mileage outside the state system, it will tend to partly offset the method of distribution of registration fees that favors the city counties.

The road policy should be one of state development. Roads have ceased to be a local question.

An Important School Bill

(Continued from Page 8)

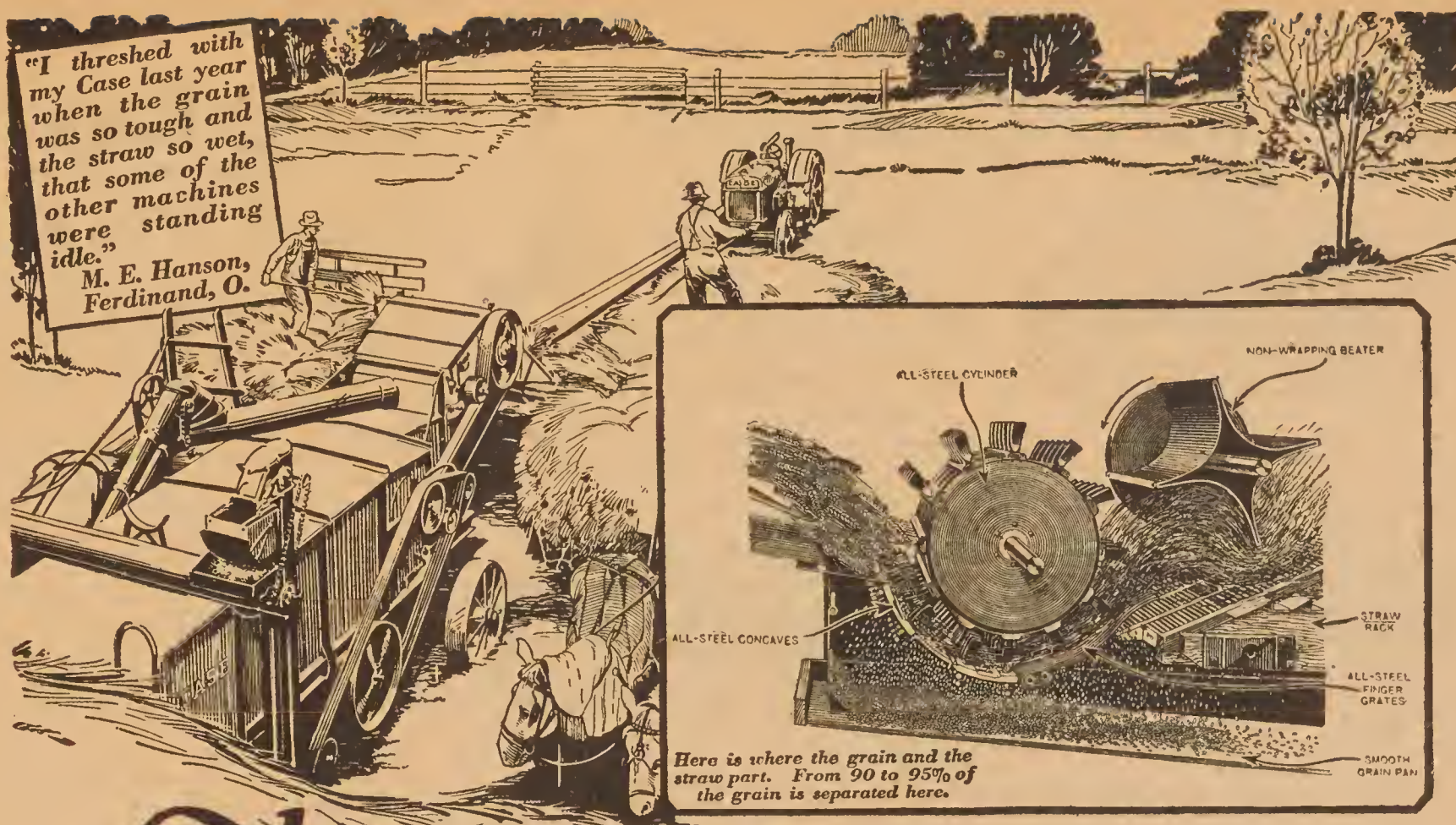
Now we come to the further steps in this program for the rural schools put into concrete form by the two bills now before the legislature, the first one providing \$4,000,000 or more for the direct benefit of the one-room school districts in the State, and the second providing \$1,500,000 to help the small graded and high schools having less than five teachers.

Do you wonder that we feel rather enthusiastic over the progress that has been made in solving the rural school problem?

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Through its changes of over a hundred years certain groups have retained their dominant characteristics, the Yankee Puritans, the Hollanders, the Czechs, the Germans and the French. To those looking for local history it is full of information and to those looking for fresh sociological material it will be most helpful. Price 60 cents. The Sayville Press, Inc., Sayville, L. I., New York.



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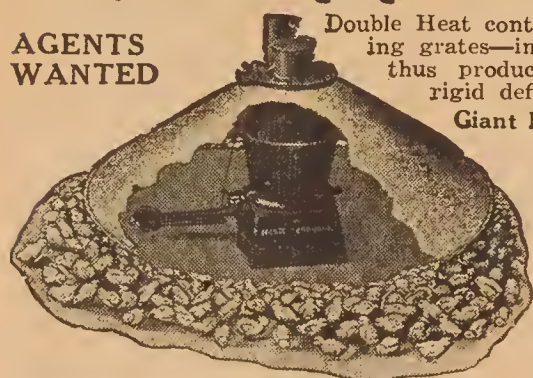
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THOUSANDS OF PLEASSED CUSTOMERS can tell you about the splendid chicks and wonderful profits made by our Marvelous High Class, Heavy Laying, Standard Bred, American Cert-O-Cult Matings for 29 years; Pure-Bred, carefully culled for size, type, color, vigor and egg laying ability. Look at the low prices—100% Live Delivery Guaranteed—you can safely order from this advertisement. References: Commercial Bank, Dun or Bradstreet.

S. C. Wh., Br., Buff, Blk. Leghorns, Anconas.....	\$7.00	\$13.00	\$60.00	\$115.00
Barred and Wh. Rox, R. C. and S. C. Reds, Blk. Minorcas.....	8.00	15.00	70.00	135.00
W. Wyandottes, Buff Orpingtons, Buff Minorcas.....	8.50	16.00	75.00	145.00
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Heavy Mixed, \$12.50 per 100; Light Mixed, \$9.00 per 100. Wh. Pekin Ducklings, 25c each. C. O. D. Shipments: We will ship 20th Century Chicks C. O. D. (pay postman on delivery) if you prefer. Get our FREE illustrated catalog. Tells all about our money-making chicks, C.O.D. plan, imported matings, etc.

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Sunshine Chicks will be better than ever this season, blood tested for 5 years, selected for high egg production, bred for vigor and vitality. In fact, Sunshine Chicks are of such high quality that we not only back them with a guarantee of live delivery but we are going still further.

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over the first critical 10 days of their life. We will replace loss up to 90% free of charge. Play safe and send for our folder and price list now. WRITE TODAY!

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Barred Rocks.....	4.00	7.50	14	S.C.W. Leg.....	3.50
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500 Lots ½c less. 1000 Lots 1c less.
Free Range Flocks. Live Delivery.
B. N. LAUVER, McAlisterville, Pa.

SPECIAL FALL prices for breeding Turkeys, Geese, Ducks, and Guineaes. Write your wants and for mailing list. PIONEER STOCK FARM, TELFORD, PA.

OSSEGE - BIG C.O.D. OFFER ON HIGH BRED CHICKS!

Send Only ONE CENT PER CHICK and Pay Postman the Rest After You Get the Chicks

Varieties	Prices out:	25	50	100	500	1000
S. C. White Buff Brown Leghorns and Anconas	3.50	6.00	10.00	50.00	100.00	
Columbian & Silver Wyandottes & Rhode Island White	4.50	8.00	14.00	70.00	135.00	
Barred & White Rocks, S.C. & R.C. Rhode Isl. Reds	4.25	7.50	13.50	65.00	117.50	
Blue Andalusian & Rose Comb White Leghorn	4.25	7.50	13.50	65.00	117.50	
Buff and White Minorcas	4.25	7.50	14.00	68.00	130.00	
Black Minorcas, White Wyandottes, d't. White & Buff Orp.	4.25	7.50	14.00	68.00	130.00	
Jersey Black Giants, Sussex & Dark Cornish	7.25	14.00	27.00	132.00	260.00	
Assorted Chicks (Heavy Breeds)	3.50	6.00	9.00	42.50	82.50	
Assorted Chicks (Light Breeds)	3.00	5.00	8.00	37.50	72.50	

Prices as shown, plus postage. Order from this ad and save time and money. Reference: Bank of Ottawa, Dun or Bradstreet or Editor of this Paper.
J. W. OSSEGE HATCHERY
Dept. 69, Ottawa, O.



With the A. A. Poultry Farmer



Why the Wide Range in Poultry Profits?

PRACTICES that spell the difference between merely "getting by" in the poultry business and making a substantial profit, are indicated in a summary of records kept by flockowners over a seven-months' period.

An outstanding fact shown by the summarized figures is that low feed cost may not be economical. The five flockowners who made largest profits had a feed cost considerably above the average of all record keepers. The average cost for the five was \$122.32 per 100 hens. Taking the average of 25 reports the cost was \$80, more than \$40 less per 100 hens. Yet the return above feed cost for the five flocks was \$139.04, while for the 25 it averaged only \$109.24, or about \$30 less.

Feeding a high protein feed to the laying flock during the summer months is also profitable, the reports reveal. "The five flockowners who made the most profit," according to the summary, "fed protein in the form of either milk, meat scraps, or tankage. Cost of these protein feeds was more than off-set by greater returns in eggs."

The records showed that flocks returning highest profits were carefully culled, and that the marketing of unprofitable layers and surplus broilers was a very profitable practice.

How much improved practices can accomplish in the way of increasing profits is indicated in the following figures: One flock returned \$229 for each 100 hens above feed cost, while another returned only \$81; the amount of money received for eggs from each 100 hens during the seven months was \$99.13 for the lowest flock, while the highest was \$176.90.

number of producer, (this registry number is furnished to the producer by (Continued on Page 24)

Baby Chicks

S. C. Wh. Leghorn Chicks and Pullets

(Day-Old) (8-10 Weeks) from State-Supervised, blood-tested specialty bred stock.

Every Leghorn chick is hatched from a Hen Breeder, weighing 4 lbs. or more. For Quick Profits—Raise a Brood of Broilers Try our Wh. Wyandotte-Wh. Rock Cross Bred Chicks from blood-tested matings. They make top-notch broilers, and the pullets make good winter layers. We also offer chicks from blood-tested White and Barred Rocks, R. I. Red and Wh. Wyandotte matings.

R. I. Red Pullets, 10 Weeks Old Only \$1 Each—Immediate Delivery Write for Free Folder and Prices Wene Chick Farms, Dept. D, Vineland, N. J.

BIG CHICKS from High Record Matings



300-326 eggs S.C. White Leghorns, Also Special Tancred Matings and 15 other varieties, Buff, Brown, Black Leghorns; Anconas; White, Buff, Black Minorcas; Barred, White, Buff Rocks; White Wyandottes; S.C. and R.C. Reds; Buff Orpingtons; Jersey Black Giants. Write today for free catalog before you buy. Prices Low and good genuine personal service to each customer. Satisfaction Guaranteed. 28 years shipping chicks to satisfied customers. FREE! 1000 CHICKS in prizes for best photos of Pioneer Chicks or Flocks.

1900-1929 First to ship Chicks in U. S.

UHL PIONEER HATCHERY & EGG FARMS New Washington, Ohio Dept. A

300,000 White-Brown Buff Leghorn CHICKS

Shipped C.O.D. Send No Money PURE STRAINS—Tancred—Hollywood—Barron—American S. C. White Leghorns—Brown and Buff Leghorns—Eggs and Chicks Produced from some of the finest matings in Pennsylvania. Breeders Specializing in High Egg Production—Dependable Chicks for Commercial Poultrymen—100% Live Arrival—Send No Money—Chicks Shipped C.O.D.—Catalogue.

Pennsylvania Co-Operative Leghorn Farms, Box 314 Grampian, Pa.

CHICKS OF QUALITY

In lots of.....	25	50	100	500	1000
Wh. Wyandottes.....	\$4.50	\$8.50	\$16.00	\$77.50	\$150
Rocks or Reds.....	4.00	7.50	14.00	67.50	130
Wh. Leghorns.....	3.50	6.50	12.00	57.50	110
Heavy Mixed.....	3.50	6.50	12.00	57.50	110
Light Mixed.....	3.00	5.50	10.00	47.50	90

From carefully selected free-range flocks, 100% arrival. Postpaid. Valuable illustrated 96-page booklet FREE. Telling all about poultry.

The Commercial Hatchery, Box 75-A (The dependable plant) Richfield, Penna.

BABY CHICKS

hatched by the best system of incubators from high class bred-to-lay stock. White, Brown, Buff Leghorns, Anconas \$14.00 per 100; Barred, White Rocks, Minorcas, Reds \$16.00 per 100; White Wyandottes, Buff Orpingtons \$17.00 per 100; Giants \$20.00 per 100; Heavy Broilers \$12.00 per 100; Light Broilers \$10.00 per 100; Pekin Ducklings \$30.00 per 100. Add 25c on orders for less than 100. Safe delivery guaranteed by parcel post. Nunda Poultry Farm, Desk H, Nunda, N. Y. Member of the International Baby Chick Ass'n. and the N. Y. State Co-Operative Chick Producers Ass'n.

BABY CHICKS

Famous Tancred Strain, Single Comb White Leghorn Chicks, from heavy laying free range flocks. Our flocks are headed with 260 egg strain cockerels. Write for our new free circular and our prices. Cocolamus Poultry Farm, Box 40, Cocolamus, Pa.

CHICKS

Pure bred. Blood tested free range breeders. Leghorns, Anconas, 126 Rocks, Reds, 146 Wyandottes, Orpingtons, Minorcas, 156 Black Giants, 20c. 100% live delivery. Valuable Chick Manual Free. Seidleton Farms, Washingtonville, Pa.

Hampton's Black Leghorn Day Old Chicks. The Kind that lay. Circular free. A. E. HAMPTON, Box A, Pittstown, N.J.

Honey for the Chickens

Even the chickens have a sweet tooth. Down in Cape May County, Thomas W. Kessler, a successful poultryman, is feeding honey to his young chickens and getting excellent results. He has been able to control disease in his flocks and he credits their healthy condition to the honey that they get. One tea cup of honey is mixed with each 10 quarts of water and it is greatly relished by the hens and chickens alike. It proved of great value with the little chicks this spring. The mortality was greatly reduced and the chicks had more pep over those that did not receive the sweetened drink.

Lights for Hens

"How many lights are needed per pen of 100 hens."

BEST results have been secured by using a 40 watt lamp every ten feet. The lamps are hung six feet from the floor and each lamp has a reflector 16 inches in diameter. By this rule, it would take two lights for a pen 20x20.

Retail Egg Grading Law Hurts Local Market

(Continued from Page 3)

feeling among the poultrymen. The same is true in Massachusetts. A study of the New England Egg Law shows at once this outstanding difference between it and the New York State Law. In the first place, taking Connecticut as an example, this uniform law shows requirements set down for "Connecticut New Laid Fancy", which is the top grade. The law states that eggs to be sold under this grade, must be laid in Connecticut, must not be over seven days old, must average net weight 24 ounces per dozen with a minimum weight of 22 ounces for individual eggs. The other specifications are similar to the top notch grade except that eggs must be packed by the producer, or producers' organization, must be candled, packed in sealed cartons bearing the name and address and registry

BABY CHICKS

From Heavy Laying Free Range Flocks

25	50	100	500	1000	
S.C.W. & Br. Leghorns.....	\$3.50	\$6.00	\$12	\$57.50	\$110
S.C.B. and Wh. Rocks.....	4.00	7.50	14	67.50	130
Buff Orpingtons & Reds.....	4.00	7.50	14	67.50	130
White Wyandottes.....	4.00	7.50	14	67.50	130
Assorted Chicks.....	3.00	5.00	9	42.50	80

100% prepaid safe delivery guaranteed. Order from this ad. or write for circular J. N. Nace Poultry Farm RICHFIELD, Pa. Box 161

White Leghorn Baby Chicks a Specialty

Per 50	100	500	1000	
S. C. W. Leghorns.....	\$6.50	\$12.00	\$57.00	\$110.00
Barred Rocks.....	7.50	14.00	67.50	130.00
R. I. Reds.....	7.50	14.00	67.50	130.00
Heavy Mixed.....	6.50	12.00	57.50	110.00
Light Mixed.....	5.00	9.00	42.00	80.00

Our White Leghorn Cockerels: Sire—from hen that laid 312 eggs per year. Hens—254-290 eggs. Actual 365 day trap nest record. All chicks Postpaid to your door. 100% live delivery guaranteed. Order direct or write for free circular. SUNSHINE HATCHERY, Dalmatia, Pa.

CHICKS

Will ship C. O. D.	25	50	100
S. C. Reds.....	\$4.00	\$7.50	14.00
Barred Rocks.....	4.00	7.50	14.00
White Leghorns.....	3.50	6.50	12.00
Heavy Mixed.....	3.50	6.50	12.00
Light Mixed.....	2.75	5.00	9.00

500 lots ½c less, 1000 lots 1c less. Free range. 100% Delivery. Circular. W. A. LAUVER, McAlisterville, Pa.

CLEAR SPRING QUALITY CHICKS

per 100	500	1000	
S.C. White Leghorns.....	\$11.00	\$2.50	\$100.00
Barron and Wyckoff Leghorns.....	12.00	57.50	110.00
Barred Rocks and R.I. Reds.....	14.00	67.50	130.00

Light Mixed, \$9.00 per 100; Heavy Mixed, \$12.00 per 100, for March and April. 100% live delivery. Postpaid. New circular free giving full details of all breeds. CLEAR SPRING HATCHERY, McAlisterville, Pa. Box 49

KERLIN BARGAINS in Wh Leghorn Chicks

"Kerlin-Quality" Money-Making Leghorns. Beautiful Great Winter Layers, White D'Arches. Free Egg Contest Winners. Over 50,000 Delighted Customers. BIG DISCOUNT ON Chicks ordered Now. Delivery When Wanted. Free Starting Feed! Big Catalog FREE! Kerlin's Grand View Poultry Farm, Box 35, Centre Hall, Pa.

CHICKS

White Leghorns \$12. Barred Rocks \$14. Light Mixed \$9. 100% live delivery. Postpaid. Circular free. L. E. STRAWSER, Box 30, McAlisterville, Pa.



Your Baby Chicks deserve Oatmeal, too

Give Them this Life-Saving, Strength-Building Nourishment contained in Ful-O-Pep Chick Starter, a balanced ration prepared by The Quaker Oats Company

FRESH, pure oatmeal! Nothing better for little fellows' diet, as everybody knows.

And how you see it "work" when you put this wonderful food—properly prepared and blended—into baby chicks! What husky, healthy, ready-for-work or -market chickens you grow!

A Scientific Ration

Oatmeal, from sound choice grain is the base of Quaker Ful-O-Pep Chick Starter, a balanced ration in dry mash form that is made right in the same mills where Quaker cereals are prepared. This famous ration was developed upon scientific findings and each year increases its popularity. It contains molasses (preventive of coccidiosis) and both cod liver oil and cod liver meal. Also, valuable proteins, important minerals, grains—all in exactly the proportions that scientific research and experiment have proved best.

It's All Feed—Every Bit

All of these select feedstuffs are ground to the proper texture for tiny, tender crops. They are thoroughly mixed by modern machines so that at every mouthful the baby chick gets "something of everything."

No picking apart; no waste; no foreign or inedible matter; just food—real nourishment—every bit of it.

What Cod Liver Meal Does

The cod liver meal seems to multiply the nourishment in other ingredients, keeps appetites keen, and helps to build strong, capable organs, better blood, and thus prevents anemia.

With all of its advantages, Quaker Ful-O-Pep Chick Starter is actually cheaper to use; costs less because it goes farther. It's easy and pleasant to handle; saves time and labor; ready for use just as it comes from the blue-and-white striped sack.

And easy to buy, too! Quaker dealers everywhere want a chance to show you how to turn your baby chicks into heavy-laying pullets or heavy-weighting meat birds. If you don't know your Quaker Dealer write us direct.

THE QUAKER OATS COMPANY
CHICAGO, U. S. A.



Oatmeal
626 Eggs



Cornmeal
72 Eggs

In a test conducted at Liberty Villa Farm, fifty pullets raised on oatmeal feeds produced 626 eggs in their first 28 days of egg record. Fifty pullets raised on the same rations—except for the substitution of cornmeal for oatmeal—produced 72 eggs in the same period. Oatmeal builds pullets of the laying type; well-developed, healthy birds that want to work.

Quaker

FUL-O-PEP CHICK STARTER

BUY QUAKER FEEDS IN STRIPED SACKS

BABY



CHICKS

HILLPOT Quality Chicks

Leghorns Rocks Reds Wyandottes



Hillpot Quality Chicks, because of their splendid health and vigor, actually require less time and attention than average chicks. They mature more quickly with minimum loss, thus cutting down rearing cost. They lay heavily and continuously. It is these vital factors that reduce the egg-cost and give the big profits that have won a national reputation for Hillpot Quality Chicks.

Send for my valuable Chick Book. It is free.
W. F. HILLPOT, Dept. 129, FRENCHTOWN, NEW JERSEY

HERE: NEARLY EVERYONE RAISES FULL BLOODED "AMERICAN" QUALITY CHICKS



	50	100	500	1000
American or Eng. SC. Wh. Leghorns.....	\$6.75	\$13.00	\$62.00	\$120.00
Hollywood Wh. or Brown or Buff Legs.....	7.25	14.00	67.00	130.00
Tancred Wh. Leg. Anconas-Barred Rocks.....	7.75	15.00	72.00	140.00
ICC or SC Reds, Wh. Rocks, Parks Rocks.....	8.25	16.00	77.00	150.00
Wh. Wyandottes, Buff Orp., Blk. Minorcas.....	9.25	18.00	87.00	170.00
Brahmas, Col. Rocks, Blue Andalusians.....	11.25	22.00	105.00	200.00

Light Mixed \$9.00 a hundred. Mixed any breeds our selection \$10.00. Heavy Mixed \$12.00 a hundred.

Get our NEW CATALOGUE—It proves to you the SUCCESS our Customers have with our chicks—Breeders culled and Bred for High EGG PRODUCTION in Winter when eggs are demanding large premiums. Reference, Curwensville National Bank—100% Live Arrival—Dependable Service. Order Early.

AMERICAN CHICKERIES, BOX 214, GRAMPIAN, PA.

NATIONAL "SUPERBRED" CHICKS

500,000 SUPERQUALITY CHICKS FOR 1929



	25	50	100	500	1000
SUPERBRED CHICKS NOW.....	\$2.50	\$6.75	\$13	\$62.00	\$120
S.C. White, Brown and Buff Leghorns.....	3.75	7.25	14	67.00	130
Tancred and Hollywood W. Leghorns.....	4.25	7.75	15	72.00	140
Barred and White Rocks, R. I. Reds.....	4.25	7.75	15	72.00	140
Black Minorcas and Anconas.....	4.75	9.00	17	82.00	160
White Wyandottes and Buff Orpingtons.....	5.50	10.25	20	95.00	190
White Minorcas and Blue Andalusians.....	7.00	13.00	25	120.00	230
Jersey Black Giants.....	3.00	5.50	10	50.00	100
Mixed or Odds and Ends.....	3.00	5.50	10	50.00	100



SPECIAL MATED FLOCKS. All chicks sent prepaid by either Parcel Post or Express. 100% live delivery guaranteed. Bank references furnished on request. Write us. You will save money by ordering Superbred chicks NOW.

NATIONAL CHICK FARMS Box 408 MIFFLINTOWN, PENNA.

WOLF SELECTED CHICKS

10 FREE CHICKS WITH EACH 100 ORDERED BEFORE MARCH 1st. Don't miss this chance to get a start with Wolf's extra quality pure-bred high producing stock. Every breeder produced on free range and health of chicks is safeguarded. Get Our Catalog and Price List

Tells about prizes won by our birds. Read about Mary Heneel who made over \$1000 profit in one year with birds of our breeding. All leading breeds—prices very attractive. Write today. Chicks shipped C.O.D. Toe picking stopped instantly with Wolf's "No-Pick." Order box today. \$1.00 postpaid. Satisfaction guaranteed or money refunded.

WOLF HATCHING & BREEDING COMPANY, BOX 1, GIBSONBURG, OHIO

Buy C.M.L. Chicks

C.M.L. CHICKS

Cost no more than ordinary chicks from the average hatchery and the quality is far better. We have specialized for years in BARRON LEGHORNS. Imported direct from Barron, Lehigh 285 to 314. BARRON S.C.W. LEGHORNS, BARRED ROCKS, WHITE ROCKS, REDS, WHITE WYANDOTTES.

Our birds have ample range which insures large, hardy chicks. They are carefully selected and mated. They mature early. Our fine quality chicks can be had at a price that will surprise you. Get our low prices. They will interest you. C. M. Longenecker, Box 40, Elizabethtown, Pa. Write today for FREE catalogue.



FOR YEARS WE HAVE HATCHED AND SOLD

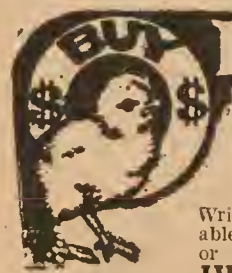
SATISFACTORY CHICKS

POSTPAID PRICES—AMERICA'S FAMOUS PRIZE WINNING STRAINS—

	100%	25	50	100	500	1000
S.C. Wh., Br., Bf., Blk. Leghorns; Sheppard's Anconas.....	\$4.00	\$7.00	\$13.00	\$60.00	\$115.00	
Bar., Wh. & Bf. Rocks; Bf. Orp.; Reds; Blk. Minorcas.....	4.50	8.00	15.00	70.00	135.00	
Barron Wh. Leghorns; Wh. Wyandottes; Bf. Minorcas.....	4.75	8.50	16.00	75.00	145.00	
Ex. Qual. Wh. Wyand.; Reds; Rocks; Wyckoff W. Leg.; Wh. Min.....	5.00	9.50	18.00	85.00	160.00	
Heavy Mixed 50, \$6; 100 \$11.50; 500 \$55; 1000 \$105. Light Mixed 50 \$5; 100 \$9; 500 \$42; 1000 \$85. J. Blk. Giants 100 \$20. Wh. Pekin Ducklings 28c each. Not Postpaid to Canada.						

We have bred the highest quality for 21 years. Matings culled and selected by Experts for Heavy Winter Laying. Careful, personal service on all orders. We ship C.O.D. Bank References.

THE NEW WASHINGTON HATCHERY CO. Box R, NEW WASHINGTON, OHIO



HUBER'S RELIABLE CHICKS

10 FREE CHICKS —ON orders booked before March 15th, we give 10 Chicks free with each 100 ordered. When we say RELIABLE—we mean RELIABLE in every way. Breeding stock of highest quality of 19 years of careful development. Special attention paid to health of flocks and records kept.

CATALOG FREE—CHICKS SENT C. O. D. IF YOU WISH Write for details—get our illustrated catalog which tells all the story. Our prices reasonable. A book on Raising Chicks worth many dollars given free with each order of \$10.00 or more. Big discount for early orders.

HUBER'S RELIABLE HATCHERY, No. High St., Fostoria, Ohio

WYCKOFF AND TANCRED STRAIN

100% Arrival Prepaid to your office.

	100	500	1000
White Leghorns.....	\$12.00	\$57.50	\$110

THE RICHFIELD HATCHERY, Box E, RICHFIELD, PA.



BOS QUALITY CLASS A CHICKS

From healthy heavy layers. Several varieties. Low prices. Special discounts. No money down. Pay 10 days before shipment or C.O.D. 100% live delivery postpaid. Catalogue free.

Bos Hatchery, Zeeland, Mich. R. 2A

(Continued from Page 22)

the Commissioner of Agriculture upon request).

Storage Eggs Should Be Labeled

In every one of the New England States, eggs to bear the standard state grade must be produced within the state. Of course it is impossible to prevent some bootlegging of eggs, but it is not believed that this is carried on on any considerable scale. We can hardly expect to do this in New York State, since New York City is not a state market but an inter-state market, and as a matter of real fact we are hardly entitled to set up grades which would exclude eggs produced outside the state of New York. However, it would be possible to set up grades which

WE will be glad to hear from our readers who have constructive suggestions for improving the present New York State Egg Grading Law. Suggestions already received might be summarized as follows:

1. Keep the present law but amend it by eliminating the unclassified grade and the nearby fancy grade.
2. Require all cold storage eggs to be labeled as such. This might be done by keeping the present grades but add the word, cold storage, to all eggs that have been stored.
3. Do away with all grades and teach the consumer to buy according to quality.
4. Require the producer to candle before the eggs are sold.
5. Sell eggs by weight, thus removing the necessity for weight requirements in grading.

would exclude state eggs beyond limits now covered by nearby and nearby western eggs as quoted on the market. We believe that the interests of the poultrymen in New York State make it absolutely necessary that the storage eggs be sold as "storage eggs", regardless of their condition. There can be set up a system of grades corresponding to the fresh egg grades, but with the term "storage" added, and storage eggs can be sold on the basis of quality of these grades, but a fresh egg should be a really fresh egg and not simply a high class egg out of storage.

As to the unclassified grade. There are both advantages and disadvantages to having this grade. We believe, however, that the final result will be better if unclassified eggs are eliminated and an actual grade substituted for it. If we had more packing plants operated by local producers, in New York State, the whole situation would be much easier to meet. As I understand it, one reason why the Canadian law has worked so well is that there are scattered everywhere throughout Canada, egg grading plants which take the producers' eggs and grade them properly. The people who assume that this Canadian Law would work equally as well in New York State, seem to have overlooked the fact that such plants are, with a few exceptions, not existent in New York State. We hope that this condition will change in the future, but we do not believe personally that the situation can be met with organization of producers throughout the whole Atlantic Coast section, or even through the Northeastern States. One such attempt has already been made and the results are too well known to require commenting.

Poultrymen Should Pull Together

In the meantime, we hope that the various organizations interested in poultry producers in the state, will take hold and see that the necessary changes are made in the Egg Law. The poultry industry of New York State is a great and increasingly important part of its



CHICKS with vim and vigor

Hatched by men with 19 years experience, from culled flocks. 100 per cent live delivery guaranteed by Prepaid Parcel Post at the following prices:

S. C. White Leghorns.....	11c each—\$100.00 per 1000
S. C. Brown Leghorns.....	11c " 100.00 " 1000
Barred Rocks.....	12c " 110.00 " 1000
S. C. R. I. Reds.....	14c " 130.00 " 1000
S. C. Black Minorcas.....	14c " 130.00 " 1000
Mixed Broilers.....	9c " 80.00 " 1000

Order now for spring delivery. Capacity 60,000 eggs. \$1.00 will book your order. Catalogue free.

The Pennsylvania Hatchery, Liverpool, Pa.

Our Slogan "Service After Delivery"

FINGER LAKE REGION BABY CHICKS



22 years' progressive success with Cornell's advice in culling, grading, and feeding in operating a 71 acre Poultry Farm, Strong, Liveable, Productive and Profitable Baby Chicks. Leghorns, Rocks, Reds, Wyandottes and Giants. Ask for price and mating lists. Custom Hatching.

THE DERROY TAYLOR CO., NEWARK, NEW YORK

BABY CHICKS

100% Live Delivery.

	50	100	500
Wh. and Br. Leghorns.....	\$6.00	\$11.00	\$52.50
Buff and Bl. Leghorns.....	6.00	11.00	52.50
Anconas.....	6.00	11.00	52.50
Barred Rocks.....	6.50	12.50	60.00
Wh. and Buff Rocks.....	6.50	12.50	60.00
SC and RC Reds.....	6.50	12.50	60.00
SC Bl. Minorcas.....	6.50	12.50	60.00
Wh. and SL Wyandottes.....	7.50	14.00	67.50
Buff Orpingtons.....	7.50	14.00	67.50

All absolutely first class purebred stock from culled flocks. Prompt shipments.

James F. Krejci, 9507 Meech Av. Cleveland, O.



S.C. WH. LEGHORNS BARRED ROCKS R.I. REDS

Send for low price list and booklet, describing our farm, stock, etc. Our Tancred Strain Leghorns are as good as the best. Eighteen years in the Chick and Chicken business.

Brookside Poultry Farms, Dept. A. E. C. Brown, Prop., Sergeantsville, N. J.

QUALITY BABY CHICKS

Five extra given free with every box of one hundred ordered. April hatched chicks, Leghorns, White, Brown, Buff, Black—\$14.00 per 100; Barred Rocks, Reds, Minorcas, Anconas, \$16.00 per 100; White Rocks, Wyandottes, Buff Orpingtons, \$18.00 per 100. March, \$2 more; May, \$2 less; June \$4 less. Custom hatching. Eggs for hatching. Odds and Ends, Left Overs, Mixed broiler chicks, Light, 10c; Light and Heavy, 12c; All Heavy, 14c; Better order now. Will send C.O.D. Thousands hatching daily all year around. Active, husky, chicks hatched from healthy free range breeders that will live, grow and lay. Prompt shipments. Postage prepaid. Live delivery. Send for folder. SCHOENBORN'S HATCHERY, 335 Main St., Hackensack, N. J. Phone 1603 or 1604.

100% Live Arrival

	100	500	1000
Ferris Strain White Leghorns.....	\$12	\$52.50	\$110
Everlay Brown Leghorns.....	12	52.50	110
Basom's Barred Rocks.....	14	67.50	130
White Rocks.....	14	67.50	130
Owens' R. I. Reds.....	14	67.50	130
Black Minorcas.....	14	67.50	130
Mixed Chicks.....	9	42.50	80



JUNIATA POULTRY FARM Box A Richfield, Pa.

BABY CHICKS

13 Leading Varieties—White Leghorns, Black Minorcas, Rocks, Reds, Wyandottes, Hamburgs, Speckled Sussex, Buff Orpingtons.

\$9.00 per hundred and up.

Free Catalog and Price List

Lantz Hatchery, Tiffin, Ohio

HIGH GRADE CHICKS

Blood Tested and Utility Stock

Leghorns, Rocks, Reds, Wyandottes, Anconas, Black Minorcas and Mixed. Also two and six weeks old chicks. Pekin Ducklings.

Write for circular and prices.

TAYLOR'S HATCHERY, BOX 12, LIBERTY, N. Y.

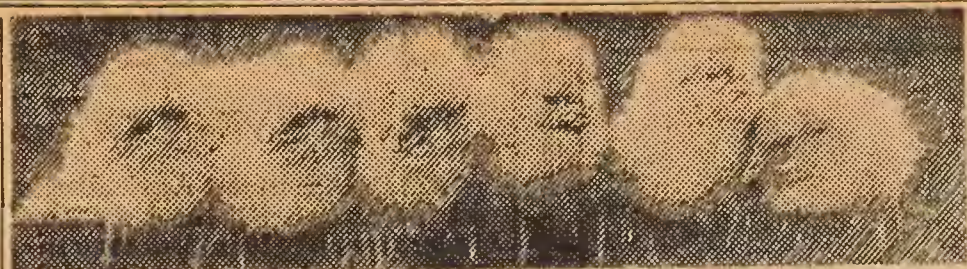
Wyckoff Tancred CHIX White Leghorns

Book your order now for March and April Chicks. \$12.00 per 100 \$57.50, 500 \$110, 1000

100% prepaid safe delivery guaranteed.

J. N. NACE POULTRY FARM, Box No. 50, Richfield, Pa.

BABY



CHICKS



Lamona Baby Chicks and Setting Eggs

START NOW to build your flock of the finest all-purpose fowl ever developed. Prolific layer of white-shelled eggs, fine table fowl, develops early, grows fast and will command top prices. Day-old chicks, \$1.00 each; settings, \$5 to \$50. Order now to insure delivery. **S. E. RAYMOND · Chardon, Ohio**

5 Lb. Leghorns

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Single Comb, White Leghorns.....	\$6.50	\$12.00	\$57.50	\$110
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S.C. Rhode Island Reds.....	8.00	15.00	75.00	
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Broiler Chicks, Light Breed.....	5.00	10.00	47.50	90

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Tancred Strain W. Leg. \$12 per 100
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Heavy Mixed 12 per 100
Light Mixed 9 per 100

500 lots 1/2c less; 1000 lots 1c less.
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Common Leghorns, Barred Rocks, Light & Heavy Mixed, as low as 8c each. 100% guaranteed. *"New Circular Free."* Prepaid.
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Single Comb White Leghorns trapnested and pedigreed since 1904. Orders for chicks and eggs booked now. *Catalogue on request.*

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"Duck News" Free.
ROY PARDEE,
Islip, L. I., N. Y.

agriculture, and no law which works an injustice can long be tolerated. It is up to all of us who are interested in the industry to put our shoulder to the wheel and see that the situation is corrected.

* * *

Suggests Discussion Before Action

YOUR article on the Egg Grading Law and its effects and defects is O. K. My only comment is (and it is made as a result of what we learned on our recent tour of the New York markets) that you did not stress sufficiently the first point you made in the article. We have had low egg prices this winter; not knowing any other thing to blame for that state of affairs a great many of us have jumped to the conclusion, that the egg law is responsible. There are two other factors that probably had much more to do with it—there were 20 per cent more eggs in storage than last winter, and the unusually mild weather has stimulated an unprecedented supply of fresh eggs. Of course, we might argue that it was the hope of selling storage eggs in competition with fresh eggs that led last spring to the heavy storing of eggs. If such was the case, we need not worry about its happening again. The storage men are taking heavy losses.

Personally I feel that the egg-law needs some revisions. I think changes should be made only after a good deal of discussion has cleared the issue in our minds. Your bringing the matter to the front in American Agriculturist should help to do that.—L. W.

* * *

Consumer Does Not Understand Law

THE egg grading law has some very good features, but the greatest inconvenience we have found with it is ignorance on the part of the buying public. Too few people realize that Grade A is not the best grade, and fail to understand the meaning of Nearby Fancy. It is natural to think of "A" as being of the best quality, and the error in the law is in providing a grade better than "A". Grade A should include only those eggs which are now graded as Nearby Fancy; that is, all the grades should be put one forward in the alphabet. If necessary, a Grade D might be included. Also, the unclassified grade should be eliminated. We have seen some of our best eggs put into the unclassified grade, until we undertook to pack our eggs in the standard 2x6 cartons, stamped with the grade at the farm. This measure brings us a somewhat better price than we would otherwise receive. The egg grading law, in my opinion should include size, same as the Federal grades. We separate ours into two sizes, or perhaps three, over 22 ounces, over 18 ounces, and under 18 ounces. We have practically none under 18 ounces to the dozen.

There is some competition with the storage eggs, it is true, but were it not for the storage egg holders, eggs in the spring could not be given away fast enough. However, I believe the time is not far distant when the cold storage egg will disappear from the markets entirely. Winter eggs are largely a matter of hatching time of chicks, together with proper care and management, and fresh eggs are going to be nearly as plentiful all year as they are in summer. I am inclined to blame this for the lowering of egg prices this winter, rather than the flooding of the markets with storage eggs. There are more fresh eggs direct from farms in the city stores this winter than ever before. Any grocer will agree to that in this particular part of the state. Eggs are becoming a product which will not be dependent on the seasons.—C. D. Y.

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THE keystone of Kerr's Quality Chicks is the Kerr breeding farm, where 2000 birds are now being trapnested. These heavy layers are scientifically mated to males from three or more generations of officially tested hens. Here Kerr produces the pullets that are such consistent winners in the egg-laying contests, and the great male birds to head his breeding flocks. The Kerr Chickeries can furnish utility and special matings chicks from flocks that have passed the blood test for Bacillary White Diarrhea.

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THEY LIVE because they are bred from healthy, free range breeders that have thrived and gained in vigor for generations. They LAY because they are from selected and tested high egg power stock. White, Brown and Buff Leghorns, Barred and White Rocks, R. I. Reds, Anconas, Black Minorcas, Buff Orpingtons, White Wyandottes. 12c and up. 100% live delivery guaranteed. Postpaid. Member International Chick Assn. Write today for FREE Chick Book.

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Home-Made, but Ends Bad Cough In a Hurry

To end a stubborn cough quickly, it is important to soothe and heal the inflamed membranes, get rid of the germs and also to aid the system inwardly to help throw off the trouble.

For these purposes, here is a home-made medicine, far better than anything you could buy at 3 times the cost. From any druggist, get 2½ ounces of Pinex. Put this into a pint bottle, and add plain granulated sugar syrup or strained honey to fill up the pint. This takes but a moment, and makes a remedy so effective that you will never do without, once you have used it. Keeps perfectly, and children like it.

This simple remedy does three necessary things. It loosens the germ-laden phlegm and soothes away the inflammation. At the same time it is absorbed into the blood, where it acts directly on the bronchial tubes. This explains why it brings such quick relief, even in obstinate bronchial coughs and "flu" coughs.

Pinex is a highly concentrated compound of genuine Norway Pine, containing the active agent of creosote, in a refined, palatable form, and known as one of the greatest healing agents for severe coughs, chest colds and bronchial troubles.

Do not accept a substitute for Pinex. It is guaranteed to give prompt relief or money refunded.

The 1929 Kitchen Contest

A. A. Will Cooperate with Home Bureaus

AGAIN American Agriculturist is co-operating with the New York State Federation of Home Bureaus in a state-wide contest for improving kitchens. Any woman in counties organized for home bureau work may enroll for the contest with the executive committee or home bureau manager. She is to submit a description of the changes she would like to make in her kitchen, accompanied by sketches showing what she had to start with and how she plans to have it eventually. This means that real thought should be devoted to the possibilities of her kitchen as to improving its arrangement. Even though it be in one of the very old houses, perhaps the work centers can be grouped differently, thus reducing the number of steps necessary in the baking or other activities going on there.

These sketches and plans are to be judged in each county by a committee of judges and very interesting and useful prizes will be offered there. The winner of first county prize will then compete for state prizes, given by American Agriculturist. These are as follows: 1st prize \$50.00, 2nd prize \$25.00, 3rd prize \$15.00 and 4th prize \$10.00, and will be awarded at the Federation's annual meeting in November.

Since one of the prime objects of the improvement contest is to achieve actual changes where needed in kitchens, the completed Kitchen Contest offers opportunity for winning a prize to those who effect the changes they planned in the letter and sketch contest. The State Federation of Home Bureaus offers a \$25 prize to the woman showing best results in making her kitchen more convenient. This is called the Completed Kitchen Contest and is open to those who have won county prizes in previous letter-and-sketch contests.

These contests offer a fine opportunity for a woman to have the fun of competing with others on a problem which she probably has wanted to tackle for years but never quite got around to do it. Full information is available at all county home bureau offices or may be obtained from our Household Department.

from the hooked mats which I see in almost every house in the neighborhood. For the busy bees who have little time to sit down even in winter, this kind of rug sounds attractive, for one can be made between mid-day dinner and bed time. Choose a miserable day when Hubby has to stay indoors and coax him to set the supper. Leave all the dishes to be washed up next day, too—for the work is so interesting you will just want to keep right at it.

I use middlings or shorts sacks as the weave is firm and close. Four go for the interlining or padding. First of all, the sacks are cut up, so as to separate the lettered fronts from the plain backs. I dye, say, several of the plain pieces a pretty golden brown and another lot are dyed green.

Then I take 8 of the undyed lettered fronts, (equalling 4 sacks) and, cutting off all rough edges, lay them carefully on top of one another and tack them together with a darning needle and wool, going round close to the edges. Next, I tack it across from side to side in 3 straight lines and from end to end in 2 straight lines, this criss-crossing of lines helping it to lie flat.

A piece, dyed brown, is tacked right on top of this padding, and then a pattern is cut out from a green dyed piece. Each part of the pattern is arranged and pinned on in its own place, the edges neatly turned in and stitched on with thread. Then a brown piece is tacked on to cover the back of the rug.

Lastly, a broad (or narrow), border of brown is carefully sewn on all around to bind the edges, being first pinned and then sewn on to the bottom. The corners have to be carefully adjusted to make them look neat, and I sew them down last of all.

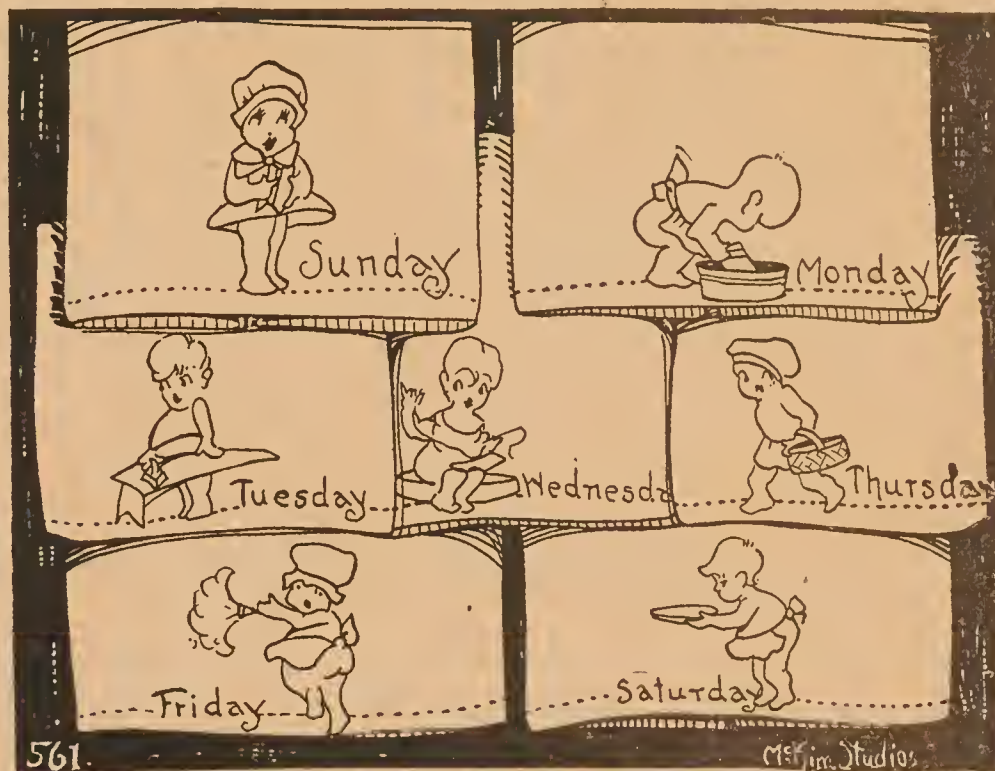
This makes a cheap and pretty little rug and is so quickly done. One takes pleasure in inventing new patterns and in planning new combinations of colors.—H. McF., Canada.

Quickly Made Rugs

FEED sacks are perquisites of farm life and it is nice to be able to make use of them in furnishing our homes. I make rugs from them, as a change

I wonder how many who have difficulty in transferring embroidery designs have ever tried drawing the patterns on very soft tissue paper and sewing the tissue directly to the goods on which we wish the design to be worked? After the pattern is completed the paper may be easily removed by washing. This saves a great deal of time.—P. M. W., New York.

Seven Day Tea Towels



561.

McGraw-Hill

FOR gifts or for bazaar, as well as for us who have long since qualified as homekeepers, a Tuesday tea towel for Tuesday, and a Sunday one for Sunday, is most encouraging. Outline stitch, two strands of any favorite hue, quickly transforms the stamped material into mighty clever towels, each with a chubby baby, struggling with the task of the day. Pattern No. 561 at 20 cents supplies the set of seven designs in wax transfer form to use on anything from linen crash to sugar sacks.

We can also furnish this set of designs, seven of them stamped on soft, part linen toweling, ready to embroider and use. This is No. 562, and is \$1.40 complete, postpaid. Three skeins of embroidery floss in colors to match the border are ten cents extra. Order from Embroidery Dept., American Agriculturist, 461, Fourth Ave., N. Y. C.

Aunt Janet's Corner

Success Is Not A Matter of Luck

ONE of the hardest things for most folks to believe is that those who succeed usually earn their success. "He has pull", "He is just plain lucky", or "What a bluffer he is" are common enough remarks about some who rise above the ranks and may be termed successful in one or more respects. But the good old maxim is still true: "You may fool some people all the time or all people some of the time, but you can't fool all the people all the time." The reason most people "get there"

through the fabric of social and business existence. Anyone who has something worth saying or doing usually is given the opportunity to say or do it. The trick lies in getting ready to say or do it better than anybody else.—AUNT JANET.

Tested Recipes

Sweet Potato Fruit Cake

Mix together two cupfuls mashed sweet potato, one cupful milk, one half cupful sugar, one cupful raisins, one fourth cupful chopped almonds, one half cupful cracker dust, one teaspoonful cinnamon, one half teaspoonful allspice, one half teaspoonful salt, one teaspoonful vanilla, the juice and rind of one orange, two tablespoonfuls fat, and beat thoroughly. Beat four eggs, add two teaspoonfuls baking powder and beat these into the potato mixture. Put in buttered cake pan and bake forty minutes in moderate oven.—L.M.T., New York.

The result of this mixture is a rather solid, moist cake. In fact it could well be served as a pudding with whipped cream on top.

* * *

Sweet Potato Salad

Combine two and one half cupfuls cooked diced sweet potato with one cupful diced celery, one teaspoonful chopped onion, and one half cupful chopped peanuts. Chill, heap on lettuce leaves, cover with salad dressing, garnish with plumped raisins and serve. L.M.T., New York.

This is a very hearty salad and therefore should be served with otherwise light meals.

Pretty Slenderizing Effect

Smart Frock for Little Girl



2684



Little girls' DRESS PATTERN 2684 with its diagonal closing is something new for the younger set. The pleated insets give extra fullness needed in such a dress. Kasha, wool jersey, tweed or the novelty cotton crepes are appropriate for this design. The pattern cuts in sizes 6, 8, 10, 12 and 14 years. Size 8 requires 1 1/4 yards of 40-inch material with 1/2 yard of 32-inch contrasting. PRICE 13c.

TO ORDER: Write name, address, pattern numbers and sizes clearly and correctly and enclose with correct remittance in stamps or coin (although coin is sent at own risk). Add 12c for one of the new Fashion Catalogs and send to Pattern Department, American Agriculturist, 461-4th Avenue, New York City.

is because they were prepared when opportunity came. The world is aching for new ideas and the individual who has a brand new one and knows how to use it already has achieved the greatest element of success.

Even those who follow the beaten path but who do a better job than the law requires have a least one fundamental factor of success. Take scrubbing floors, for instance. In my neighborhood the woman who goes out to scrub floors or to do similar work and does the best job of it is always the first one in demand. The others who skip the corners get called last, of course.

The chances are that the good scrubwoman used her opportunities and learned how a floor should be scrubbed and proceeded to live up to her best lights. The not-so-good scrubber rails against fate and the unfairness of life in general and wonders why work is slack and nobody wants to pay her the same as they pay Excellent Scrubber No. 1.

This homely little incident only illustrates what happens all the way up



2670



PATTERN 2670 is just the style the smart woman wants if she must be careful to have only the slenderizing lines. By using a figured material of lightweight woolen or one of the heavier silks with vestee of plain or contrasting shade, a most effective dress may be made. The pattern cuts in sizes 16, 18 years, 36, 38, 40, 42 and 44 inches bust. Size 36 requires 3 1/2 yards of 40-inch material with 5/8 yards of 40-inch material contrasting. PRICE 13c.

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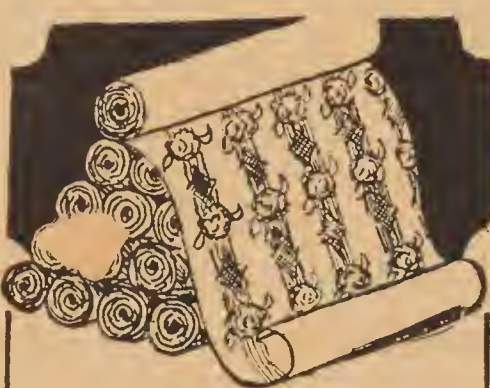
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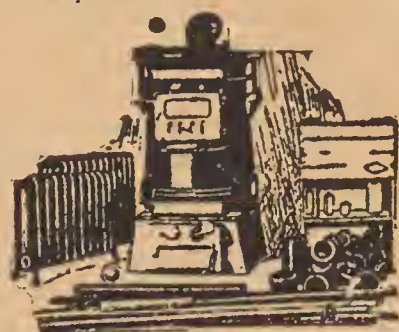
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254 West 34th Street, New York

The Little Shepherd of Kingdom Come *By John Fox, Jr.*

HUNT had been over the camp that first afternoon on a personal tour of investigation. There were not a thousand Springfield and Enfield rifles at that time in Johnston's army. Half of the soldiers were armed with shotguns and squirrel rifles, and the greater part of the other half with flint-lock muskets. But nearly every man, thinking he was in for a rough-and-tumble fight, had a bowie-knife and a revolver swung to his belt.

"Those Arkansas and Texas fellows have got knives that would make a Malay's blood run cold."

"Well, they'll do to hew firewood and cut meat," laughed Morgan.

The troops were not only badly armed. On his tour, Hunt had seen men making blankets of a piece of old carpet, lined on one side with a piece of cotton cloth; men wearing ox-hide buskins, or complicated wrapping of rags, for shoes; orderly sergeants making out reports on shingles; surgeons using a twisted handkerchief instead of a tourniquet. There was a total lack of medicine, and camp diseases were already breaking out—measles, typhoid fever, pneumonia, bowel troubles—each fatal, it seemed, in time of war.

"General Johnston has asked Richmond for a stand of thirty thousand arms," Morgan had mused, and Hunt looked up inquiringly.

"Mr. Davis can only spare a thousand."

"That's lucky," said Hunt, grimly.

And then the military organization of that army, so characteristic of the Southerner! An officer who wanted to be more than a colonel, and couldn't be a brigadier, would have a "legion"—a hybrid unit between a regiment and a brigade. Sometimes there was a regiment whose roll-call was more than two thousand men, so popular was its colonel. Companies would often refuse to designate themselves by letter, but by the thrilling titles they had given themselves. How Morgan and Hunt had laughed over "The Yellow Jack-ets," "The Dead Shots," "The Earth-quakes," "The Chickasha Desperadoes," and "The Hell Roarers"! Regiments would bear the names of their commanders—a singular instance of the Southerner's passion for individuality, as a man, a company, a regiment, or a brigade. And there was little or no discipline, as the word is understood among the military elect, and with no army that the world has ever seen, Richard Hunt always claimed, was there so little need of it. For Southern soldiers, he argued, were from the start, obedient, zealous, and tolerably patient, from good sense, and a strong sense of duty. They were born fighters; a spirit of emulation induced them to learn the drill; pride and patriotism kept them true and patient to the last, but they could not be made, by punishment or the fear of it, into machines. They read their chance of success, not in opposing numbers, but in the character, and reputation of their commanders, who, in turn, believed, as a rule, that "the unthinking automaton, formed by routine and punishment, could no more stand before the high-strung young soldier with brains and good blood, and some practice and knowledge of warfare, than a tree could resist a stroke of lightning." So that with Southern soldiers, discipline came to mean "the pride which made soldiers learn their duties rather than incur disgrace; the subordination that came from self-respect and respect for the man whom they thought worthy to command them."

Boots and saddles again at daybreak! By noon the column reached Green River, over the Kentucky line, where Morgan, even on his way down to join

Johnston, had begun the operations which were to make him famous. No picket duty that infantry could do as well, for Morgan's cavalry! He wanted it kept out on the front or the flanks of an army, and as close as possible upon the enemy. Right away, there had been thrilling times for Dan in the Green River country—setting out at dark, chasing countrymen in Federal pay or sympathy, prowling all night around and among pickets and outposts; entrapping the unwary; taking a position on the line of retreat at daybreak, and turning leisurely back to camp with prisoners and information. How memories thronged! At this very turn of the road, Dan remembered, they had their first brush with the enemy. No plan of battle had been adopted, other than to hide on both sides of the road and send their horses to the rear.

"I think we ought to charge 'em, said

Confederate sympathizers, and straggling soldiers, as Hunt reported, horribly. Dan chuckled at the memory, for the prisoners were quartered with different messes, and, that night, several bottles of sparkling Catawba happened, by some mystery, to be on hand. The prisoners were told that this was regularly issued by their commissaries, and thereupon they plead, with tears, to be received into the Confederate ranks.

This kind of service was valuable training for Morgan's later work. Slight as it was, it soon brought him thirty old, condemned artillery-horses—and Dan smiled now at the memory of those ancient chargers—which were turned over to Morgan to be nursed until they would bear a mount, and, by and by, it gained him a colonelcy and three companies, superbly mounted and equipped, which, as "Morgan's Squad-

The Story Thus Far

CHAD leaves "Lonesome" with his dog "Jack." His foster parents care both dead from the plague and plans have been laid to bind Chad out to a hard fisted neighbor. After the funeral, Chad collects a rifle, some powder, and shot and a haversack and with "Jack" by his side, starts out for unknown parts. He meets the sons of Joel Turner from over the mountain who take him home. Chad's cleverness at school gains the admiration of Caleb Hazel, the schoolmaster. They become close friends. Hazel tells Chad of the "Bluegrass Country" beyond the hills. Logging operations take Chad to a distant city where he gets lost and starts home on foot. He is picked up by Major Calvin Buford. It appears that Chad is also a Buford and is believed to be a kinsman of his new found friend, who takes him to his home in Lexington in the heart of the "Bluegrass." Chad accepts the Major's offer of a home and an education. Chad enters into the social life and becomes very popular at school. He falls in love with Margaret Dean, daughter of General Dean, neighbor of the Bufords. Meanwhile feeling grows bitter between North and South and war clouds gather. Chad joins the Union forces. Harry Dean joins the northern army while his brother Dan joins Richard Hunt in Morgan's Raiders.

Georgie Forbes, Chad's old enemy. Dan saw that his lip trembled, and, a moment later, Georgie, muttering something, disappeared.

The Yankees had come on, and, discovering them, halted. Morgan himself stepped out in the road and shot the officer riding at the head of the column. His men fell back without returning the fire, deployed and opened up. Dan recognized the very tree behind which he had stood, and again he could almost hear Richard Hunt chuckling from behind another close by.

"We would be in bad shape," said Richard Hunt, as the bullets whistled high overhead, "if we were in the tops of these trees instead of behind them." There had been no manoeuvring, no command given among the Confederates. Each man fought his own fight. In ten minutes a horseholder ran up from the rear, breathless, and announced that the Yankees were flanking. Every man withdrew, straightway, after his own fashion, and in his own time. One man was wounded and several were shot through the clothes.

"That was like a camp-meeting or an election row," laughed Morgan, when they were in camp.

"Or an affair between Austrian and Italian outposts," said Hunt.

A chuckle rose behind them. A lame colonel was limping past.

"I got your courier," he said.

"I sent no courier," said Morgan.

"It was Forbes who wanted to charge 'em," said Dan.

Again the Colonel chuckled.

"The Yankees ran when you did," he said, and limped, chuckling, away.

But it was great fun, those moonlit nights, burning bridges and chasing Home Guards who would flee fifteen or twenty miles sometimes to "rally." Here was a little town through which Dan and Richard Hunt had marched with nine prisoners in a column—taken by them alone—and a captured United States flag, flying in front, scaring

ron," became known far and near. Then real service began.

In January, the right wing of Johnston's hungry hawk had been broken in the Cumberland Mountains. Early in February, Johnston had withdrawn it from Kentucky before Buell's hosts, with its beak always to the foe. By the middle of the month, Grant had won the Western border States to the Union, with the capture of Fort Donelson. In April, the sun of Shiloh rose and set on the failure of the first Confederate aggressive campaign at the West; and in that fight Dan saw his first real battle, and Captain Hunt was wounded. In May, Buell had pushed the Confederate lines south and east toward Chattanooga. To retain a hold on the Mississippi valley, the Confederates must make another push for Kentucky, and it was this great Southern need that soon put John Morgan's name on the lips of every rebel and Yankee in the middle South. In June, provost-marshals were appointed in every county in Kentucky; the dogs of war began to be turned loose on the "secesh sympathizers" throughout the State, and Jerome Conners, overseer, began to render sly service to the Union cause.

For it was in June that Morgan paid his first memorable little visit to the Bluegrass, and Daniel Dean wrote his brother Harry the short tale of the raid.

"We left Dixie with nine hundred men," the letter ran, "and got back in twenty-four days with twelve hundred. Travelled over one thousand miles, captured seventeen towns, destroyed all Government supplies and arms in them, scattered fifteen hundred Home Guards, and paroled twelve hundred regular troops. Lost of the original nine hundred, in killed, wounded, and missing, about ninety men. How's that? We kept twenty thousand men busy guarding Government posts or chasing us, and we're going back often. Oh, Harry,

I am glad that you are with Grant."

But Harry was not with Grant—not now. While Morgan was marching up from Dixie to help Kirby Smith in the last great effort that the Confederacy was about to make to win Kentucky—down from the yellow river marched the Fourth Ohio Cavalry to go into camp at Lexington; and with it marched Chadwick Buford and Harry Dean, who, too, were veterans now—who, too, were going home. Both lads wore a second lieutenant's empty shoulder-straps, which both yet meant to fill with bars, but Chad's promotion had not come as swiftly as Harry had predicted; the Captain, whose displeasure he had incurred, prevented that. It had come, in time, however, and with one leap he had landed, after Shiloh, at Harry's side. In the beginning, young Dean had wanted to go to the Army of the Potomac, as did Chad, but one quiet word from the taciturn colonel with the stubbly reddish-brown beard and the perpetual black cigar kept both where they were.

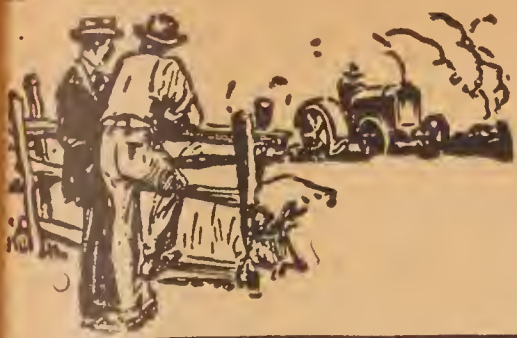
"Though," said Grant to Chad, as his eye ran over beautiful Dixie from tip of nose to tip of tail, and came back to Chad, slightly twinkling, "I've a great notion to put you in the infantry just to get hold of that horse."

So it was no queer turn of fate that had soon sent both the lads to help hold Zollicoffer at Cumberland Gap, that stopped them at Camp Dick Robinson to join forces with Wolford's cavalry, and brought Chad face to face with an old friend. Wolford's cavalry was gathered from the mountains and the hills, and when some scouts came in that afternoon, Chad, to his great joy, saw, mounted on a gaunt sorrel, none other than his old schoolmaster, Caleb Hazel, who, after shaking hands with both Harry and Chad, pointed silently at a great, strange figure following him on a splendid horse some fifty yards behind. The man wore a slouch hat, tow linen breeches, home-made suspenders, a belt with two pistols, and on his naked heels were two huge Texan spurs. Harry broke into a laugh, and Chad's puzzled face cleared when the man grinned; it was Yankee Jake Dillon, one of the giant twins. Chad looked at him curiously; that blow on the head that his brother, Rebel Jerry, had given him, had wrought a miracle. The lips no longer hung apart, but were set firmly, and the eye was almost keen; the face was still rather stupid, but not foolish—and it was still kind. Chad knew that, somewhere in the Confederate lines, Rebel Jerry was looking for Jake, as Yankee Jake, doubtless was now looking for Jerry, and he began to think that it might be well for Jerry if neither was ever found. Daws Dillon, so he learned from Caleb Hazel and Jake, was already making his name a watchword of terror along the border of Virginia and Tennessee, and was prowling, like a wolf, now and then, along the edge of the Bluegrass. Old Joel Turner had died of his wound, Rube had gone off to the war and Mother Turner and Melissa were left at home, alone.

"Daws fit fust on one side and then on t'other," said Jake, and then he smiled in a way that Chad understood; "an' sence you was down thar last, Daws don't seem to hanker much after meddlin' with the Turners, though the two women did have to run over into Virginny, once in a while. Melissa," he added, "was a-goin' to marry Dave Hilton, so folks said; and he reckoned they'd already hitched most likely, sence Chad thar—"

A flash from Chad's eyes stopped him, and Chad, seeing Harry's puzz-

(Continued on Page 30)



AMERICAN AGRICULTURIST

Classified Ads

A Place to Buy, Sell or Trade



DOGS AND PET STOCK

COLLIE PUPPIES, males \$6.50, females \$4.50. P. HAMILTON, Cochranville, Pa.

SCOTCH COLLIES and Welsh Shepherds Puppies. Shipped on approval. MAPLE GROVE FARMS, Pope Mills, N. Y.

COLLIE PUPPIES, Sable with white markings. Males \$6.50, Females \$4.50. P. HAMILTON, Cochranville, Pa.

REGISTERED POINTER, Male, trained, must be sold, champion hunter, trial given. JOSEPH GATES, Westboro, Mass.

COON, FOX, MINK and Opposum hounds \$15. Farm row dogs \$3. New 12 gauge double hammerless Stevens and case \$25. First money order gets. DAWSON, Tuckerton, N. J.

LIVE STOCK

(See Page 30)

POULTRY

Baby Chicks, Breeding Stock, Eggs

EARLY SPRING BROILER CHICKS—Butchers. Market men pay extra prices for your purebred Rocks, Reds, Wyandottes, Orpingtons. Descriptive Picture Folder Free, showing best varieties money making market chickens. FARM SERVICE, Route A1, Tyrone, Pa.

PEAFOWL, Pheasants, Bantams, Pigeons, Guineas. Free circular. JOHN HASS, Bettendorf, Iowa.

KEISER'S SINGLE COMB Brown Leghorns and Golden Buff Orpingtons. Excellent matings. Catalogue. F. KEISER, Grampian, Pa.

FOR SALE—Single Comb White Leghorn chicks. L. H. HISCOCK, Skaneateles, N. Y. Circular on request.

SINGLE COMB REDS—Barred Rocks, Eggs, Chicks. Extraordinary matings. Fine type. Bred for winter production. Catalogue. Low prices. GRAMPIAN HILLS POULTRY FARMS, Grampian, Pa.

AMERICAN MOTTLED ANCONAS—Record Layers. Lay large white eggs. Extra large type. Exceptional markings. Fine matings. Low prices. Catalogue. AMERICAN ANCONA FARMS, Grampian, Pa.

PRODUCTION BRED CHICKS that live. Large type S.C.W. Leghorns, \$20-100; \$180-1000; Invest now and take profits in 1929. ADAM SEABURY, Sayville, L. I.

SUNNYFIELD EXTRA LARGE Single Comb Black Minorcas. Exclusively. Chicks, Eggs, Stock. Extraordinary layers. Lay exceptionally large white eggs. Two matings. Low prices. Catalogue. SUNNYFIELD MINORCA FARMS, Grampian, Pa.

REGAL DORCAS WHITE WYANDOTTES—Eggs, chicks, stock. 256 egg record. Ledger. North American contest. Winter layers. Excellent type. Fine matings. Low prices. Catalogue. KEISER'S WHITE ACRES, Grampian, Pa.

GIANT LIGHT BRAHMAS—chicks—eggs—extraordinary large breeders—fine color—GIANT BRAHMA FARMS, Grampian, Pa.

ROSE COMB RHODE Island Red Cockerels, superb quality. \$2.50 and up, shipped on approval. ROBERT H. PURVES, Waddington, N. Y.

LEGHORN, ANCONAS 10c. Rocks, Reds, Minorcas 12c. Wyandottes 13c. heavies 11c. Light mixed 9c. CONTINENTAL HATCHERY, York, Pa.

BUCHER SUPER-QUALITY CHICKS from inspected free range money-making stock. Reds, White Wyandottes, White Barred Rocks, Giants, Black Minorcas, Anconas, White and Brown Leghorns. Booklet Free. Low Prices. Pure Breeds. BUCHER BROS., HATCHERY, Dept. C, Bucyrus, Ohio.

SINGLE COMB WHITE Leghorn Chicks from certified supervised and flock matings. R. B. PEARSALL, Groton, N. Y.

500 CHICK size Brooder Stove given free with each 500 chick order. L. W. HAMBLIN, Wilson, N. Y.

Classified Advertising Rates

CLASSIFIED ADS ARE INSERTED at the rate of 7 cents a word. The minimum charge per insertion is \$1. Count as one word each initial, abbreviation and whole number, including name and address. Thus "J. B. Jones, 44 E. Main St., Mount Morris, N. Y." counts as eleven words.

The More You Tell, The Quicker You Sell

ADVERTISING ORDERS must reach our office at 461 Fourth Avenue, New York City, not later than 14 days before the Saturday of publication date desired. Cancellation orders must reach us on the same schedule. Because of the low rate to subscribers and their friends, cash or money order must accompany your order.

Orders for these columns must be accompanied by bank references

POULTRY

Baby Chicks, Breeding Stock, Eggs

QUALITY CHICKS—S.C. White Leghorns per 100-\$11. S.C. Barred Rocks \$13. Light mix \$9 per 100. Heavy \$11. Special prices on larger lots. 100% live delivery. postpaid. New circular free. EDGAR C. LEISTER, McAlisterville, Pa.

CHICKS—From Pedigreed Barron White Leghorns. Imported yearly from Barron, England; dams trapnest records to 313. Big females, long bodies, large eggs. Catalog free. BISHOP'S POULTRY FARM, New Washington, Ohio.

BIG VIGOROUS CHICKS from high egg producing, pure bred stock. Carefully selected for rapid growth and high vitality. Chicks that grow faster and lay more eggs. Leghorns, Barred Rocks. Free Brooder stove with order of 500 chicks. L. W. HAMBLIN, Wilson, N. Y.

HEAVIEST LAYING BARRED Rock pen all eastern contests two consecutive years. Records to 2347. Circular. Chicks \$25 per hundred. Cockerels \$5. H. VAN WINKLE, Box A, Camden, N. Y.

FIRST AND SECOND prize cocks, first prize hen, second prize pullet, production class Utica Show, \$4.50 each. Cocks, cockerels \$3. up. Hens \$2. Our Bourbon Red turkeys won at Chicago and Madison Square Garden. Stock—Eggs—Poults. MRS. C. J. DOXTATER, Evans Mills, N. Y.

BABY CHICKS: From heavy laying strains of Rocks and Reds \$14. White and Brown Leghorns \$12. Mixed \$10. prepaid. Member I.B.C.A. SUNNYSIDE HATCHERY, Liverpool, Pa.

FOR SALE EGGS for hatching, from Rhode Island Reds, High Laying strain, and beautiful dark red color. 15 eggs \$3. 30 eggs \$5. LAUREL CENTRE GARDENS, Port Jefferson Station, N. Y.

POULTRY

Baby Chicks, Breeding Stock, Eggs

SINGLE COMB WHITE Leghorn chicks from two and three year hens only. 18c. Hatching eggs. 9c. RED RIDGE POULTRY FARM, Centro Moriches, N. Y.

BLACK SPANISH & RED CAPS, 15 eggs \$2.50; Duck eggs: White Muscovies, Buff Orpingtons, Pekins. 11-\$2.50. New Zealand Red Rabbits, \$5. each. BREEDERS SUPPLY, Cobleskill, N. Y.

Turkeys—Ducks—Geese

TURKEYS MAMMOTH BRONZE Bourbon Red, Narragansett, White Holland hens, toms, unrelated pairs and trios, highest quality. Reasonable prices. WALTER BROS., Powhatan Point, Ohio.

TURKEYS—Large, purebred, Mammoth Bronze, vigorous, healthy birds, highest quality, splendid markings, satisfaction guaranteed. CLIFTON LEE, Lowville, N. Y.

TURKEYS—LARGE, PUREBRED, Mammoth Bronze. Dark colored. Very beautifully marked. Best strain. Yearlings and young stock. MRS. ARTHUR INGER-SOLL, Lowville, N. Y.

PUREBRED WHITE MUSCOVY DUCKS \$3, two for \$5.50. CHARLES E. HALLOCK, Mattituck, New York.

MAMMOTH BRONZE TURKEYS, Large, vigorous, healthy stock, free range. Prices reasonable. ELMER BERRY, Adams, N. Y.

BOURBON RED TURKEYS for sale. Toms \$15. and hens \$12 each. MRS. WALTER B. SEXTON, Vonic Centre, N. Y.

WHITE HOLLAND TURKEYS, large, strong and extra heavy laying strain also Barred Rock Cockerels. MRS. D. H. MILLER, R-1, Adams, N. Y.

FEW GOOD ROUEN drakes and ducks at reasonable prices. ELMER L. DUTTERA, Littlestown, Pa.

LIVESTOCK ADVERTISING

After the issue of March 30th advertisements for livestock (cattle, swine, sheep, horses and goats) will not be accepted for the classified page.

All livestock advertising will be grouped together on one page under the heading "LIVESTOCK - BREEDERS". A special reduced rate of 50c per agate line, or \$7.00 per column inch, will be given this type of advertising.

In figuring the cost of your advertising seven words of type will average a line. Make some allowance of space for proper display.

This action is taken for the convenience of readers and also to make livestock advertising of greater value in the columns of AMERICAN AGRICULTURIST. This display advertising, while producing better results for advertisers will, in most instances, cost no more than classified.

MINIMUM SPACE—Four lines averaging 28 words costing \$2.00 for each insertion is the smallest order accepted.

COPY must be received eleven days prior to the issue in which the advertisement is to appear.

TERMS—Cash must accompany all orders for less than \$10.

REFERENCES either from your bank or from two reputable business men in your community are required from new advertisers. These references are required for the protection of both our readers and other advertisers.

For further information in regard to livestock advertising write—Advertising Department, AMERICAN AGRICULTURIST, 461 Fourth Ave., New York City.

POULTRY

Turkeys—Ducks—Geese

MAMMOTH WHITE PEKINS, Ducks \$3. Drakes \$4. ARTHUR BURGMAN, Locke, N. Y.

MAMMOTH BRONZE DAY old turkeys and hatching eggs. Place orders now for early delivery. PLYMOUTH TURKEY FARM, Plymouth, N. H.

DUCKLINGS \$30. Eggs \$12 per hundred. Mammoth White Pekins. L. W. HAMBLIN, Wilson, N. Y.

FOR SALE: Thorobred Mammoth Bronze turkeys. Free from disease. Enclose Stamp. MAUDE MILLS, Hammond, N. Y.

PUREBRED, PERFECTLY MARKED, Bourbon Red turkeys from prize winning stock. MRS. E. B. HARMON, Adams, N. Y.

PUREBRED MAMMOTH BRONZE large vigorous healthy May and June turkeys. Toms \$12-\$15, hens \$8-10. MRS. D. J. WASHBURN, Adams, N. Y.

FARM EQUIPMENT

LIME AND FERTILIZER SPREADERS that will do the best of work. Made to attach to any cart or wagon \$15.00. J. S. GREENLEAF, Anson, Maine.

ROOFING PAPER, 3-ply, \$1.35 per roll, 100 sq-ft. Prepaid. Asphalt shingles, roofing, paint. Send for price list. WINKER BROS., Millis, Mass.

ELECTRIC LIGHTING PLANT large capacity, guaranteed good as new, a bargain. LESTER BENNETT, Victor, N. Y.

EDGEWOOD GARDEN COMPANY, Mfgs. of Rabbit, Fox and Poultry Equipment. Send for booklet today. HERBERT E. DE WINTER, Franklin, Mass.

MANURE SPREADERS \$119.50 and \$124.50 and Packers \$77.50 F.O.B. Liberty, Indiana, direct from factory to Farmer. LIBERTY SPREADER & MFG. CO., Liberty, Indiana.

EXTENSION LADDERS, 20 to 32 ft. 25c per ft. 32 to 40 ft. 27c per ft. Freight prepaid. ARTHUR L. FERRIS, Box A, Interlaken, N. Y.

FOR SALE, LETZ Dixie grain and roughage grinder No. 180 almost new. Also two Perfection milking pails with double unit pulsators. Prices reasonable. P. O. Hopewell Junction, N. Y. Tel. Beacon 309 F. 5. MRS. R. T. VAN WYCK.

SEEDS—NURSERY STOCK

PEACH AND APPLE TREES \$5; \$7.50 per 100 and up. Complete assortment fruits, berries, vines, ornamental trees, vines, shrubs, evergreens. Catalog in colors free. TENNESSEE NURSERY COMPANY, Box 102, Cleveland, Tenn.

PEACH AND APPLE TREES \$5 per 100 and up. Fruits, ornamental trees, vines. TENNESSEE NURSERY CO., Box 202, Cleveland, Tenn.

HIGH GRADE SEED Potatoes—Russets. Green Mountain, Gold Coin, Cobbler, Banner, Walter Raleighs and Carman No. 3. Prices right. Catalog free. THE KEYSTONE POTATO FARMS, Richfield, Pa.

Free Samples CLARAGE Seed Corn. CLARAGE produced WORLD'S HIGHEST YIELDS. Write Dunlap & Son, Williamsport, Ohio.

100 MASTODON EVERBEARING \$1.85. 300, \$5. Illustrated Plant, Seed Catalogue free. CHAMPION ORIGINATOR, New Buffalo, Michigan.

MARTHA WASHINGTON ASPARAGUS Crowns, \$3.75 per Thousand, above Ten thousand \$3. Thousand. M. MAZURSKY, Barnwell, S. C.

Additional Classified Advertising

On Page 30

HANDY ANDY Says "Here's How"

To Raise Turkeys Successfully

By Ray Inman

Turkeys CAN BE RAISED SUCCESSFULLY UNDER CONFINED RANGE

A FELLER KINDO WONDERS WITH TURKEYS IN A CONFINED RANGE, BOULDER.

YEAH, BUT YOU'GHTA SEE WHAT MY WIFE KIN DO TO 'EM IN JUST A ORDINARY OL' KITCHEN RANGE

EVERY BOW-LEGGED TYPE OF TURKEY

Locate BROODER HOUSE ON GROUND FREE OF DISEASE AND PARASITES divide it into four 10x50 lots

FOR A 200 BIRD FLOCK

HAS THEY EVER BEEN ANY PARASITES ON THIS LAND, PHILPAW?

THEY WAS A AVIATOR LANDED HERE IN ONE ABOUT A YEAR AGO—BUT HE TOOK IT AWAY WITH HIM

Rotate YOUNG TURKEYS TWO WEEKS TO EACH LOT, THEN MOVE TO A TWO ACRE RANGE DIVIDED INTO FOUR SECTIONS, ROTATING ONE MONTH TO A SECTION.

TURKEYS IS BEST ROTATED ZEPH

NOT FER ME. -I LIKE 'EM FRIED

Feeds TO USE:

YOUNG: STANDARD BABY GROWING: GROWING MASH GROWN: GRAIN MIXTURE FEED IT IN HOPPERS

WELL, WELL—YOU GOT ADANDY LIL TOM TURKEY AINCHOO?

YER GOOPHIE. —HIS NAME'S RALPH!



Livestock Breeders

CATTLE

CATTLE



HOLSTEINS FOR PROFIT

More Dollars per Cow per Year

Improve Your Herd A Holstein bull will add production, size and ruggedness to your herd. A good Holstein bull will start you on the road to greater dairy profits.

Extension Service

The HOLSTEIN-FRIESIAN ASSOCIATION OF AMERICA
230 East Ohio Street, Chicago, Illinois

Send for Literature

\$50⁰⁰/₁₀₀ OFF in the Chinese Auction

of FISHKILL DEMEER HENGERVELD

Born February 6, 1928

He is a son of a three year old (by the noted Dutchland Colantha Sir Inka) that has made two good long time records first and second calf on twice a day milking. This young bull's sire, and also his dam are son and daughter of Winana Segis May 2d, who made 876.76 lbs.

of butter and close to 20,000 lbs. of milk in ten months as a four year old. Also his sire is a son of Hengerveld Homestead De Kol 4th who has a splendid list of large producing daughters, he being a son of Jenny Linn Colantha, with a record of over 30 lbs. butter in 7 days.

His Price is Now \$350.

This price will be reduced \$50 the first of each month until sold. Dairyman's League Certificates will be accepted at face value in payment for this animal.

FISHKILL FARMS HENRY MORGENTHAU, Jr., Owner
461 Fourth Avenue New York

FEDERAL TESTED COWS, 45 fresh and close up springers, Holsteins, Guernseys, and Jerseys. E. CLAUDE JONES, Columbia County, Craryville, N. Y.

FOR SALE: 13 head of registered Holstein heifers. Begin to freshen in March. One 2 year old bull, Canadian bred. Accredited herd. BEN NEWTON, Salamanca, N. Y.

6 COWS, 11-2 year old heifers, 6 bulls 3 to 18 months old. 4 calves 3 months old, 2 registered guernsey calves 3 months old TB Tested.
SPOT FARM, TULLY, N. Y.

FOR SALE: Registered Jersey cattle Cows, Heifers and young bulls, grandsons of Bagot's Crocus. From a T.B. tested herd. WM. McWHORTER, Argyle, N. Y.

SWINE

SWINE

FARMERS BUY FROM FARMERS

Let us suggest to you as breeders the best kind of a pig to start to raise is a good one. You save time and money. We sell all pigs with a trial of two weeks, and then if dissatisfied, return pigs and we will return your money.

7-8 wks. old, \$3.75 ea.; 8-10 wks. old, \$4 ea. Breeds—Chester and Yorkshire cross, and Berkshire and Chester cross. Crating free. These prices F.O.B. our depot. Will ship any number C.O.D. or send check or money order.

MISHAWUN STOCK FARM,
MISHAWUN ROAD, WOBURN, MASS.
P. S. No pigs sold at the farm; only by appointment.

PIGS FOR SALE OLD RELIABLE STOCK

Heavy legged, square backed, Chester and Yorkshire crossed, Poland China and Chester crossed, Barrows, boars or sows—8 to 10 weeks old, \$4.00 each. Fancy Berkshires, also Chester Whites, 2 months old Sows and unrelated Boars, \$5.00 each. 10 days trial or your money back. Shipped C.O.D. Crating free of charge. Yours for quality hogs.

ED. COLLINS, 35 Waltham Street,
LEXINGTON, MASS.

Pigs From Reliable Stock

Buy where quality is never sacrificed for quantity. We sell only high grade pigs, fast growers, that will prove a good investment—thrifty and rugged, having size and breeding. Will ship C.O.D.

Chester and Yorkshire—Berkshire & Chester
7 to 8 weeks old, \$3.75
8 to 10 weeks old, \$4.25
Satisfaction guaranteed, or money refunded. 10 days trial allowed. Crates supplied free. A. M. LUX, 206 Washington St., Woburn, Mass. Tel. Wob. 1415.

BEST GRADE Chester, Berkshire and Poland China Pigs. 3 months old, \$12.00 each; 6-8 weeks old, \$7.00 each. (Express Paid). Bred Sows and Boars. C. E. BOSSERMAN, York Springs, Pa.

REGISTERED O.I.C. sows bred to farrow, boar pigs certificates accepted, GEO. N. RUTACHT, Mallory, N. Y.

FOUNDATION DAM FARROWED 241, 8 yrs. O.I.C. Farmers prices. All ages. Write, SUMNER, Wyalusing, Pa.

Additional Classified Advertising

PRINTING—STATIONERY

GUMMED MAPLE LABELS. Guaranteed stick to tin. Advertising letters, circulars, price lists. Attractively printed in colors. Sells your product at highly profitable prices. Samples and valuable information free. **PRINTER HOWIE,** Beebeplain, Vt.

PERSONAL STATIONERY printed with your name and address, will by its fine appearance and great convenience be a source of satisfaction and pride to you. 100 sheets fine ripple finish bond with 100 envelopes to match for \$1., printed in handsome Gothic type. **BEAVER PRESS,** 11520-159th St., Jamaica, N. Y.

AGENTS WANTED

AGENTS: \$16 day and New Ford Auto Free. Sell groceries. Over 400 items used daily every home. Steady all year job. Your own groceries about half price. Send for samples. **HARLEY COMPANY,** Dept. B-12265, Dayton, Ohio.

TOBACCO

CIGARS from factory, trial 50 large Perfectos, postpaid, \$1. **SNELL CO.,** Red Lion, Pa.

HOMESPUN TOBACCO: Chewing 5 lbs. \$1.50; Smoking 5 lbs. \$1.25. Fifty cigars \$1.75. Pay when received. Pipe free. **FARMERS UNION,** Paducah, Ky.

WOMEN'S WANTS

LADIES SILK and **WOOL** Bloomers, white, grey, tan, 36-44. 2 pair \$1.50. Good openings for agents. **A. H. TALBOT SALES COMPANY,** Norwood, Mass.

FARMS FOR SALE

14 ACRES, 8 room house, electric; best farming section of Sunny South Jersey. **OWNER** 418 N. 2nd St., Camden, N. J.

FARM FOR RENT with a chance to buy. Call personally or write, **MR. O. COX,** Mattituck, L. I.

FOR SALE: One of the finest homes in the county. 5 acres. Splendid 10 room house modern 2 baths, spring and village water. Steam heat. Plenty fruit. 75 mile view. 2 miles from Liberty village. Most beautiful spot in the State. High and healthful. Mosquitos unknown. \$7000 part cash. Terms. **AUGUST JOHNSON,** Livingston Manor, N. Y. Phone 2-F-2.

DEL-MAR-VA—THE MARKET BASKET OF THE EAST. Three to ten hours by motor truck to New York, Philadelphia, Baltimore and Washington markets. Pennsylvania Railroad permeates Peninsula. Splendid productive land, farms, town and waterfront homes. Low prices. Good schools, low taxes. Very little snow and freezing. Handsome descriptive booklet, FREE. Address 164 Del-Mar-Va Building, Salisbury, Md.

FOR SALE: Dairy Farm, 160 acres, reasonably priced for quick sale on cash terms. Contains 110 acres of fertile soil suitable for cultivation and 50 acres pasture land. Two story, 7 room frame house, bank barn, hexagon shape, 65 ft. across, about same height, stables 35 cows, 4 horses. Hay capacity 125 loads. Silo 12x35. Two running creeks and spring water piped to barn. This an ideal Dairy Farm, best in the district, located one-fourth mile from railroad station and near Oil City, Pa., which provides a high priced market for butter, cream and milk, etc. Intending buyers will be shown the property at any time. Call on or write **H. T. HEYDRICK,** 327 No. Main St., Meadville, Pa.

The Little Shepherd of Kingdom Come

(Continued from Page 28)

zled face, turned away. He was glad that Melissa was going to marry—yes, he was glad; and how he did pray that she might be happy!

Fighting Zollicoffer, only a few days later, Chad and Harry had their baptism of fire, and strange battle orders they heard, that made them smile even in the thick of the fight.

"Huddle up thar!" "Scatter out, now!" "Form a line of fight!" "Wait till you see the shine of their eyes!"

"I see 'em!" shouted a private, and "bang" went his gun. That was the way the fight opened. Chad saw Harry's eyes blazing like stars from his pale face, which looked pained and half sick, and Chad understood—the lads were fighting their own people, and there was no help for it. A voice bel-lowed from the rear, and a man in a red cap loomed in the smoke-mist ahead:

"Now, now! Git up and git, boys!"

That was the order for the charge, and the blue line went forward. Chad never forgot that first battle-field when he saw it a few hours later strewn with dead and wounded, the dead lying, as they dropped, in every conceivable position, features stark, limbs rigid; one man with a half-smoked cigar on his breast; the faces of so many beardless; some frowning, some as if asleep and dreaming; and the wounded—some talking pitifully, some in delirium, some courteous, patient, anxious to save trouble, other morose, sullen, sto-

lid, independent; never forgot it, even the terrible night after Shiloh, when he searched heaps of wounded and slain for Caleb Hazel, who lay all through the night wounded almost to death.

Later, the Fourth Ohio followed Johnston, as he gave way before Buell, and many times did they skirmish and fight with ubiquitous Morgan's Men. Several times Harry and Dan sent each other messages to say that each was still unhurt, and both were in constant horror of some day coming face to face. Once, indeed, Harry, chasing a rebel and firing at him, saw him lurch in his saddle, and Chad, coming up, found the lad on the ground, crying over a canteen which the rebel had dropped. It was marked with the initials D. D., the strap was cut by the bullet Harry had fired, and not for a week of agonizing torture did Harry learn that the canteen, though Dan's, had been carried that day by another man. (To be Continued Next Week)

Maine a Great Farm State

About one-fourth of the population of Maine is engaged in farming, with \$250,000,000 invested in farms and equipment. The annual value of the products of these farms is more than \$120,000,000.

When one thinks of Maine, he thinks of potatoes, for Aroostook County is one of the greatest potato producing sections of the world. But dairying is also a big farm industry in Maine and the state is a large producer of many other kinds of farm products.

Additional Classified Advertising

SEEDS—NURSERY STOCK

GLADIOLUS BULBS—36 page illustrated Catalog free, 175 varieties. Thirty All Different \$1. postpaid. **HOWARD GILLET,** Box J, New Lebanon, N. Y.

MILLIONS CABBAGE, ONIONS, and Tomato Plants, \$1. 1000. Pepper and Potato Plants \$1.75 1000. Gladiolus Bulbs \$1. 1000. **CLARK PLANT CO.,** Thomasville, Ga.

FARM SEEDS APPROVED varieties. Officially analyzed and tested. Beans, Barley, Buckwheat, Potatoes, Corn, Oats. Free sample and circular. **E. F. HUMPHREY,** Ira, N. Y.

CERTIFIED SEED POTATOES. Smooth and Russet Rurals. Buy direct from one of New York's Premier growers, car lots or less. **A. A. WEEKS,** Locke, N. Y.

CERTIFIED SEED POTATOES, Irish Cobblers and original strain Carman No. 3. Buy direct from grower. Write today for prices. **N. A. BAKER & SONS,** Fairport, N. Y.

EARLY JUNE RED Raspberry sets for sale. The earliest, largest, heaviest bearing berry grown. Send for literature telling what the New York State Experiment Station says of the June. **LESTER BENNETT,** Victor, N. Y.

BEAUTIFUL DAHLIAS. Choice varieties, 8 our best, all different \$1. postpaid. 10 Pompons \$1. 6 choice Gladioli bulbs with orders before March 15th. **C. P. EARLE,** Dahlia Specialist, 1806 W. Genesee St., Syracuse, N. Y.

SITUATIONS WANTED

MAN WANTS WORK on poultry farm. Some experience. References. Box 407, **AMERICAN AGRICULTURIST.**

WANTED POSITION on Poultry Farm in western New York. boy farm raised. Christian young man, 21, desiring experience. Good health, willing worker. **JASPER BUCK,** Bliss, N. Y.

HELP WANTED

MARRIED MAN to work in Dairy and care for calves. Wife to board two single men. **ARTHUR D. HOOSE,** Fishkill Farms, Hopewell Junction, N. Y.

RELIABLE MEN WANTED to sell guaranteed trees, shrubs and roses. Steady work. Pay weekly. Start now for Spring business. Wholesale and retail. **WEBB NURSERY CO.,** Rochester, N. Y.

WANTED IN MARCH young man experienced in greenhouse and garden work also capable of attending Seed Store and keeping accounts. Protestant American of good family connection preferred. **LAUREL CENTRE GARDENS,** Port Jefferson Station, N. Y.

EVERY HOME A PROSPECT. Make big money. Employ crew. Take orders trees, shrubbery. Work entire year. All or part time. Complete cooperation, Landscape service. Com. paid weekly. We deliver, collect. Apply **WILLEMS, SONS' NURSERIES,** Desk A, Rochester, N. Y.

WOOL—HIDES—FURS

MINK FURS WANTED. Large \$30. Medium \$24. Small \$20. Red fox, large \$30. Medium \$24. Small \$20. **E. T. SHERMAN,** Whitman, Mass.

WANTED—MUSKRATS, A-I, Winters. Springs, good sizes, Blacks, \$2 Brown \$1.75. Held separate on request. **STERN'S French St.,** New Brunswick, N. J.

MISCELLANEOUS

USED CIVIL WAR ENVELOPES with flags, designs, etc. \$1 to \$15 paid. Other stamps on envelopes before 1871 bought. **W. RICHMOND,** Cold Spring, N. Y.

WANTED—HAY, GRAIN, Potatoes, Apples, Cabbage, Carloads. Pay highest market prices. **THE HAMILTON CO.,** New Castle, Pa.

WANTED TO BUY old bags. We pay excellent prices. Write for prices. We pay freight. **OWASCO BAG CO.,** Rochester, N. Y.

PEANUTS—Buy direct from growers. Roast them yourself. 10 lbs. \$1.50; 25 lbs. \$3.00; 100 lbs. \$10.00; 500 lbs. \$40.00; 2000 lbs. \$150.00. Now booking orders for "FROSTPROOF" Cabbage Plants. **J. P. CONNELL COMPANY,** Franklin, Va.

LONG'S PURE HONEY—Direct from producer, clover or buckwheat, 5 lbs. pail \$1.15 postpaid, whole-sale prices on request. Satisfaction guaranteed. **W. C. LONG,** Millville, Pa.

OUR 1929 CATALOG just from press. 84 pages showing Largest Line of Poultry Supplies in the world. (Over 350 items). Write today for your copy FREE. **BROWER MFG. CO.,** Dept. 11, Quincy, Ill.

AVIATION—Salary while learning, \$18 to \$25 per week, while under instruction in our factory and at our airport. Call or write for information without obligation. **WEEKS AIRCRAFT CORPORATION** Department S. Plankinton Building, Milwaukee, Wisconsin.

HERCULES 1½ horse engine \$20. 32 volt generator \$25. Delco power stand \$15. 11. **A. VAN KUREN,** Rummerfield, Pa.

PURE HONEY, Satisfaction guaranteed. 5 lbs. clover, \$1; 10, \$1.90; buckwheat \$1.65. Prepaid. **C. N. BAL-LARD,** Valois, N. Y.

FOR SALE. 32 volt Westinghouse light plant, **CHAS. D. OSBORN,** care Crawshaw Carpet Co., Newburgh, N. Y.

CHAPPED HANDS? SMOOTHIT gives quick relief. Send 25c for jar. **Philadelphia Chemical Mfg. Co.,** 4834 N. Franklin St., Phila., Pa.

MILKING MACHINE, New Automatic, 2 single units, pump, tank, etc.; like new, reasonable. Also 2 double units. **O. HENDRICKSON,** Cobleskill, N. Y.

WANTED USED BAGS any quantity and grade. Highest prices and freight paid. **HOFFMAN BROS. BAG CO.,** 39 Gorham St., Rochester, N. Y.

PATCHWORK: Rayon, Percale, Prints, 3 lbs. \$1. 100 assorted pieces 6x8, \$1. Special trial package, 50 cents, postpaid. **NEW ENGLAND PATCHWORK CO.,** Hartford, Conn.

\$2 to \$500 EACH paid for hundreds of Old or Odd Coins. Keep all old money, it may be very valuable. Get Posted. Send 10 cents for Illustrated Coin Value Book. 4x6. 25 years in business. We buy and sell. **CLARKE COIN EXCHANGE,** Box 25, Le Roy, N. Y.

FARMERS' "EVERY-DAY-PAY-DAY-PLAN." You can make \$30 to \$150 weekly distributing Whitmer Products to your friends. Experience unnecessary. We teach you how free. Earn while learning. Team or car needed. Write today for Farmers' "Every-Day-Pay-Day-Plan." **THE H. C. WHITMER CO.,** Columbus, Indiana. Farm Dept. 12.

AMERICAN AGRICULTURIST Classified Ads get results. Try one.



The Service Bureau
A Department Devoted to the Interests, Welfare
and Protection of A. A. Readers

Homework Schemes

IN spite of the fact that we are continually warning subscribers against homework schemes, we receive several letters each day asking about the reliability of certain concerns. We cannot emphasize too strongly that after investigating literally hundreds of these concerns, we have yet to find one which we can recommend. We consider them especially harmful due to the fact that they swindle just the people

We say this in spite of the fact that the pay offered for such homework is ruinously low. Even if the pay was sure, we would not recommend to our subscribers that they work for the rate which they could receive from this source.

Addressing Envelopes

3. Many firms advertise for people to address envelopes at home. On the face of it, this is absurd. Modern business sends its letters in typewritten envelopes or in cases where there are large letter lists, the addresses are put on by stencil at a cost far below that which would have to be paid for hand addressing.

Those who answer this type of ad usually find that the company is interested in getting names and addresses for some purpose which will do you no good, or else they are attempting to sell you some correspondence course.

4. There is still another type of homework scheme in the form of a clipping bureau. This we consider pretty close to a fraud. Applicants pay their money and are given directions for starting a clipping bureau. Briefly, this gives to our subscribers a number of papers, clipping news items from them and writing to those mentioned and saying that you have a news item of interest which you will send them for a certain sum of money. We are sure none of our subscribers would care to engage in this sort of business.

Total Loss is Staggering

If figures were available showing the amount of money taken in by these so-called homework schemes, we feel sure that the figures would be staggering. We base our conclusion on the numbers of them which have recently been brought to life. In many cases, their activities have been brought to the notice of the Post Office Department and fraud orders have been issued against them. The Post Office has done some good work along this line but they are handicapped by the fact that the invest-

who can least afford it. They commonly take small amounts of money, sometimes not over a dollar or two, from people who are in great need of money and there is practically no chance of recovery.

Homework schemes may be divided into the following groups or classes:

1. Those who are interested in selling a sample outfit at a profit. This may be a dress or an apron to make, show cards to letter or draw or material to embroider. The company agrees to pay so much per dozen in case the work proves satisfactory. The usual experience is that after the work is done, it is returned to the company. Then they either return the work saying that it is not satisfactory or fail to make any reply whatever. In many cases by the time complaints begin to come in, the concern has moved and has probably opened a business under another address and name.

Cannot Compete With Machines

2. Another class of homework schemes offers pay for crocheting various garments or for weaving such things as beaded bags. We found that in some cases pay has been given to some people for this work. However, our investigation shows that in the majority of cases these firms, despite the fact that they have imposing letterheads, consist of one or two people with desk space only, where they receive their letters.

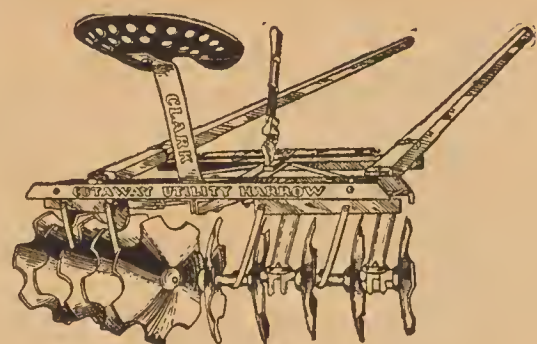
In cases where we have received complaints of non-payment, it has been practically impossible to locate them. Our experience has been, in the majority of cases, that sooner or later these people go out of business, owing money to a large number of subscribers.

We consider it an impossibility in this day and age for handwork to compete successfully with machine work.



The Sign of Protection

MAIL COUPON BELOW



CLARK "CUTAWAY"
Utility Harrow

A general favorite one-horse harrow. Has 10 14-inch disks of cutlery steel forged sharp, 5 inches apart and cutting 4 feet wide. Steel frame. Lever for shifting gangs. Disks equipped with clodbreakers.



CLARK "CUTAWAY"
Single Action Harrow

For deep thorough tillage. Made with reversible gangs. Extension heads for orchard cultivation. Light draft, no tongue truck required. Large assortment of sizes with 16 in. or 18 in. disks.



CLARK "CUTAWAY"
Flexible Double Action Harrow

Those who prefer a flexible Double Action Harrow can now get it in a genuine Clark "Cutaway." The rear gangs do their full share of the work. Turns the shortest corners easily. Screw control. All steel construction. Tractor model only.

CLARK "CUTAWAY"
Unit Frame Double Action Harrow

Cuts your land deep, thoroughly pulverizes the soil, leaves a level, even seed bed. Rear disks cut exactly halfway between front disks and at same depth. Several sizes, horse and tractor model. (Tractor model, all steel construction.)

For Valuable FREE Books

Just your name and address on the coupon below brings you two valuable books free. One book is "The Soil and Its Tillage," the other is the CLARK "CUTAWAY" Catalog of Disk Harrows and Farm Implements.

"The Soil and Its Tillage" is a small encyclopedia of farm information. Simply written, it tells in detail:

What the Soil Consists of, Kind of Soil, How Plants Feed, What Tillage Accomplishes, How Deep Tillage Increases Crops, Modern Method of Tillage, Disking without Plowing, Orchard Tillage, Types of Disk Harrows, etc.

The book, which is fully illustrated, shows how to get bigger, better crops, how to save time and labor—how to make your farm yield greater profits.

The CLARK "CUTAWAY" Catalog illustrates and describes the full line of CLARK "CUTAWAY" Disk Harrows—from the Baby Cultivator and one-horse, Single Action harrow to the Double-Action harrows for Fordson and other tractors. It also tells about special machines such as Bush & Bog Plows, Smoothing Harrows and others.

It tells why the Disks on all CLARK "CUTAWAY" Harrows are made of cutlery steel heat treated and forged sharp instead of rolled; it explains many features found only on CLARK "CUTAWAY" Implements that mean better tillage with less time and work.

Whether you have a small truck farm or one of hundreds of acres, whether you are ready to buy now or later, send for these two books.

There is something of interest in each for you. No obligation at all. Mail the coupon below.

"Since 1865"

Clark
"CUTAWAY"

The Cutaway Harrow Co.

76 Main St., Higganum, Conn.

Please send your FREE catalog and book, "The Soil and Its Tillage."

Name

Address

Department of Agriculture, said today.

"It is a fact generally accepted by medical authorities, based on world-wide medical experience," added Mr. Campbell, "that there is no known drug or combination of drugs which will prevent or cure influenza. Products labeled as effective for this purpose will unhesitatingly be classed as misbranded within the meaning of the food and drugs act and treated accordingly."

Forest Rangers Not Trained By Correspondence Schools

EACH year the Forest Service of the United States Department of Agriculture receives between 14,000 and 15,000 letters—an average of between 40 and 50 a day—from persons seeking employment in the service. As against this great volume of applications, there are only about 900 rangers in the Forest Service, and the annual turnover is rarely more than 50. A great number of the applications come from boys and young men with little educational training, whereas the ranger position requires at least high school education and additional technical training and experience in forestry. Many applicants have been induced to pay for correspondence courses which claim without foundation that they will qualify them for the work.

Permanent positions in the Forest Service are under civil service, the lower ones being filled by examination and the higher positions by promotion. The law requires that, whenever practicable, positions must be filled by citizens of the State in which the vacancies occur. Citizens of States which do not have National Forests therefore have little chance of obtaining ranger positions, as they can be considered only after the list of qualified citizens of the States which have forests has been exhausted.

Promptness Appreciated

New Kingston, N. Y.
December 2, 1928.

RECEIVED your letter and check for \$40. I am thanking you for same. It helps me in great shape as I am a laboring man. I am getting along fairly good. I cannot explain how I appreciate what the American Agriculturist has done for me so far. As long as I can get the A. A. and insurance I will have both. If there is anything I can do or say to help you will be glad to do it.

Very truly yours,
(Signed) Emmet Eckert.

ment required to start one of these firms is very small and it has actually been shown in some cases that another scheme was started almost immediately under a new name and address as soon as the Post Office closed them up. In one case brought to our attention, a man and his wife were running two separate schemes.

Influenza Cures Called Fraudulent

"IT is the intention of the Food, Drug and Insecticide Administration to take immediate action under the food and drugs act against all preparations represented by label or by circular accompanying the package as preventives or treatments of influenza, la grippe, pneumonia, and related diseases," W. G. Campbell, Director of Regulatory Work of the United States



WANTED AT ONCE!

300 More Good Men
in New York and New England

to help introduce and retail Rawleigh's Good Health Products. You will be supplied from our new branch house just opened at Albany. Sell in town or country. Wonderful opportunity. Nothing new—no experimenting. On the market since 1889. 170 necessities needed daily in every home. Annual Sales over 35 million packages. Largest Company—over 15 million dollars capital—10 great factories and branches. Practically no capital, no experience needed. Quick, easy sales, repeat every 30-60 days. Big pay right from start. Stone, Vt., sold \$212.20; Reagan, N. Y., \$184.40 first week. Profits increase monthly. Dupray, Mass., cleared \$6,000 last year; Emery, Me., \$5,000; Stowe, Conn., \$4,000; Sinclair, N. H., Storm, R. I., \$4,200 each. Thousands make more than they ever could before. You should do as well. Simply follow the same old time-tested Rawleigh Methods which have given consumers best values and satisfaction for 40 years. We supply everything—products, outfit, sales and service methods which secure the most business everywhere. Steady year round—no lay-off—no boss—you are sole owner and manager. For particulars write

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THE LARGEST INDUSTRY
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**Build ~ Remodel
Ventilate or Equip
A Hog House, Dairy Barn
Horse Barn or Poultry
House Until You Get
Our Free Book**



**Tells
Why**

Jamesway

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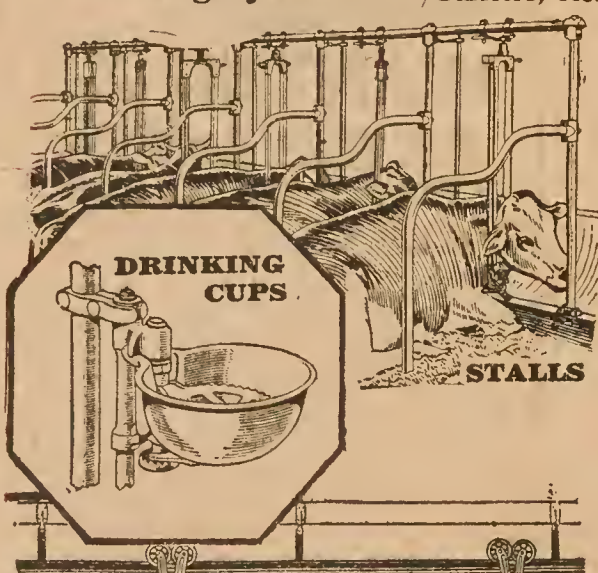
**Labor Saving
Dairy Barns**

**FREE How to Save Money
ON MATERIAL**

The Jamesway book which we send you FREE will show you how to save money in many ways when you are building, remodeling or equipping any farm building. Our many years of experience in planning and designing practical, convenient layouts for farm buildings has taught us how to plan buildings to save cost of material and construction. We can also tell you how best to plan your building so as to save steps and save work at chore time. We know just how every door, every window, every stall, should be placed and the whole general arrangement should be made so that the light, air, heat and moisture will all be properly taken care of. In short, the Jamesway service will save you all regrets and costly mistakes.

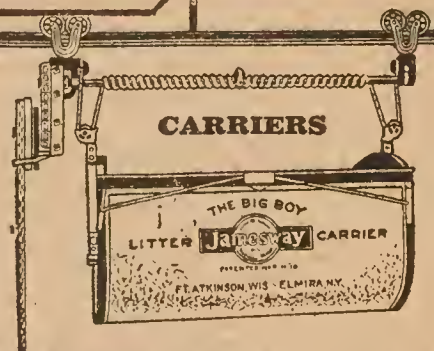


Ventilating Systems



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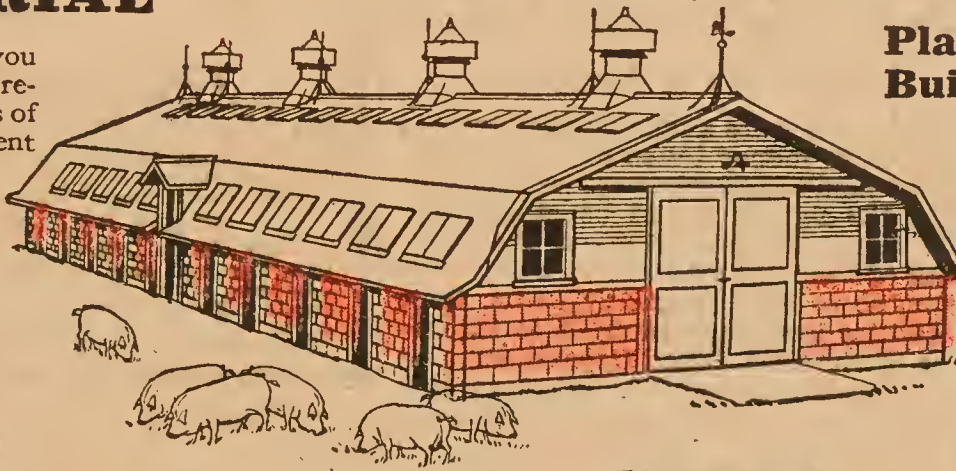
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Our FREE Book also tells about the complete line of Jamesway Equipment—Stalls, Stanchions, Drinking Cups, Litter Carriers, etc., for the cow barn. Troughs, Waterers, Pens for the hog houses. Feeders, Nests, Waterers, Incubators, Brooders and Baby Chick Equipment for the poultry house. Here again our extensive experience in designing and manufacturing enables us to put out BETTER designed—MORE practical—LONGER lasting equipment for the cow, the horse, the hogs or the hens. Jamesway offers you the most complete line of every kind of labor-saving, money-making equipment for any farm building. That's why Jamesway equipment always gives better service and costs less in the long run. Get our FREE Book and see for yourself.

**Jamesway Equipment
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**Time Saving
Money Saving Hog and
Poultry Houses**

Planning New Buildings Our free book tells how Jamesway farm engineers and service department will help you plan your buildings to give you exactly the arrangement you want, convenient, handy, yet save you a lot of money in construction and material costs.

Remodeling Get the most out of your old building. The Jamesway Book and the Jamesway Service Department will show you how to get the most for your money on any remodeling job.

Jamesway Ventilation Find out how Jamesway Engineers have perfected the Ventilation System for Barns and Poultry Houses so as to keep them warmer in winter—cooler in summer—drier the whole year round—prevent disease—increase production and make you more profit. Send the coupon below and find out all about it.



**Complete Ventilation
Systems for Barns
and Poultry Houses**

Mail Coupon Today!

Mail the coupon today to our office nearest you. Learn all about Jamesway's complete service—How the local Jamesway man in your locality will give you the benefit of his help and experience without obligating you. Check on the coupon what you are interested in—whether building, remodeling, ventilating or equipping a cow barn, horse barn, hog or poultry house, and we will send you the Jamesway Book that tells you just what you want to know.

James Manufacturing Co.

Dept. 7935

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Minneapolis, Minn.

Elmira, N. Y.

Minneapolis, Minn.

Mail Coupon to Office Nearest You

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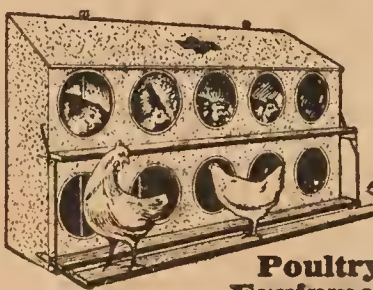
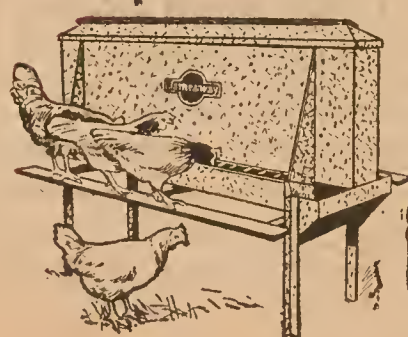
Please send me your NEW Jamesway BOOK. I am interested in

- ☐ Building ☐ Remodeling ☐ Equipping ☐ Ventilating
☐ Cow Barn ☐ Horse Barn
☐ Hog House ☐ Poultry House

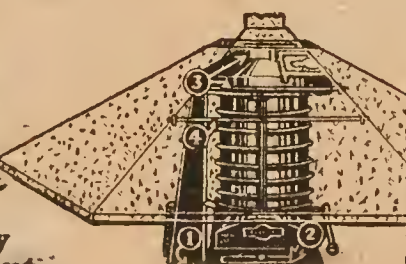
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**Poultry
Equipment**



(35)

COLLEGE OF AGRICULTURE
ITHACA, N.Y.
APR 12 1929

AMERICAN AGRICULTURIST

51
A513

\$1.00 Per Year

February 23, 1929

Published Weekly



Two Furrows in Place of One and Instead of Walking, We Ride

February 18--23 Is Farm Equipment Week



Insure Extra Grazing Days NOW!

EVERY shipment of milk or livestock takes fertility from your pasture. Unless you take steps to maintain this fertility pasture starvation robs you of your profits. Weeds and moss are the first stage of plant food starvation. Later weeds and brush take possession and your pasture loses its efficiency.

The above photographs show an experiment at the Massachusetts Experiment Station. The starved pasture (left) is practically ruined by poor growth and weeds as a result of no fertilizer treatment. In the same pasture (right) a top-dressing of lime, phosphorus and potash has brought back white clover and blue grass and crowded out weeds.

Lime and fertilizers make a fertile pasture, fill it with good grasses, and drive out the weeds. They give you more grazing days in the summer dry spell and start your grasses quicker in the fall. Plenty of potash in your fertilizer insures results the first year.

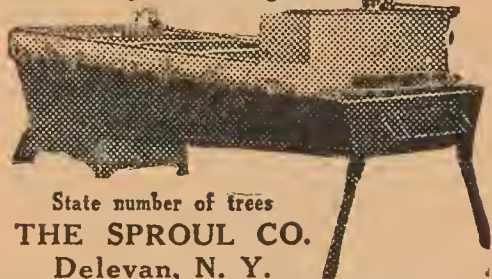
Agricultural and Scientific Bureau
N. V. POTASH EXPORT MY.
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19 West 44th St., New York, N. Y.

POTASH

PAYS

KEYSTONE EVAPORATOR

Famous Everywhere
because one man can operate without help of any kind. Our new Keystone Heater increases capacity 40 per cent.; uses all waste heat. Write for catalog.



State number of trees
THE SPOUL CO.
Delevan, N. Y.

Masters Plant Setter

Saves All the Hard Labor Transplanting

Tobacco, Tomatoes, Sweet Potatoes, Cabbage, Peppers, Egg Plant—and similar plants.

No Stoopng—No Lame Back

Set out your plants just when you are ready, regardless of dry weather. Each plant set, watered and covered in one operation: Three times as fast as hand setting. Every plant will grow. Every year the demand for Masters Rapid Plant Setter exceeds manufacturing facilities. Many have been disappointed and could not get them at planting time. Don't wait. Buy from your dealer NOW. If he hasn't this planter in stock write us for descriptive literature.

MASTERS PLANTER CO.

4922 W. Grand Ave., Dept. D, Chicago, Ill.

Certified Seed Oats

Don't have lodged oats again this year! Write for facts about our high yielding oat that outstands all others—also extra high feed value oat developed by plant breeders of N. Y. State Col. of Agr. These and other Pedigreed farm seeds fully described in free catalog. Write for copy today.

K. C. LIVERMORE

Box A

HONEOYE FALLS, N. Y.



Post Your Farm AGAINST TRESPASSERS

Write the
**SERVICE BUREAU OF
AMERICAN AGRICULTURIST,**
461 Fourth Ave., New York City

MAULE'S SEED BOOK



When you plant Maule Seeds you plant **SUCCESS!** For you use Super-Tested Seeds, Guaranteed for Abundant Life. Plan before you plant with Maule's new Seed Book; a dependable garden guide for 52 years. A Post Card will bring it, **FREE.**
Wm. Henry Maule, Box 6, Philadelphia, Pa.

State Grange Meets

Important Business Transacted at Rochester

ROCHESTER played host to the New

By L. L. ALLEN

York State Grange this year, the 56th annual session of this big delegation being held Feb. 5-8. One of the most encouraging features of the meeting was the announcement that, after a steady loss of members for the past five years, the tide has turned and a gain of nearly two hundred has been made.

State Master Fred J. Freestone of Seneca county presided, this being his first session since his election at Poughkeepsie one year ago. The business sessions were held in the ball room of the Hotel Seneca.

Master Optimistic

At the opening of the Grange Tuesday morning Master Freestone delivered his annual address, reviewing present conditions of agriculture and finding much of encouragement. He declared that not in a long time have our legislators, both national and state, shown so much realization of the true condition of agriculture as now. "The Grange has given its entire life", said Master Freestone, "in the fight for agricultural equality and we should now stand for a fair exchange between the products of agriculture and the products of industry, finance and labor. We hope that this delegated body will adopt a sound, well thought-out agricultural program that your legislative committee can take to Albany and work for with all their vigor."



This picture of Mrs. Jennie B. Stone of Oswego and Mr. Jacob Shaffer of Monroe County was taken last year. These two grange veterans have passed away since the last State Grange Session. Mrs. Stone had attended every State Grange session for the past fifty years and Mr. Shaffer was the oldest Pomona grange master in the United States.

Sad Story of Taxation

Master Freestone devoted much attention to the important subject of farm taxation. He gave as an illustration of the injustice of present methods of assessment and taxation on a 160-acre farm adjoining his own which was recently sold at auction to settle an estate and brought but \$4,800.00. The assessment was \$10,000.00. This was a good producing farm, with good buildings. Some of the things being asked for by farmers to relieve the present unsatisfactory and unjust system of taxation are the elimination of the direct state tax, the relieving of the counties of all expense for the building and maintaining of state highways, the imposition of a tax on gasoline, and the adoption of a more equitable plan of aid for the rural schools.

Twenty-one Grange halls have been dedicated during the past year, said Master Freestone, and many more halls are in process of erection.

State Secretary Frank J. Riley, who

has just completed nine years' service in that office, reported a total of 129,218 members in the state January 1, 1929, in the 877 Granges of the state, a net gain of 193. Chautauqua county reports the largest membership of any county, 7409, with Jefferson a close second with 7370. Other big Grange counties are Oswego with 6380, Monroe with 6322, St. Lawrence with 5879, Steuben with 5478, Wayne with 4756, and Ontario with 4018.

Clinton county shows the largest gain, 275 members for the year. Orleans stands second, with a gain of 210. Orleans county also won the Knapp silk flag this year, Clarendon Grange of that county winning the banner for making the largest percentage of gain in membership. The gain was 96 members, an increase of 738 per cent.

A record number of resolutions was presented before the State Grange for action. The larger part of these resolutions pertained to the consolidation of schools,

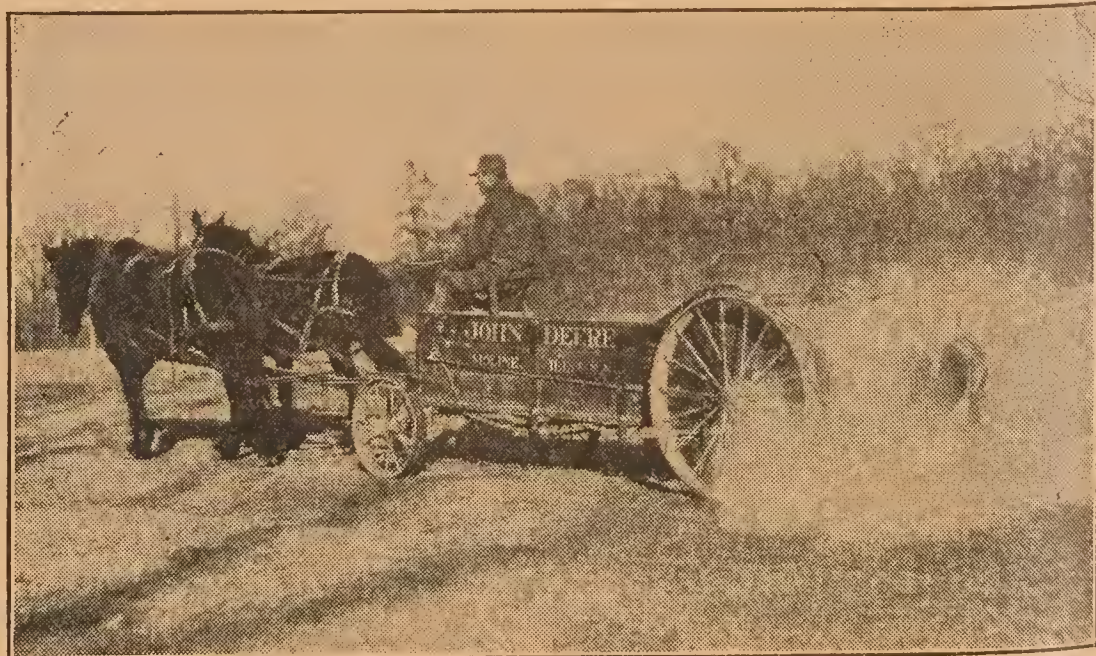
and the Grange reaffirmed its position of one year ago in declaring against forced consolidation. Other important measures on which the Grange took action were: Demanding a State enforcement act to carry out the provisions of the Volstead law; calling for an increase in the tariff schedules on farm products; favoring a gasoline tax; asking legislation making it mandatory for hunters to obtain the consent of farm owners before hunting on their property; urging a revision of the tax and assessment laws to relieve farmers as much as possible from the present unjust methods; opposing a unified sanitary milk code covering the shipments of milk into New York city; favoring the National Grange plan of farm relief; urging an amendment to the game laws to afford farmers better protection against pheasants; recommending the abolishment of the State census; opposing the abolishment of the State Department of Agriculture and Markets, and favoring a collection in every Grange each year for the benefit of the State Grange Revolving Scholarship fund.

A message of sympathy was sent to Herbert E. Cook, the beloved farm leader of Northern New York, who is seriously ill at his home in Denmark, Lewis county. This was on suggestion of former State Master Sherman J. Lowell, now a member of the Federal Tariff Commission at Washington.

One of the most valuable reports made before the session was that of H. C. McKenzie of Walton, Delaware county, the State Grange tax expert. Mr. McKenzie reviewed the present tax conditions, showing how all forms of taxation, federal, state and local, had made great increases in the past few years. The local tax schedules had developed the largest increase, it was explained.

Through the chairman of the State

(Continued on Page 11)



An attachment recently put on the market makes it possible to spread lime with any tight-bottomed manure spreader.

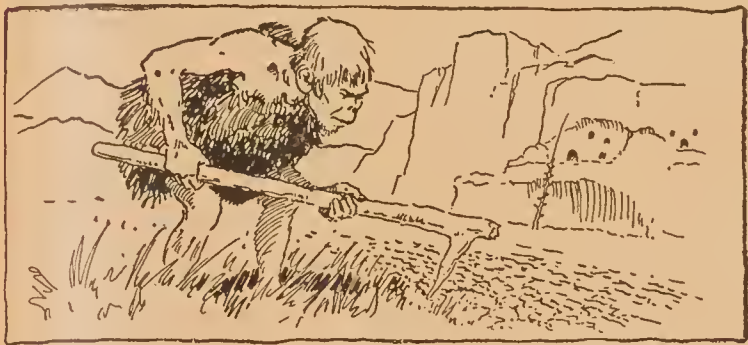
Human Labor Is Costly

New Machines Widen Spread Between Cost of Production and Returns

By F. A. LYMAN

FARM machinery and equipment development has made startling progress in the last ten or fifteen years. The labor shortage caused by the World War and the necessity for a greatly increased agricultural production program hastened this progress. When the war was over and the agricultural depression followed, further impetus was given to the use, design and manufacture of labor saving and cost reducing implements and equipment, because it then became imperative to cut production costs to the bone and to replace scarce and high-priced labor with mechanical power, which was both cheaper and more efficient when properly used.

Today, the adequate use of power and equipment on New York and other Eastern farms is of prime importance in an efficient and profitable farm management program, for hired labor is still scarce and is one of the highest priced commodities that the farm operator can buy and use. On the other hand, farm machinery costs stand



It would cost \$160 to prepare an acre of ground, without manufactured tools and with man labor at \$4.00 a day. It would take about 40 days of hard work.

at the bottom of the list of farm operating expenses, according to a recent study made by the Rural Economics Department of Ohio State University. Power is today replacing muscle to a greater extent than ever before in the history of Agriculture, and production costs are being lowered accordingly.

The development of longer lived, lighter weight and more powerful tractors which are simple to service and operate has been the outstanding sign of advancement in the tractor industry. Whereas 2000 or 3000 hours of service was about all that could be expected of the pre-war tractor, 10,000 hours is a minimum mark for tractor designers to meet today assuming it receives proper care; and thousands of machines exceed this record in the field.

Tractors Used More Hours per Year

The average number of hours use per year is also increasing, making the hourly cost of operation and depreciation charges lower than ever



If \$1.00 were invested in a spade, it would require \$40 to prepare an acre for seeding. One man can spade one-tenth of an acre a day, or four times as much as when using sticks, horns or sharp stones.

before. A recent survey by the New York College of Agriculture shows that tractor operating costs in 1926 were only 67.6 to 78.7 per cent of what they were in 1920. "Improved models of tractors and better dealer service to tractor owners resulting in lower depreciation and lower fuel costs account largely for the reduced operating costs," the report states. Most significant, perhaps, of the items contained in the report was the state-

ment that each tractor replaced on the average 3.3 months of hired labor yearly. On farms where the tractor was used 600 hours per year, the cost per hour of operation was less than half of the cost where the tractor was used only 200 hours per year. These figures, while the latest obtainable, are three years old and present data would undoubtedly be even more favorable.

The general purpose or cultivating tractor is even further extending the use of tractors and is the latest and most important tractor development. On farms where the cultivation of row crops formed an obstacle to tractor ownership or caused an overlapping of tractor and animal power, the general purpose tractor is filling a long felt need. One result has been to multiply the number of "horseless farms."

The use of power, whether it be in the form of tractors, gas engines, horses or mules, or electricity, has greatly increased the productivity of each farm worker, explaining in large part the reason for a larger crop and livestock production in the face of a decreasing agricultural population. More than that, power has made farming an easier and more enjoyable occupation and when efficiently used, has materially increased farm profits. The use of power, tractors especially, has led to the design and use of many new implements, and new uses for old tools and combination of old tools and machines.

Dairy Equipment Lowers Costs

Much of the arduous work formerly associated with dairy farming has been eliminated by labor saving equipment such as milking machines, feed and litter carriers and equipment for handling hay and other feeds. Items of equipment, such as automatic drinking cups, feed grinders and ventilation systems help increase production, health and sanitation of the dairy herd, at the same time reducing labor costs. New models of milking machines are easier to keep clean and sanitary than ever before, are easier on cows, and require less power. Recent studies show that the owner of a herd of 10 to 12 cows or more can profitably own a milking machine. The necessity of careful attention to washing and sterilization in keeping milking machines clean and sanitary has led to the development of sterilizing devices which prevent and control the growth of bacteria with a minimum of time and labor. The old idea that certified or low count milk could not be produced with a milking machine has been entirely dispelled, in fact, the majority of certified and Grade "A" farms now use milking machines.

Present day cream separators turn easier, vibrate less, run more smoothly and skim closer than the older models. Some are equipped with ball bearings. Electric motors are replacing the hand crank wherever this form of power is available. Revolving or turnable supply cans and oil windows are refinements which appeal to many.

Recent studies and experiments have proven quite conclusively that temperature control is the

major requirement of a satisfactory ventilation system. Ventilation systems have been made more effective by means of regulators which automatically control the amount of air passing through the intakes. In this way, sudden temperature changes caused by shifting wind pressure which have disastrous effects on egg and milk production can be avoided even if there is no one around the barn to regulate the ventilators.

Improved models and new designs of feed mills and roughage grinders make possible complete utilization of home-grown feed crops. There are, for instance, combination feed and roughage grinders which automatically grind and mix corn, oats,

hay, stover or any combination of feed materials, and in addition add any desired amount of one of two concentrates such as cotton seed meal. The various materials are fed into different hoppers and are mixed together as they are chopped and ground. Automatic blowers which elevate the ground feed to wagon or feed bin can also be applied to most of the new grinders. One interesting development is the automatic arrangement of motor, feed grinder and bins whereby the underground grain is allowed to run from an overhead bin into the grinder, hopper and the ground feed automatically placed in another bin.

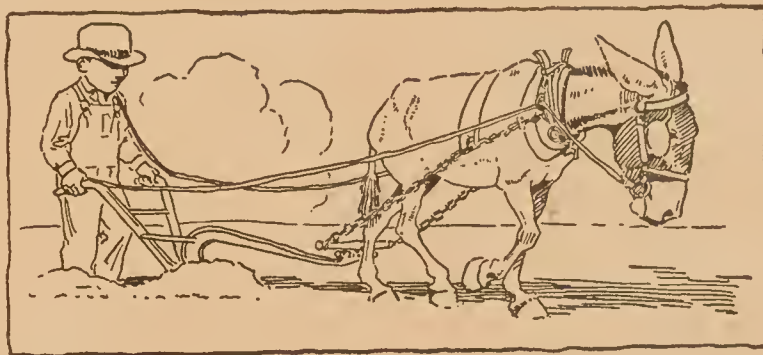
New methods and means of filling silos are taking much of the hard work out of this all-important dairy-farm task. Bundle elevators can

be attached to corn binders, elevating the bundles directly from the binder to the rack wagon. Individual farm size cutters which do not require a large crew of neighbors or hired help are now widely used. Power requirements and hence the cost of silo filling have been reduced by the discovery that a comparatively low cutter speed—400-

500 revolution per minute—is more efficient than a high speed. Running at this speed, a five horsepower electric motor can easily handle a medium sized cutter at full capacity. Electric motors are becoming quite popular for silo filling where central station power is available. There is also a new field ensilage harvester which is a combination binder and ensilage cutter for making silage in the field as the corn is cut. The field ensilage harvester is a tractor outfit, power take-off operated.

There are a number of new machines of interest to the potato grower. Two and three-row planters, and two-row diggers, can be traced to the increasing use of tractor power. Many one-row diggers have been equipped with a gas

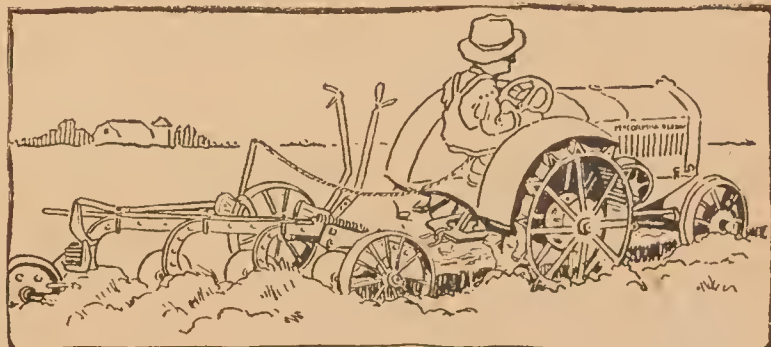
(Continued on Page 26)



When a man directs the power of one horse or mule, an acre can be prepared for \$6.50, calculating man labor at \$4.00 and horse and equipment at \$2.50 an acre. They can prepare 1 acre a day, or 10 times faster than man alone.



Four horses plus one man and the necessary machinery can prepare 4 acres a day at a cost of \$3.60 per acre. Repairs, etc., are considered. In spite of increased investment and overhead expenses, the production costs have been reduced.



Although the investment under this arrangement is greater, one man can prepare 12 acres a day at \$1.23 an acre, all items of expense being included.

Editorial Page of the American Agriculturist

AMERICAN AGRICULTURIST

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Vol. 123 February 23, 1929 No. 8

How Machinery Has Changed Farming

THE week of February 18 to 23 has been set aside as Farm Equipment Week, when thousands of implement and equipment dealers will hold exhibits, displays and programs at their places of business in order to offer farmers an opportunity to see what is new in farm machinery. Equipment Week, now an annual event, also makes a good occasion to emphasize the need on every farm to look over the old equipment, make necessary repairs, and make plans for the purchase of new machinery where it must be had.

It is interesting to note the tremendous effect that machinery has had upon agricultural production in recent years. In the past ten years, agricultural population has decreased by 15 per cent while the total crop production has increased by 5 per cent, and animal production by 15 per cent. The average number of crop acres farmed per man has increased from 12 acres seventy-five years ago to 34 acres at present. As a matter of fact, in much of the country the acreage per worker is larger than 34, ranging from 640 to 1,000 acres per man in Montana, where large tractors, combines, fleets of grain drills and other large scale farming equipment are used, to the corn belt farms where one man often does most of the work on 160 to 200 acres.

The dairy, livestock and poultry farmers have not been behind in increasing their efficiency by better equipment. Milking machines, water bowls in the mangers, patent stanchions, modern ventilators, and dozens of other modern conveniences practically unknown only a few years since are now to be found generally in every section where dairying is practiced.

If you are inclined to philosophize, you will sometimes look back across the past twenty-five or thirty years and wonder what is going to happen if we have as many changes on the farms in the years to come as we have had in the recent past.

The Proposals to Restrict Dogs

ASSEMBLYMAN D. P. WITTER's proposed dog law, now being considered by the New York State legislature, is causing a great deal of discussion around the State and in the legislative halls at Albany. The provisions of this bill are explained on Page 25 of this issue and are of

interest to every dog owner as well as to sheep and cattle men. The bill is the result of an investigation conducted by a legislative committee, of which Mr. Witter was chairman, during the past year in New York State. The committee held thirty-two hearings in twenty-seven counties.

The situation which the committee found in regard to dogs and the destruction of farm animals is rather astonishing. Dog population outside of the city of New York has increased during the past five years by more than 100,000. At the same time, the paid damages done by dogs to domestic animals have increased from \$69,000 to \$198,000, or about threefold. The committee well states, "Unless this enormous loss each year caused by dogs can be materially decreased, the sheep industry in this state is doomed to destruction. It is reported by good authority that there is at the present time about three-fourths of a million acres of tillable land in this state which is idle, practically all of which should and would be pasturing sheep if it were not for dogs. In twenty-three of the upstate counties there are more dogs than sheep."

More wool is imported into the United States than is exported, and if sheep could be kept on the idle lands without danger from dogs, the business would be a profitable one. It is because of these reasons that the present bill was introduced into the legislature. As a matter of fact, however, most of the opposition to the provisions of the bill comes not because of any new proposals to the present dog law but rather to provisions in the old dog law which have been in operation several years.

The new bill aims to fix the responsibility for damage done by dogs and to secure for the sheep and cattle owner prompt and certain payment of damages. It aims better to enforce the present law against stray dogs and to cut down the number of worthless animals by increasing the tax on females from \$5 to \$10.

There is nothing in the proposed bill to which a true lover of a dog can object if he is willing to assume the responsibility for the animal he owns and to keep it where it belongs. Mr. Witter and his associates have done a good job in finding out the facts about the sheep and dog situation and in proposing a bill that will encourage sheep industry in the state.

These proposals should become law.

Some Suggestions On the Egg Grading Law

THERE have been almost constant criticism and faultfinding with the new egg grading law ever since it was established. In recent issues of AMERICAN AGRICULTURIST, we have opened our columns to both sides to bring out the facts.

There is no doubt that there are some real grounds for dissatisfaction with the new egg grades. It has been pointed out in defense of the law that the average price of eggs in the market has been slightly higher this year than before the law went into effect. This is true, but it is also true that the average price to poultrymen, at least to small producers with flocks from one to five hundred hens, has been lower under the law than before, and it is the farmer that AMERICAN AGRICULTURIST is interested in.

The law also has seemed to make it possible to put storage eggs on the market under the classification of grade A. The result is that many consumers buy what they think are strictly fresh eggs paying the highest prices for them, only to find that such eggs are not fresh. A few experiences like this, and the average consumer quits buying!

On the other hand, the new grades have been in force only one year and it is unfair to judge any law on the basis of what it has done or not done in so short a time. Also, when the law was passed, no additional appropriation was made. As a result, attempts to enforce it have not been effective, and those charged with its enforcement

cannot be fairly criticized when they had no means with which to do the job.

After hearing the arguments pro and con and making a careful study of the way these egg grades are working, we recommend to our poultrymen readers the following suggestions:

First: The grades should be changed to eliminate the use of the unclassified grade. We believe that the lower prices to poultrymen and farmers upstate are caused to a large degree by retailers buying and selling eggs in the unclassified grade. We understand this change is being considered.

Second: There should be an adequate appropriation made for enforcing the egg grading law. What good is it if its provisions cannot be carried out? Proper enforcement would serve to stop the selling of storage eggs as grade A.

Third: We recommend a little more patience on the part of producers to give the law a chance to see what it can do over a longer period of time.

We Are Working For You

WE hope that you are not missing any of the articles in this and other recent issues of AMERICAN AGRICULTURIST on the vastly important subject of schools, roads and other tax matters that are now under consideration at Albany. We are sparing no trouble to get this information and to have it fully explained so that you may have first hand reliable information of just what is being considered to relieve and adjust farm taxes.

Leaf over the pages of just this one issue and see if you do not agree that this issue, or any of the recent ones, is fully worth the price of your subscription. Also give our advertisers a chance when you buy. Remember they are guaranteed. Why take a chance?

Coming

THE next week's, or March 2nd issue will be the great AMERICAN AGRICULTURIST annual Reference Number. This issue has come to be a big event in the A. A. family. For weeks there have been extra hustle and bustle here in the office to get the material together. In fact, we collected it off and on during the whole year. It is sorted and edited and cut down so as not to waste any space or any of your time in reading it. The Reference Issue is edited from the standpoint of eastern farms and farmers. It fits your needs.

It should be filed carefully where you can refer to it constantly for there will be hundreds of times during the year when you can turn to it quickly to solve some perplexing problem of the farm and home, whether it be how to save a sick animal or the amount of seed required for a certain crop.

Hundreds of our readers have written to us in past years that the Reference Issue was worth the subscription price for the whole year. But this year's Reference Number will be the best yet. Look for it next week.

Eastman's Chestnut

MY friend, "Ridy" Hewitt, competent County Agent of Chemung County, may not be Scotch, but I have it on good authority that he once asked a young lady to go to the county fair with him, and she accepted. A day or two later, a friend met her on the street and asked her how she enjoyed the fair. She looked rather irritated and downcast for a moment, and replied that she did not see it.

"Didn't see it," said the other. "Didn't you tell me you and Mr. Hewitt were going the other day?"

"Yes," answered the girl, "but after we had walked four miles to the fair, I did not have strength enough left to climb over the fence with him!"

How the Central School Act Works

Facts About the Law and Its Operation in Over Fifty Districts

Will you kindly publish an article on the Central Rural School system? I am sure a great many of your readers would appreciate it.

Are there many such schools in New York State? Are they considered a success or not? Will you please state the advantages as well as the disadvantages of such schools. Have the taxes in those districts been raised to such an extent as to be a burden to the farmers?—A. S., *New York*.

THE central school plan was established by amendment to the Education Law by the New York State legislature in 1925. The law provides an optional plan under which any group of districts may organize as one central school district governed by one board of education with an equalized tax rate for the whole district.

Distinct provision is made, however, that no one-room school may be closed within the central district without a majority vote of the voter within the one-room school district.

How a Central District is Made

Whenever any community wishes to consider the advisability of establishing a central district, the proposition is taken up with the district superintendent of schools and an application is forwarded through him to the Commissioner of Education. Forms for such application may be obtained from the State Education Department. At the time of filing the application, or very soon afterwards, petitions must be filed with the Department to show the attitude of the legal voters toward the proposition in the common school districts where it is proposed to establish the central rural district. Or in the place of petitions, meetings may be held and a record vote taken to ascertain whether or not the people wish to consider the proposition further.

When the application, petitions or records of

meetings have been received by the Commissioner of Education, if this information seems to show enough local interest, the Commissioner will send some representative of the Department to

How Well Do Parents Like Central Districts?

- I. Number of reports: 407.
- II. Number of schools: 18.
- III. *Are the drivers careful about the safety and comfort of the children?*
Number reporting: 386.
Yes: 365. No: 21.
- IV. *Are you reasonably well satisfied with the transportation of your children to school and return?*
Number reporting: 382.
Yes: 338. No: 44.
- V. *Is the instruction received and the school in general satisfactory?*
Number reporting: 401.
Yes: 395. No: 6.
- VI. *Are your children as well treated in school as the village children?*
Number reporting: 390.
Yes: 385. No: 5.
- VII. *Would you prefer to have your children attend a one-teacher rural school?*
Number reporting: 388.
Yes: 34. No: 354.

canvass thoroughly the locality, to make absolutely certain that the majority really wish to establish a centralized district. In addition to making individual calls, this representative usually calls

another meeting where all sides of the proposition are thoroughly discussed.

He then reports back to the Department of Education, and if the Commissioner thinks the facts warrant his action, he will proceed to lay out the boundaries of the district.

The next procedure is for fifteen persons within the proposed district to unite in a petition for a meeting of the inhabitants of the district to determine whether such central rural school shall be established. This petition must be filed with the town clerk, who must issue a call for the meeting.

When the meeting comes together, after full discussion a vote is taken on the proposition to establish a central school district. If the meeting does not pass the resolution, no such meeting shall again be called within one year thereafter. If it does pass the resolution, the meeting will then proceed to elect a board of education, and when the final records of the meeting are forwarded to the Commissioner of Education, he designates the district so organized as Central School District No. — of the Town of —, and the district is ready to proceed on the new basis.

It will be noted from the procedure described above that great care is taken to ascertain local sentiment. The Department of Education is especially careful not to lay out new central districts unless local opinion, registered in a strong majority vote, justifies it. The fact is that the Department is in constant receipt of petitions to lay out new central districts and is going very slowly in agreeing to any of these petitions until it is certain that the people within the districts want them.

It is of course impossible on any vital
(Continued on Page 8)

State Aid for Town Highways

A Plan for Better Dirt Roads

By MARK GRAVES,
State Tax Commissioner

EDITOR'S NOTE:—With all of our improved roads, more than half of the farmers of New York State still live on dirt roads. Because of this fact, and also because of the poor road service that these farmers receive, AMERICAN AGRICULTURIST has been fighting for years for better dirt roads. We have received thousands of letters from farmers on the subject and when we have taken the matter up with town superintendents, we have found in most cases that they were doing the best they could with the small amount of money with which they had to work these roads. Therefore, this subject of dirt roads was one of the first to be taken up by Governor Roosevelt's Agricultural Advisory Commission of which Henry Morgenthau, Jr., is chairman.

A plan recommended by this commission to Governor Roosevelt and to the legislature will, in our opinion, do much to help this whole dirt road system. In the following article written by Honorable Mark Graves, New York State tax commissioner, the present system of State aid for town highways is fully explained, and then Commissioner Graves explains the new plan suggested by the Roosevelt Commission.

We hope that you are studying all of these articles on the road and school tax situations which are reported and explained weekly in AMERICAN AGRICULTURIST. They are of vast importance to every rural dweller.

PRIOR to 1909, towns had the option of maintaining their town highways by requiring residents and property owners of the town to work out their road taxes or to adopt the money system. Beginning with 1909 the money system became mandatory. To assist the towns, Section 101 of the Highway Law was enacted. The design was to assist all towns financially in the maintenance of their town high-

ways through payments out of the State Treasury and, moreover, to give a greater measure of assistance to the poor towns.

Towns having an equalized assessed valuation of real and personal property, outside of incorporated villages, of less than \$5,000 for each mile of highway were given for each dollar raised by tax a dollar out of the State Treasury, but not more than \$25 per mile.

Towns having a valuation of \$5,000 or over, but less than \$7,000 per mile, received for each dollar raised, 90 cents, but not more than \$25.

Towns having a valuation of \$7,000 or over, but less than \$9,000, for each mile of such highway, received for each dollar raised by tax, 80 cents out of the State Treasury, but not more than \$25 per mile.

This graduated plan was carried down to the point where towns having a valuation per mile of highway of \$13,000 or over, but not more than \$25,000 per mile, received from the state, 50 cents for each dollar raised within the town for the maintenance of town highways, but not more than \$25 per mile.

Towns having an equalized value per mile of highway of more than \$25,000 were permitted to receive as high as one-tenth of one per centum of such valuation provided they raised an equivalent sum for highway purposes.

Old Law All Right When Made

This section was well designed at the time to give the towns substantial aid, it is believed, appropriate assistance. But since 1909 conditions have changed. Twenty-five dollars will no longer purchase the same amount of service or road machinery or road material as it would in 1909.

Moreover, assessed and equalized valuations have greatly increased. Today, more than two-thirds of the towns (these are the poorer towns) are limited to \$25 per mile of aid from the state, while the wealthy towns are virtually without a limit. For example: in 1928, 131 towns received \$25 or less per mile of highway. In every instance they are very poor towns. On the other hand, 5 of the wealthiest towns in the State received aid out of the State Treasury amounting to \$500 or more, per mile of highway; 53 received \$100 or more, per mile of highway; 152, \$50 or more.

Old Law Unfair Now

Looking at it another way, it is found that 138 of the wealthier towns have tax rates for the maintenance of town highways of \$5 per thousand or less, based on assessed valuations, while 17 of the poorest towns have rates of \$30, or more; 30 have rates of \$25 or more; 51 have rates of \$20, or more; 127 have rates of \$15, or more, and 336 have rates of \$10, or more, per thousand dollars of assessed valuation.

Approaching it from still a third angle, it is found that if this matter is examined by counties, the towns in wealthy counties are, on the average, receiving more aid from the State per mile of highway than are the towns in the poorer counties. For instance: Towns within Nassau County received in 1928 out of the State Treasury to aid them in maintaining their town highway, on the average of \$250 per mile; Westchester, \$233 per mile; Rockland \$115, and Suffolk \$107 per mile, while Clinton received less than \$24, and Otsego, Schoharie and Washington, less than \$26.

Expressing this in another way, it was found that in 1928, 627 of the poor towns, having a
(Continued on Page 7)

"Wormy Culls less than 2%"

S. J. Kitzmiller

"Previous to using NuREXFORM, and while using other forms of lead, my apples and pears were wormy to an extent of about 25 % but since using NuREXFORM I have had to cull out not to exceed, and I think, even less than 2% because of their being wormy."

"NuREXFORM mixes easily and has excellent suspension qualities."

"NuREXFORM has given me better results than I have obtained from any other arsenate."

S. J. Kitzmiller.

This is only one of hundreds of enthusiastic letters we receive from fruit growers praising the high qualities of NuREXFORM. All recommend it even if it does cost slightly more per pound. They look beyond first cost and consider NuREXFORM from the standpoint of adherence, suspension, easy mixing qualities with Lime Sulphur and finally the greater percentage of sound fruit it produces. If you once try NuREXFORM, you'll never go back to ordinary lead. You'll save money in the long run. Try it. Write for circular.

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NuREXFORM

IMPROVED DRY ARSENATE OF LEAD



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Rex Dry Lime-Sulphur

Rex Oil Emulsion

Rex Bordo Mixture

Sulphur

Copper Dusts

Rex Calcium Arsenate

40% Nicotine Sulphate



A.A.'s Western New York Farm and Home Talk

Time To Overhaul Orchard Equipment

A COLD January is being followed

By M. C. BURRITT

erate nitrates is the important thing.

by a mild February with snow. Early February saw the first real snow of the winter when the towns had to get out the snow plows and bobs-

As a soil leveler and for creating a surface mulch the pulverizer or culti-packer type of tillage tool seems to be growing in favor.



M. C. Burritt

sleighs could be used to haul up wood and get out manure. Today the children are building a formidable snow fort. Yet days are lengthening. Mid-winter means that we will soon be going down the other side of the dormant season toward spring. And just as in spring the young man's fancy turns, etc., so as spring nears the farmer's thoughts begin to turn to supplies, to machinery and equipment and to plans for the coming season. Farmers who carefully plan ahead should have their seeds and fertilizers ordered and as the so-called "farm equipment week" is coming on we ought now to center our thoughts on overhauling the farm machinery or ordering new.

Spray Rig is Essential

On fruit farms spray equipment is of outstanding importance. No grower who expects to remain in the business can afford to be without a good spray rig. A good spray rig means first a standard pump with sufficient capacity, and second, adequate power behind it. The price of complete spray outfits has become so high and the returns from apples are so low, that only large growers with big orchards to cover feel that they can afford to buy new. So there has been much overhauling of old rigs, replacements of parts and attempts to make the old outfits do. There is little doubt that some of the poor spraying and neglecting to spray, is due to inability to buy new and efficient outfits. A few growers whose rigs have completely given out have hired neighbors to dust for them, as this is very quickly done and in the late evening or early morning.

Some Growers Favor Sod

The mowing machine is coming more and more to take the place of tillage implements, as sod replaces clean cultivation. However, where neither leguminous cover crops or commercial nitrates are used, plows and cultivating tools are still essential. Shallow plowing and thorough stirring to lib-

Of pruning tools, I think the saw is the best for all around work and after trying all sorts of special pruning tools including extension types, I come back to the good old standard type saw. For cutting back peach trees and thinning ends of branches of course, hand clippers are much better. And generally for thinning the small outer branches, a type of pruning recognized more and more as important, some form of clippers is best. But for most pruning give me a standard pruning saw.

After reading the above my wife remarked that that might be of some interest to the men but what about equipment in the house for the women. Well that too is important. Unfortunately for the women the necessity for providing farm equipment for productive income compels the purchase of such things first. And yet household equipment comes too slowly on most farms, and farm women wear themselves out at heavy tasks when even a small amount of equipment could save much strength and spirit.

Of all household equipment to save hard work, I would put running water, modern plumbing and sewage disposal first and foremost, because it saves so many steps and so much heavy lifting. Power washers and vacuum cleaners would probably come next. Electric power and light are wonderful labor savers and make possible the use of many other small and convenient devices.—M. C. Burritt, February 10, 1929.

Cross Pollination of Apples Important

THE importance of cross pollination in affecting the apple crop is receiving considerable attention. This past season conditions were poor for bees at blossoming time and this resulted in a poor set on many varieties, especially McIntosh and Northern Spies that were set in large blocks.

This indicates that more attention should be given to planting varieties together that pollinate each other, as well as to the work done by bees in cross pollinating.

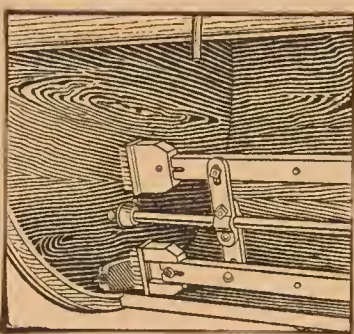


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A new tillage implement which fits the seed bed in one operation. A power take-off from the tractor operates several vertical shafts carrying a number of revolving knives.

State Aid for Town Highways

(Continued from Page 5)

town highway mileage of 54,930, received in the aggregate \$1,342,726.66, while the remaining 305 wealthier towns having 24,957 miles of highway, received \$1,755,350.26.

How the New Plan Would Work

These and other data convinced Governor Roosevelt's Agricultural Advisory Commission that Section 101 of the Highway Law no longer executes the purpose for which it was originally intended, and by reason thereof needs amendment. Accordingly, the following report was rendered to the Governor on February eighth:

Roosevelt Commission Report on Town Highways

"In previous reports, mention has been made of state aid for town highways apportioned under Section 101 of the highway law. That section, enacted in 1908, effective in 1909, has remained unchanged in respect of its apportionment provisions. The depreciation of the purchasing power of the dollar, increases in assessed valuations and other factors have made that section now obsolete. It no longer executes the purpose for which it was intended, that of aiding towns in the maintenance of their dirt roads in such a way as to give a greater measure of assistance to the poorer communities.

"Your Commission finds that the poorer towns are limited by statute to maximum aid of not more than \$25 per mile while the wealthier towns are virtually without limit; in some cases the towns receive more than \$500 per mile. To illustrate: In 1928 more than two-thirds of the towns which contain more than two-thirds of the highway mileage received in round figures \$1,342,000 while the remaining less than one-third of the towns, containing less than one-third of the miles of public highway, received in round figures \$1,755,000.

"It seems to your Commission that the need for amending Section 101 is imperative. We, therefore, recommend that it be amended in such a way as to provide that any town which raises a tax for the maintenance of town highways equivalent to a tax of three mills of equalized valuation as equalized for state purposes, or a tax for such purpose which in the aggregate averages \$50 or more per mile of town highway, shall receive from the state \$50 per mile of public highway outside of incorporated cities and villages and exclusive of improved highways included in the state highway system which are maintained by the State.

"This proposed plan does not entail any additional appropriation on the part of the State.

"HENRY MORGENTHAU, JR.,
"Chairman."

The plan recommended to the Governor is an equalizing one. It raises the limit under which the poor towns are now laboring from \$25 to \$50 per mile of highway and places a limit of \$50 per mile upon the wealthy counties for which there is virtually no limit now.

If this plan is enacted into law, the State will say to every town in the state: "We will give you \$50 to be used in maintaining your town highways (meaning all highways outside of incorporated cities and villages and outside of improved highways in the state highway system which are to be maintained by the State) if you will do either of two things. First, raise a tax for the same purpose equivalent to a tax of three dollars per thousand on valuations as equalized for state purposes, or, second, \$50 per mile of public highways."

For example, suppose a town has \$1,000,000 equalized valuation. A three mill tax on this valuation would raise \$3,000 for town highway purposes. Now suppose that town has one hundred miles of highways outside of incorporated cities and villages. One hundred divided into \$3,000 would give \$30 per mile, on a three mill tax. But under the plan proposed, the State would give \$50 if the town raises a three mill tax, which would make a total of \$80 per mile in the town for the town highways.

Or, if the town does not use the three mill tax method, its other choice is to raise \$50 per mile. The State will du-

plicate this by giving another \$50, which would make a total of \$100 per mile.

Putting it another way, if your town will raise a three mill tax, no matter what that tax amounts to, even though it falls below \$50 per mile, the State will aid to the extent of \$50 per mile. This means for the average rural county like Cayuga, Clinton, Columbia, Delaware, Fulton, Madison, Tioga, Washington, Wyoming, Yates, and many others, twice as much state aid for the maintenance of town highways as is permissible under the existing law.

For thirty-eight rural counties, other than those named, it means a substantial increase in the amount of financial assistance granted by the State. Some, but not all, of the towns in the following counties would receive less: Albany, Erie, Monroe, Nassau, Niagara, Putnam, Rockland, Schenectady, Suffolk and Westchester.

A Campaign for Better Potatoes in Onondaga County

A GROUP of about thirty-five potato growers met at the Onondaga Farm Bureau office Monday, February 4, for the purpose of outlining in detail the intensive educational campaign for the potato industry of the county.

R. E. Deuel, president of the Onondaga County Farm Bureau, presented a plan which calls for enrollment of growers who will sign up for the adoption of one or more of the following practices: First, better seed of standard varieties; second, seed treatment; third, spraying or dusting; fourth, better grading. After careful study of the situation by a committee headed by Mr. Deuel, it was agreed that these four practices would do more than anything else to increase the quality of Onondaga County potatoes and at the same time help materially in reducing the cost.

The seriousness of the potato marketing situation was discussed at some length by the potato growers present and they agreed that the campaign program emphasizing these four essentials was necessary in order that the New York State potato growers might meet the out-of-state competition. The program outlined calls for the use of all campaign features such as community meetings to acquaint the growers with the program, posters issued from time to time, special service letters dealing with the four essentials, demonstrations, tours, and stickers.

A group of twenty-one men were selected, one from each of the potato growing sections of the county, to comprise the county potato committee. An executive committee of five men was chosen from the twenty-one as follows: H. D. Forward, Howard Cross, Walter Gardner, James Sears, and Edward Reeves. This executive committee plans to meet frequently during the year to study particularly the better grading and marketing phases of the campaign as it is related to the Syracuse market. The campaign will be under the supervision of D. D. Ward, County Agent, and Dr. E. S. Hardenburg, state potato specialist.

Cultivating a Sod Orchard

We have been considering the advisability of putting a sod orchard under cultivation. Is there any danger that the roots of these trees will be so close to the surface that they will be seriously injured by plowing and cultivating?—W. R., New York.

IT is quite probable that the fine feeding roots come closer to the surface of the ground in an orchard that has been in sod than they do in an orchard that has been cultivated, and that deep plowing will cut off many of the fine roots and so give the trees a setback. However, this does not mean that a sod orchard cannot be put under cultivation. It is a good plan to plow very shallow for a few years which will lessen the injury to the roots and encourage the growth of feeder roots deeper in the soil.

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How the Central School Act Works

(Continued from Page 5)

question to obtain unanimous agreement. There are always those who for one reason or another vote against all such new propositions. Most of these persons are perfectly honest and sincere in their opposition. Many of them have been misinformed as to how the new plan will work out. Others already laboring under a very heavy school tax burden fear increased taxation, and still others sincerely believe that the new school facilities provided under the Central School Act are not as good for the boys and girls as those already provided under the present system.

Most of these fears are based on misunderstanding and on propaganda of the Rural School Improvement Society, which has constantly misrepresented the principles of the whole Central School Act.

An Optional Plan

What are some of those principles? First, the plan is optional with any community. The Department of Education has no desire to force it in any place, and if it did have such desire, it could not do so by law. In fact, the Department is very busy as it is helping those communities where the sentiment is strong for the establishment of a central district without wasting time in helping to establish such a district where it is not wanted.

We want to make it clear, however, that there is one place where the centralization is not optional. Suppose that there are eight districts that are considering the proposition of centralization. Suppose the big majority of the voters within the whole section are enthusiastically in favor of centralization. But suppose there is one district somewhere in the center that is against the proposition. This district would be obliged to go along with the majority for the reason that one district constituting a small minority of the whole section cannot veto the whole proposition and nullify the wishes of the majority.

Very often you will find that where there are one or two districts like the example mentioned above, which are opposed to the proposition when all the others are for it, these districts are rich, possibly having some large manufactory or railroad in them, so that their present tax rate is very low as compared with the tax rate of all those living in neighboring districts. Is it not a fair proposition that their tax rate should be equalized with that of their neighbors?

The fact is, all those who at the present time are studying the farmers' tax situation and trying to get some relief at Albany are finding that the worst trouble with the whole taxation principle in rural districts is the present unfair system of inequality whereby poor districts, poor towns and poor counties are paying far more in proportion to their wealth than the rich ones are. It is perfectly human and perfectly natural that many taxpayers

living in sections with high valuations will fight the principle of equalization. Nevertheless, in all these matters of public government the equalization principle will have to prevail eventually because it is right and just.

Therefore, the Central School Act centralizes or consolidates the school districts, putting them under one administration, one board of education or board of trustees, and equalizes the tax within all of the districts, but it does not consolidate the one-room school itself. When the law was first passed, the Commissioner of Education repeatedly assured people that he would not close the one-room schools for the little children up to and including the sixth grade without the people's consent. But in order to make this absolutely sure, the Department of Education went to the legislature and obtained a law making it impossible to close any one-room school in a central rural district without a vote of those in the one-room school district.

Tax Rates in Central Districts

Now let us see what centralization does to the tax rate. In brief, experience so far shows that if you had a very low tax rate before the centralization, it was raised somewhat. If you had a high tax rate, it was lowered. In other words, it equalizes the tax rate.

For example, in a central district at Richburg, Allegany County, there were five districts before the centralization, in which the old tax rates were as follows: \$7, \$32, \$25, \$5 and \$9. The central tax rate in 1927 was \$7. In Madrid, St. Lawrence County, there were eight districts, in which the old tax rates were as follows: \$12, \$6.20, \$8, \$11, \$5.50, \$6, \$9, and \$6. The rate in the central district in 1927 was \$8.

The central district is able to keep its one-room schools open for the small children, to furnish transportation for the larger children to the central school, and to give high school facilities for all of the children of the whole district without a greatly increased tax rate because the law provides for considerably more financial aid from the State for the central district.

For example, the law reads: "Any central rural district * * * shall * * * receive from the State the same apportionments and quotas which a union free school district is entitled to * * * and in addition there shall be apportioned and paid to such district the district quotas, teachers' quotas, additional teachers' quotas and equalization quotas * * * for each of the districts included in such central rural school district in the same amount and under the same conditions as though such central rural school district had not been established."

In addition to the above quotas, the State will pay one-half of the sum paid for the transportation of pupils and a building quota equivalent to one-fourth

(Continued on Page 16)



A fertilizer distributor attached to the cultivator makes the dressing of cultivated crops an inexpensive operation.



With the A. A. Dairyman



Some Facts About Contagious Abortion

EDITOR'S NOTE—Scarcely a day goes by that we do not receive at least one letter asking how to control abortion in the dairy herd. There is abundant evidence that this trouble is increasing and in the belief that a thorough knowledge of this trouble is the first necessary step we print below a recent report of recommendations made by a committee appointed by the United States Livestock Sanitary Association.

ATTENTION is called to the following well-supported facts regarding Bang abortion disease:

1. It is now a controllable disease.
2. The serological tests are sufficiently accurate to serve as a basis for freeing herds of the disease.
3. Clean herds so indicated by the agglutination tests, carefully applied and interpreted, can be maintained clean year after year.
4. Herds thus maintained show a breeding efficiency far above that which is recorded in herds which contain many animals that react to the serological tests.
5. Other things being equal, herds that are entirely clean are the best breeding units that can be obtained. Those that consist entirely of reactors, carefully culled, can be made to show fair breeding efficiency. Those consisting of reactors and non-reactors in association show a minimum breeding efficiency as compared to the other two groups.
6. Clean units may safely be recruited with young stock from infected units provided the serological tests are made the basis of the transfer. Thus the infected unit may often be made to serve as a source of some income until the clean unit can be established, and the blood lines that the breeder prizes can be easily perpetuated.
7. Testing Bang abortion disease out of a herd or unit and keeping it out is the only known successful way to handle it.

Recommendations to Officials

To sanitary boards or officials in the various states which support a large cattle population especially the dairy states, we recommend:

1. That provision be made for conducting and interpreting the serological tests by careful and experienced men.
2. That provision be made for the accurate recording of consecutive tests in pure-bred herds or in others in which identification of animals is satisfactory.
3. Recognition of the fact that the clean herd or unit, and not the area, is the basis of any effective start in the control of the disease.
4. Recognition of the fact that each herd is an individual problem and

that while the ultimate goal in all herds—the clean unit—is the same, the immediate plan of handling is contingent on such considerations as the number and value of the reactors, the equipment available, the size of the herd, and many others.

5. The use of the practicing veterinarian as the most essential part of any plan of control, because he is the only one in a position to handle each herd as an individual problem.
6. A sanitary code which permits the sale of reactors into herds of known reactors provided the status of the purchased animals is made known to the purchaser.
7. Recognition of the fact that a clean test of an individual which comes from an infected unit, or a unit of unknown status, is a meager guarantee of safety to the purchaser.
8. Recognition of the fact that the placing of clean cattle into an infected herd is usually disastrous and serves to discredit the serological tests in the eyes of the purchaser.
9. A general policy of helpful guidance to the breeder who is endeavoring to establish and maintain a clean herd rather than a policy which involves authority on quarantine, and the erection of too many official barriers built on new knowledge which few breeders as yet fully understand.

What the Herd Owner May Do

To the individual cattle breeder, we recommend:

1. Raising of his own cattle just as far as possible, and the ultimate goal of establishing and maintaining a herd free from Bang abortion disease.
2. That he test his herd so as to learn its true status and thus be enabled to know which animals are dangerous to their associates, and to weed them out if they are limited in number.
3. A policy of severe culling in reacting units so that only valuable animals are retained.
4. Keeping reactors and non-reactors entirely apart.
5. A general plan of herd management which involves the raising of heifers apart from mature animals.
6. The use of maternity stalls, if possible, for all cows at calving time and provision for relatively small units which are now habitually recruited from outside sources.
7. That additions to any clean herd or unit should consist of non-reacting individuals that come from clean herds, and that the transfer shall be made just as far as possible while the females are not pregnant.
8. The employment of a thoroughly qualified veterinarian whose services are necessary in laying out a spe-

(Continued on Page 10)

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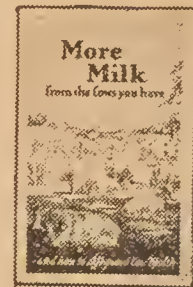


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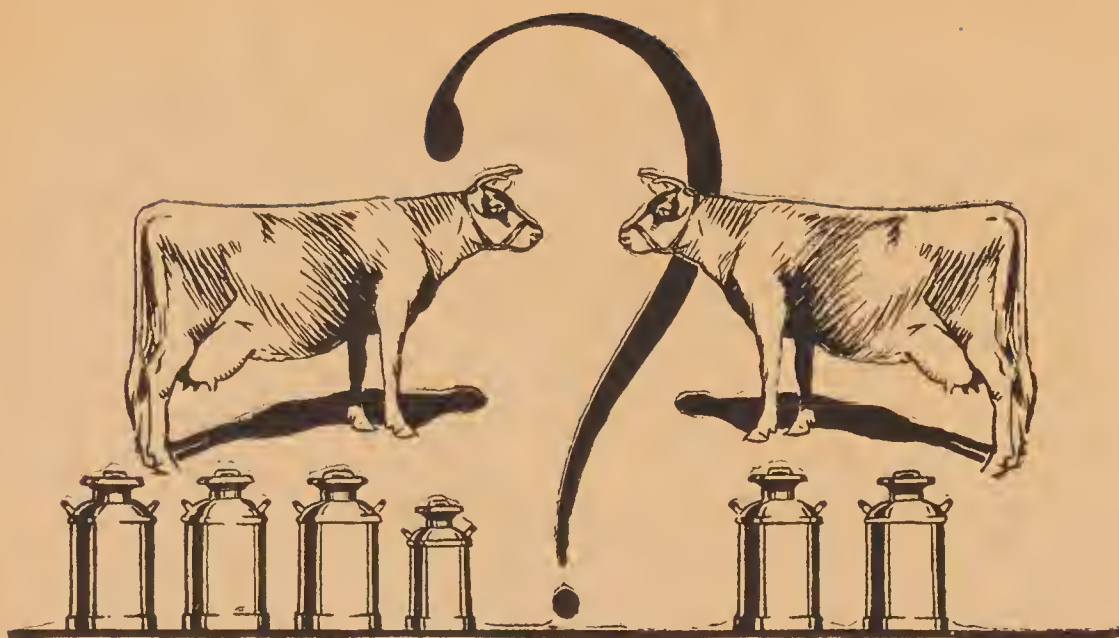
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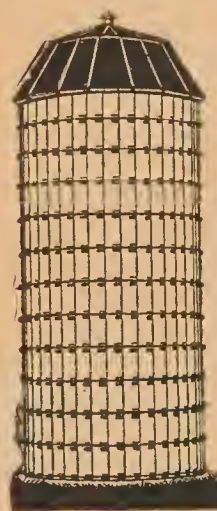
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Harder Silo has long been the leading wooden silo throughout the East. To those who prefer concrete, we now offer this up-to-date concrete silo with many improved features, priced only a little higher than a good wooden silo. Terms arranged to suit your income.

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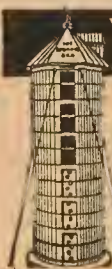
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Dept. B Frederick, Md.

(Continued from Page 9)

cific plan of handling suited to the individual herd; drawing blood samples for the serological tests; the interpretation of the reaction; the handling of individual cows which fail to breed; making pregnancy examinations, and other services of like nature.

Veterinarian Service Essential

To the practicing veterinarian who must assume the lion's share of the responsibility in helping breeders to establish and maintain herds free from Bang abortion disease, we recommend:

1. That he thoroughly familiarize himself with the newer knowledge regarding the disease, so that he is equipped to draw blood samples required in making the serological tests; to interpret the test charts and relate each test to the handling of the individual concerned; and to guide the breeder in the direction of a clean herd.
2. That he courageously refrain from recommending to his clients easy palliative measures which "may do some good" in preference to more difficult ones which are known to be successful.

A Family Milk Supply

IF American families keep animals, be they dogs, cats or horses, they want handsome ones, something that can be pointed to with pride. Some years ago this was impossible in the case of goats, but now there is hardly a section of the country that does not have its breeder of really beautiful goats. There are several breeds, all handsome to look at, and, like other well-bred, when well cared for, are highly intelligent, gentle and easy to handle. The



A well cared for goat is a clean, gentle and intelligent animal.

modern goat is not a subject for joke, but one of the most useful, as well as beautiful, of our domestic animals.

The main trouble with people keeping goats, lies in the fact that so many believe that a goat can yield a profitable supply of milk with little food and no care. There was a time when chickens were allowed to roost all winter in the trees, and get what food they could find but now it is a matter of common knowledge that the man who wants eggs in number to be profitable must feed for egg production. The same is true for goats. They must have good, clean shelter, though the stable may be very small, with a small fenced yard for exercise and fresh air.

Must Be Fed If She Is to Produce

We do not turn chickens into our flower beds, and it is no more reasonable to blame a goat for destruction, if she is allowed to roam at will. They do not do well tethered, but an ordinary fence of wire, made neat, and even ornamental, is all that is required. They must have, if they are to produce milk and continue steadily, a daily, all the year round, feed of good milk-producing grain and clover hay. Grass or pasture of any kind is not sufficient. It will keep a goat in good appearance, but will not make her produce.

Some fear the goat odor, that is con-

(Continued on Opposite Page)

K-R-O

Kills Rats Only

This new powder kills rats and mice but nothing else

Get rid of rats without danger to your children, livestock, pets or poultry.

Think what this means to you!

K-R-O may be used freely in the home, barn or poultry house with absolute safety. Actual tests have proved that it kills rats and mice every time but other animals and poultry are not injured by the largest doses.

Not a Poison

K-R-O does not contain arsenic, phosphorus or barium carbonate. Made of squill bulbs—the new safe way urged by government experts. **At your druggist, 75c.** Or sent direct from us for \$1.00 if he cannot supply you. Large size (4 times as much) \$2.00. **Satisfaction guaranteed.** K-R-O Company, Springfield, Ohio.

Heals the Teat— Keeps It Open

These new, soft-surfaced dilators keep open and soothe the injured teat while the medicated ointment quickly heals the tissues. For positive results in treating Spider, Obstructions, Cut or Bruised Teats, Hard Milkers, keep Dr. Naylor's Dilators on hand. Rounded end for easy insertion, absorbent texture carries healing medication into the teat canal.

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36 Dilators, packed in jar of medicated ointment mailed postpaid for \$1. if your dealer does not have our products in stock. Satisfaction guaranteed.

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Clear Fir, selected Hemlock—self-draining joints—doors can't stick—Best silo "buy" on market. Just say "Send Full Data Silo Offer."

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Remarkable Discovery That Cuts Down the Cost of Paint Seventy-five Per Cent.

A Free Trial Package is Mailed to Everyone Who Writes

A. L. Rice, a prominent manufacturer of Adams, N. Y., discovered a process of making a new kind of paint without the use of oil. He named it Powder-paint. It comes in the form of a dry powder and all that is required is cold water to make a paint weather proof, fire proof, sanitary and durable for outside or inside painting. It is the cement principle applied to paint. It adheres to any surface, wood, stone, stucco or brick, spreads and looks like oil paint and costs about one-fourth as much. Write to A. L. Rice, Inc., Manufacturers, 134 North St., Adams, N. Y., and a trial package will be mailed to you free, also color card and full information showing you how you can save a good many dollars. Write today.

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Every man and boy loves a good pocket knife. It is a friend of a thousand uses and if it is a good one its value soon becomes greater than any money consideration.

Good knives are not always easy to distinguish because you cannot tell from the looks of a bright and shiny new one how well it is made or how good is the steel in its blades. When you need a new knife there is one way that you can be sure of getting real value for your money whether you buy an inexpensive one or the best there is, and that is to come to a "Farm Service" Hardware Store. Our experience in cutlery and our knowledge of manufacturing make it possible for us to select the makes and the styles that will prove their worth through years of use. When you need a new knife, come to our nearest store—you will find the "tag" in our window—and let us help you select a good one and show you how to take care of it.

You will find the best of all kinds of cutlery in our stores.

Your "Farm Service" Hardware Men.

Your
**Farm Service
HARDWARE
STORES**



fined entirely to the male, and such need never be kept by the family merely wanting a milk supply for home use. The milk can be used in any and every way that cow's milk is used, and has the great advantage of being fresh and under one's own supervision as to cleanliness and health of the animal. For anyone with a small piece of garden to spare for a house and little yard, nothing is finer than a goat.—E. S. SHARPLIO.

Three Items Necessary to Good Dairying

WHAT a many-sided business this job of dairying is. The other day I was looking over a large herd which apparently was getting splendid feed and care but was not producing as well as its owner thought it should. Great attention had been given to the grain ration. The cows were getting clover hay and were being milked regularly. What was the trouble?

In my opinion, it was lack of enough water, sunshine, and ventilation, three items in dairy management which are given altogether too little attention by even the best farmers. In this barn, the cows did not even have to go outdoors for their water, still they were not getting enough water. They were released from the stanchions and crowded one another around the tank. With water handy in bowls or cups in the mangers, it is probable they would have drunk from one-third to one-half more water during the twenty-four hours, and no single item does more to increase production than plenty of drinking water.

In the matter of sunshine, the scientists are finding more and more the direct connection between the health of human beings and all other animals and the sun's rays. Most dairy barns, even the good ones, get too little light. This was true of my friend's barn, and it is also true that when we came in from the fresh air outside there was a heavy animal odor and the walls were damp, an unhealthy atmosphere of course, for any animal.

Most stables could be fixed over to get more light and ventilation without great expense, and those who have used water cups in the mangers state that they pay for themselves within the first year.—E. R. E.

State Grange Meets

(Continued from Page 2)

Grange executive committee, E. J. Walrath, the State Grange invited the National Grange to hold its 1930 annual meeting in New York State. Invitations for the 1930 session of the State Grange were received from Syracuse, Buffalo, Niagara Falls, New York City and Montreal. The decision will be made by the executive committee.

The prizes offered by the National Grange Mutual Liability Company for the largest amount of automobile insurance turned into the company from the Granges of the State went to Crum Creek Grange of Fulton county, first; North Java Grange of Wyoming county, second, and Stedman Grange of Chautauqua county, third.

One of the outstanding reports of the session was that of Miss Elizabeth L. Arthur of Lowville, State Lecturer. Miss Arthur also conducted a Grange Lecturers' conference Thursday afternoon, attended by over two hundred lecturers.

A Class of 982

The sixth degree class of Thursday evening numbered 982, being exceeded only by that at Watertown in 1926, when 1087 were received. The class at Poughkeepsie last year was 954.

Among the distinguished guests of the week were Charles M. Gardner, editor of the *National Grange Monthly*; State Master E. B. Dorsett of Pennsylvania; Past State and National Master S. J. Lovell of Washington, and Fredonia, and Past State Master S. L. Strivings of Wyoming county.

Glen L. Owen of Yates county, was elected president of the State Association of Deputies.

Mrs. O. M. Wixon of Elmira, the first secretary of the first Pomona Grange in the State, that of Chemung county, organized in 1874, was present at the session, this being her 40th annual session. Mrs. Albert Manning of Orange county,

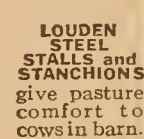
Why Pile Barn Work on Yourself?



Plan to Cut Out Drudgery



LOUDEN WATER BOWLS increase milk flow. Save daily work of watering.



LOUDEN STEEL STALLS and STANCHIONS give pasture comfort to cows in barn.



AN EASY PUSH—Louden Manure Carrier relieves you of a back-straining job. Big, smooth-running carrier takes out 12 bushels at once. Durable steel track; worm gear hoist. Coupon brings folder.

Your barn work will go on next week—next month—next year—and all the years to come. Why continue doing it the *hardest* way—in a badly arranged barn? Why not have a barn that cuts out *unnecessary* steps and saves time and labor? A barn that gives your stock the greatest comfort and makes them more profitable? Whether you are going to build a new barn or remodel the old one, plan a *work-saving* barn. Before you do anything else—

Mail Coupon for Louden Help

Without charge or obligation Louden barn architects will send you a suggestive blueprint floor plan for an up-to-date barn, suited to your own needs. Check coupon also for other information on Louden Labor Savers. Louden Water Bowls increase milk flow and pay for themselves over and over. Louden Steel Stalls and Stanchions made of *open-hearth* steel are the simplest, most sanitary, most durable. Louden Manure Carriers end barn cleaning drudgery.

LOUDEN Labor-Saving Barn Equipment

NOW! Ventilation That Protects

Louden Automatic Ventilation is *real* stock protection. Cuts out guess adjustments. Installed in any building, old or new. Check coupon for Free Ventilation Book.

This coupon also brings you full details on the latest and best in Feed Carriers and Trucks, Steel Pens, Manger Divisions, Bull Stalls, Cupolas, Roof Windows, Automatic Watering Tanks, Horse Stable and Hog House Equipment, Hay Unloading Tools. A complete line of Barn and Garage Door Hangers—"Everything for the Barn." Mail it today.

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Send me postpaid, and without charge
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...cows... bulls... young stock... horses

Will begin about (date)

I am interested in (name equipment)

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Single Unit

A single-tube system—now with half as much rubber—half as much wear! Short tubes—easy washing—clean milk! Send for illustrated catalog.



Double Unit

L. C. Noble, Poultney, Vermont, says: "After using another milker for more than two years I installed a Burrell. I find that it milks the cows clean, costs less for power, easier to clean, is all around the best milker I ever used."

Cherry-Burrell Corporation
27 Albany St., Little Falls, N. Y.

BURRELL
MILKING MACHINES AND CREAM SEPARATORS

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widow of the late State Master Manning, was also in attendance, as was Mrs. W. W. Ware of Batavia, whose husband was for several years a member of the executive committee.

H. E. Aiken of Chautauqua, was re-elected as a member of the executive committee for a three-year term.

The annual report of Secretary H. M. Stanley of the Scholarship fund, showed that \$10,637.94 had been received by the fund since its establishment in 1924. During the year loans to students have amounted to \$1,350.00. The loans bear 2 per cent interest. The Magic Gavel in its tour of the State, has been instrumental in adding over \$1800 to the fund during the year.

Ask the Man WHO SELLS IT



Geo. W. Weber

SAYS, "I enjoy working for the AMERICAN AGRICULTURIST because I know that they are doing everything they can to help the farmer and their salesmen."

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A LIVE WIRE SALESMAN.

Send for booklet, "Your Opportunity"

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ITHACA New York

When Writing Advertisers
Be sure to say you Saw it in
AMERICAN AGRICULTURIST

Reviewing the Latest Eastern Markets

Milk Prices

The following are the February prices for milk in the basic zone of 201-210 miles from New York City.

Dairymen's League prices are based on milk testing 3.5%. Sheffield on the basis of 3%.

Class	Dairymen's League	Sheffield Producers
1 Fluid Milk....	3.37	3.17
2 Fluid Cream		2.30
2A Fluid Cream	2.46	
2B Cond. Milk..		
Soft Cheese....	2.71	
3 Evap. Cond. Milk Powder		2.30
Hard Cheese	2.50	
4 Butter and American cheese. Based on New York City Market quotations on butter and American cheese.		

The Class 1 League price for February 1928 was \$3.37 for 3.5% milk and Sheffield's \$3.27 for 3%.

The above prices in each class are not the final prices the farmer receives. The final price received from the dealer is the result of the weighted average.

December Prices Announced

The Dairymen's League announces the following pool prices for January for 3.5% milk.

Gross	\$3.07
Expenses .....	.06
Net Pool	\$3.01
Certificates of Indebtedness.....	.10
Net Cash Price to Farmers.....	\$2.91

Jan. 1928, Net CASH Price, 3.5% milk.....	\$2.80
Jan. 1928, Net POOL Price, 3.5% milk.....	\$2.90
Jan. 1927, Net CASH Price, 3.5% milk.....	\$2.57
Jan. 1927, Net POOL Price, 3.5% milk.....	\$2.67
Jan. 1926, Net CASH Price, 3.5% milk.....	\$2.29
Jan. 1926, Net POOL Price, 3.5% milk.....	\$2.39
Jan. 1925, Net CASH Price, 3.5% milk.....	\$2.41½
Jan. 1925, Net POOL Price, 3.5% milk.....	\$2.31½

The Sheffield Producers announce the cash price to producers for 3% milk in the 201-210 mile zone, as \$2.84½ per hundred, (\$3.04½ for 3.5% milk).

Jan. 1928 price to producer, 3% milk, 2.85; 3.5%, 3.05	
Jan. 1927 price to producer, 3% milk, 2.64; 3.5%, 2.84	
Jan. 1926 price to producer, 3% milk, 2.64; 3.5%, 2.84	
Jan. 1925 price to producer, 3% milk, 2.75; 3.5%, 2.84	

Butter Higher and Steady

CREAMERY	Feb. 13	Feb. 6	Feb. 15, 1928
SALTED			
Higher than extra....	50½-51	50 -50½	45½-46
Extra (92sc).....	50 -	49½-	45
84-91 score.....	45½-49½	45½-49	41 -44½
Lower Grades.....	44 -45	45	40 -40½

The title line of this squib describes the change in the butter market fully as well as several paragraphs. Last week we reported a butter market that was up and down and highly sensitive. On Wednesday, February 6, the market suffered a severe break carrying prices down to 49½ for extras. The break proved apparently too sharp, for unexpected strength developed on Thursday that carried prices up to 50½c on extras. At this figure the market again became strained, most of the large buyers holding off. A slight easiness developed that carried extras to 50c. Since then the market has held steady. Sufficient butter is arriving to take care of the trade requirements which are

SHIP YOUR EGGS

WHITE AND BROWN

To R. BRENNER & SONS

Bonded Commission Merchants

358 Greenwich St., New York City

Live Broilers and Poultry Wanted

HIGHEST PRICES CHECKS SENT DAILY
Oldest Live Poultry house in New York City. Established 1883, offers you an unlimited outlet for your live poultry. Write for shipping tags and free holiday calendar folder K 27.
Krakaur Poultry Co. Inc. Bonded Commission Merchant
West Washington Market, N. Y. City

Wholesale dealer and shipper of second hand egg cases. Car lots a specialty.
LOUIS OLOFSKY, 685 Greene Av., BROOKLYN, N. Y.

prices for breeding Turkeys, Geese, Ducks, and Guinea. Write your wants and for mailing list. **PIONEER STOCK FARM, TELFORD, PA.**

FARMS FOR SALE

305 Acres Edge Catskills Real Farm, Less Than \$7 Acre

150 Acres good crop land, 50-cow pasture with spring and 2 streams, 100 acres timber and wood; good maple-sheltered home, large rooms, excellent views, basement barn, milk house, hen house, etc.; only 2-miles village and motor bus, ½ mile school. Family troubles force sale, only \$2000, terms arranged. Details pg. 39 big illus. Free catalog. **STROUT AGENCY, 255-R-4th Ave. at 20th St., New York City.**

quite full with the excellent demand that prevails. There is some added confidence at this writing, February 14, following reports of a higher market at Chicago.

Statistically the market is stronger than a year ago. On February 8, the four leading cities reported 8,133,874 pounds of butter in storage compared with 11,899,460 pounds in storage on the same day last year. The out-of-storage movement from February 1 to February 8 exceeded that movement during the same period a year ago. This year, from February 1 to 8, in the four largest cities there were removed from cold storage, 1,876,941 pounds of butter, while during the same period a year ago the movement totaled 1,446,791 pounds. The top grades of held butter are held firmly in view of the light remaining supply in New York City, although of late, there has not been quite as much inquiry for such goods.

Easier Trend to Cheese Market

STATE	Feb. 13	Feb. 6	Feb. 15, 1928
FLATS			
Fresh Fancy	24 -25	24 -25	24 -24½
Fresh Average.....			
Held Fancy	27½-29	27½-29	29 -29½
Held Average			

Although the price column shows no indication of a change, nevertheless there is an unmistakable disturbance in evidence in the cheese market. About the only description of cheese that is seasonably well sustained is fancy light colored old stock made especially for the New York market. Any irregular qualities or cheese of full color are being offered at concessions as has been true of the cheese market for several weeks past. The fresh makes are weak with a disposition to make further price concessions. There has been more uneasiness of late on the part of holders of summer and fall made goods particularly Young Americas and Daisies. It is said that the supply of Daisies is very heavy for this time of the year, stocks working out very slowly. Naturally this would give irregularity to the cheese market. The only goods that are in firm hands apparently are those New York flats mentioned above. The ten cities making daily reports are said to have in storage on February 7, according to official reports, 13,905,000 pounds of cheese, compared with 9,987,000 pounds of cheese at the same time a year ago. From February 1 to February 7, the cold storage holdings in those ten cities were reduced 674,000 pounds, exactly 122,000 pounds more than moved during the same period a year ago.

Egg Market Unchanged

NEARBY WHITE	Feb. 13	Feb. 6	Feb. 15, 1928
Hen'y Sel. Extras....	42 -	42-43	40 -
Hen'y Av'ge Extras....	41 -	41-	38 -39
Extra Firsts.....	40 -40½	40-	37½-38
Firsts	39 -	39-	37 -
Undergrades			
Pullets	37 -	37-	
Pewees			
NEARBY BROWNS			
Hennery	44½-45	44-45	40 -41
Gathered	39½-44	39-43½	39 -

Taking the egg market as a whole, there is practically no change of any consequence. Brown eggs are in a better position than whites, with which we are fairly well supplied. Wintry conditions still prevail throughout the central and southwest, which naturally holds up the seasonal increase in production. Furthermore, the shipments from some nearby points show the effects of selection for hatching purposes, only secondary qualities being received. If this condition surrounding the white egg market would only continue to prevail for awhile we might see a little relief before long, for under the present circumstances, supplies of eggs from storage are working out steadily. All winter long, storage eggs have presented a threat that became a real menace when prices started to assume higher levels. To the writer's way of thinking our present cold storage law is solely responsible for the situation. Storage eggs are used in direct competition with the fresh product and the consumer has no way of telling what is what, having no experience for the identification of held goods by the candling method. If eggs were shell treat-

ed and given a slight tint of green or blue to identify them as storage eggs, it would not take long for the fresh egg market to come into its own.

Live Fowls Selling Well

	Feb. 13	Feb. 6	Feb. 15, 1928
FOWLS			
Colored	35-36	-32	26-27
Leghorn	35-36	-31	26-27
CHICKENS			
Colored	33-35	29-31	28-36
Leghorn	33-35	29-31	30-33
BROILERS			
Colored			42-52
Leghorn			
CAPONS	45-50	40-45	30-40
TURKEYS			30-50
DUCKS, Nearby	28-30	-28	29-33
GESE	20-22	20-22	25-26

Live colored fowls arriving by express have been meeting a most excellent demand. Most of the sales were reported at 36c and there were a number

Market Reports Daily by Radio

Up-to-the minute market information and prices are broadcast daily for your benefit by American Agriculturist co-operating with the New York State and Federal Departments of Agriculture, through station WEAJ. The reports are broadcast at 12:30 standard time.

of occasions on which business was done at a higher figure, but in a small way. The market for express broilers is something of an unknown quantity. On Monday and Tuesday, February 11 and 12, most of the business in fancy Rocks was at 45c.

However, as the week progresses, the situation seems to be getting a little easier and on the 14th the offerings are rather free at 43c although there are still some receivers who refuse to sell below 45c. The buyers have not responded to the prices and in the absence of any important sales we omit the quotations.

Potato Market Easier

STATE	Feb. 13	Feb. 6	Feb. 15, 1928
150 lb. sack....	1.50-2.00	1.75-2.00	3.25-3.40
Bulk, 180 lbs.	2.00-2.15	2.00-2.25	
MAINE			
150 lb. sack....	2.00-2.25	2.00-2.35	3.25-3.60
Bulk, 180 lbs.	2.25-2.40	2.25-2.60	4.00-4.35
PENNA.			
150 lb. sack			
No. 1			
Bulk, 180 lbs.	2.00-2.15	2.00-2.25	
LONG ISLAND			
150 lb. sack			
No. 1	2.25-2.60	2.50-2.75	4.00-4.50
Bulk, 180 lbs.	2.60-2.90	2.75-3.10	4.90-5.25

Potatoes from Maine have suffered the least since our last report. Long Islands and State potatoes both have slipped. During the week a car of potatoes arrived from Canada. This car was reshipped from Virginia and was said to be 1927 stock. Naturally it showed very bad quality. The writer repeats his statement of two weeks ago that if we were able to keep second grade and poor quality potatoes off the market, we would see an infinitely better situation prevailing at the present time. How all growers in all sections are going to be brought into line is obviously a very great problem. Certainly Government loans and other forms of relief will not overcome such a condition. It is a police problem that must come from the growers themselves. Producers of other commodities have take care of the problem in the past which shows that it can be done.

Meats and Live Stock

Live calves have continued the downward trend we reported last week. The demand is slow and market irregular. The choicest primes bring \$18 but most of the arrivals have brought around \$15.

Steers are also lower than last week. The best of the arrivals fail to bring above \$12.25 with common stock at \$8.50 to \$9.

Bulls have shared in the irregularity characteristic of the live stock market. A few good ones have been sold at \$9.50 but most of the arrivals are at \$8.75.

Cows have slipped about two shill-

ings, the best arrivals are reported at \$8, although here and there an extra choice lot has brought more in a small way.

Lambs are also lower. On the 13th, there were no receipts but had there been any they would not have brought more than \$16.25 for the best.

Hog prices are unchanged, 85 to 110 pounds, \$9.25 to \$10; 130 to 160 pounds, \$10 to \$10.25; 165 to 220 pounds \$10.25 to \$10.75.

Country dressed veal has moved in sympathy with live stock, top prices easing off a cent.

Hothouse lambs are unchanged, the best bringing \$15.

Rabbits continue firm at 25c to 30c.

Bean Market Higher

The bean market continues to bound along in its merry way. This week all varieties have shared in the advance. Jumbo Marrows are now from \$12 to \$13 with average goods from \$10.25 to \$11. Pea beans have made real progress, advancing 50c up to a range of \$11 to \$11.50. Red Kidney beans which have remained constant all winter at \$8.25 to \$8.75 are now from \$8.25 to \$9. Readers will recall that a couple of weeks ago we expressed the opinion that Red Kidneys were getting set for an advance.

Feeds and Grains

FUTURES	Feb. 13	Feb. 6	Feb. 15, 1928
(At Chicago)			
Wheat (Mar.)	1.27½	1.24¾	1.30¾
Corn (Mar.) .....	.96½	.96¾	.94¾
Oats (Mar.) .....	.52¼	.52¼	.55
CASH GRAINS			
(At New York)			
Wheat, No. 2 Red	1.66¾		1.63¾
Corn, No. 2 Yel.	1.15¼		1.15¼
Oats, No. 2.....	.63½		.66¾
FEEDS	Feb. 9	Feb. 2	Feb. 11, 1928
(At Buffalo)			
Grade Oats	39.50	39.50	36.50
Spring Bran	32.50	33.50	36.00
Hard Bran	35.50	36.00	38.25
Standard Mids	31.00	32.00	36.50
Soft W. Mids	41.00	41.00	44.00
Flour Mids	37.00	37.00	38.50
Red Dog	40.00	40.50	40.00
Wh. Hominy	39.50	40.00	39.50
Yel. Hominy	39.50	40.00	38.00
Corn Meal	40.50	41.50	39.00
Gluten Feed			46.00
Gluten Meal			54.00
36% C. S. Meal	46.50	46.00	46.00
41% C. S. Meal	51.00	50.50	50.25
43% C. S. Meal	53.00	52.50	52.50
34% O. P. Linseed Meal	57.00	57.50	51.00

The above quotations are those of the local Buffalo market and are F. O. B. They are reported in the weekly letter of the N. Y. State Department of Agriculture and Markets.

No Change in Hay

There is not much to report on the hay market for the situation remains the same as it was last week. There is a good demand for No. 1 timothy which is scarce. Medium and lower grades are moving slowly, No. 2 timothy ranging from \$23 to \$25; No. 3, \$19 to \$21; sample, \$14 to \$16. Timothy containing light mixtures of grass or clover generally brings \$24 to \$25 for No. 1; \$20 to \$22 for No. 2 and \$16 to \$18 for No. 3.

Debate Outline on Farm Relief

Grange lecturers who are interested in putting on programs on farm relief may get an outline on the subject, "How Shall Congress Assist Agriculture" by dropping a request to the editorial department of American Agriculturist, 461 Fourth Avenue, New York City. This debate is prepared by Benson Y. Landis, who is with the Federal Council of the Churches of Christ in America.

Farm Papers in New Hampshire

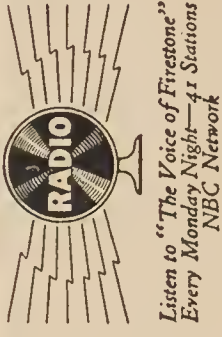
The National Fertilizer Association recently sent out nearly fifty thousand questionnaires to secure information relative to the number of farmers who regularly read farm papers. The result shows that in the United States as a whole, four farmers out of five read one or more farm papers, and that in New Hampshire 95.7 per cent of farm families have one or more farm periodicals coming into the home regularly. This is the highest percentage in any of the thirty-five states which completed the survey.

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Reaches around the World to give Most Miles per Dollar



Here are world-wide resources—gigantic enterprise—skilled organization—delivering the greatest tire mileage at lowest cost. Beneath the African sun in Liberia, Firestone is transforming a million acres into cultivated rubber plantations. Over in Singapore are vast rubber preparation plants—Firestone owned and operated—to bring the finest rubber at the lowest cost to five great Firestone factories.



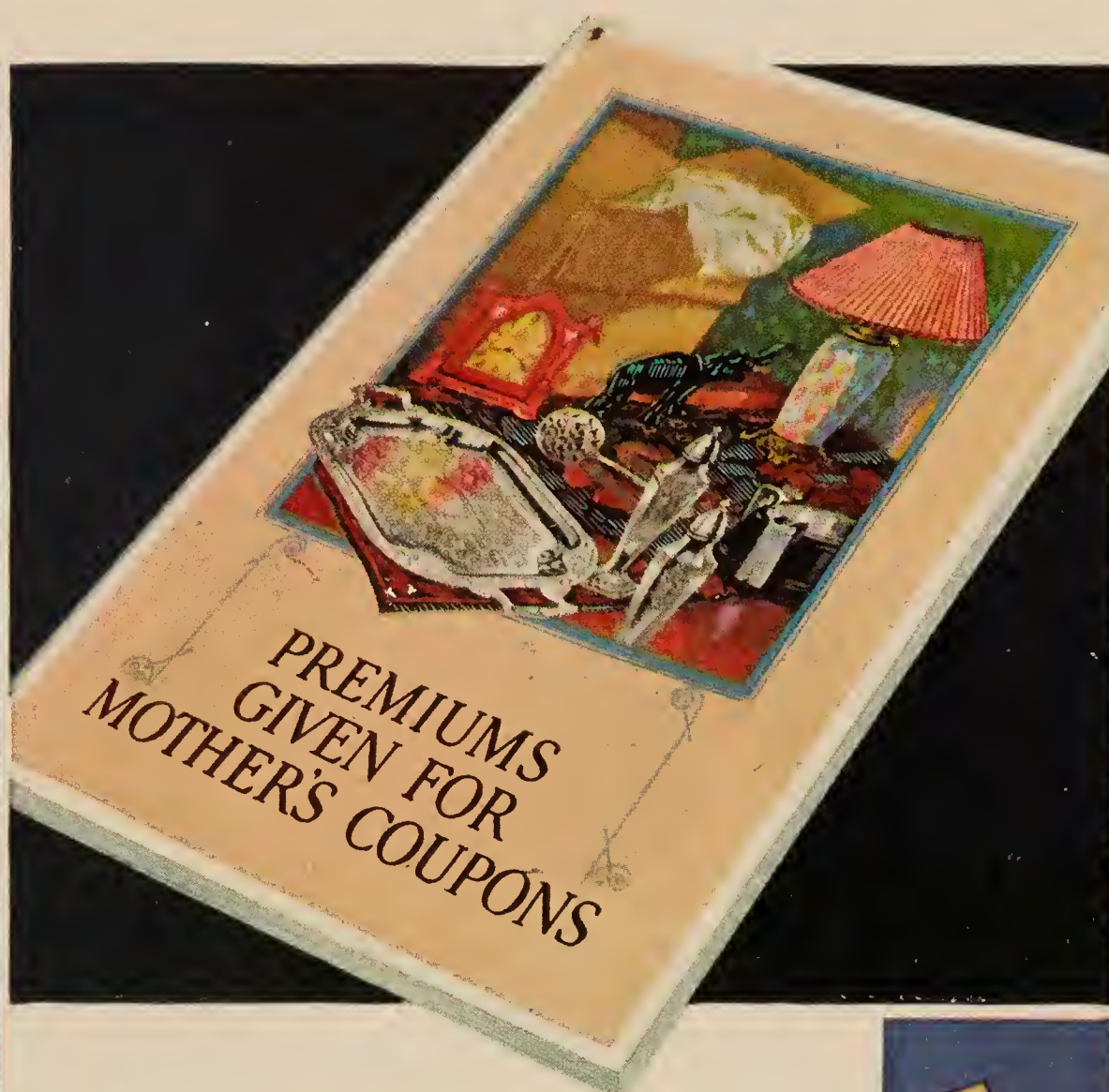
With the world's largest exclusive tire factory and the world's largest cotton fabric mills—Firestone secures large-scale economies which put supreme quality into Firestone Gum-Dipped Tires. From raw material to finished product—direct buying—direct selling—direct distribution from factory to consumer through authorized Firestone Tire Stores everywhere—Firestone saves you money and serves you better.

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with these nourishing and stimulating hot oats that children and grown-ups like every morning



HERE is the hot vigor breakfast that your family loves. Plump, rich-flavored oats that make the strengthening, appetizing, old-fashioned porridge everybody relishes.

And with them you have the opportunity to "set" your table attractively—to equip your kitchen with many little extras. Or make yourself a present of silverware, chinaware or jewelry.

For every package of luscious and delightful Mother's Oats contains a valuable premium coupon. Send now for the free gift catalog that shows the many things you can get—and start at once to save these coupons.

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You can get the regular Mother's Oats that you have always known—or Quick Mother's Oats that cooks in 2½ to 5 minutes. The same rich flavored grains—only 10 pounds of these flakes come from a bushel—except they're prepared to cook more quickly.

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Be sure to get Mother's Oats next time. Send NOW for Mother's Premium Catalog showing all the lovely things you get. Address Mother's Coupon Dept., Room 1708, 80 E. Jackson St., Chicago, Ill.



MOTHER'S OATS

Mother's Oats comes in 2 styles, the Regular and Quick Mother's Oats that cooks in 2½ to 5 minutes.

Farm News from New York

A Summary of Tax Relief Plans--G. L. F. Plans Large Expansion--County Notes

EDITOR'S NOTE—The following is a summary of Commissioner Mark Graves' speech at Ithaca on the present plans to relieve and adjust the rural tax situation. We have covered each of the points he makes in this address in articles in recent issues of AMERICAN AGRICULTURIST, but the following speech is such a good summary of the whole situation and the facts are so important, that we thought you would like this different angle on the different proposals.

REAL estate in the 57 counties outside of New York City will be relieved in the next ten years from \$100,000,000 of taxes, an average of \$14,000,000 per year, if the program of Governor Roosevelt's Agricultural Advisory Commission is adopted. State Tax Commissioner Mark Graves told a large audience at the Farm and Home Week meeting at Cornell University. "The beauty", he said, "of this program is that it relieves real property, that it equalizes the cost of constructing and maintaining the state highway system and the bridges therein, it provides substantial assistance to the counties for the development of a secondary or lateral system of highways, and finally equalizes the burden of school taxes for one, two, three and four teacher schools. It is not a purely farm relief measure. It will benefit directly every real property taxpayer whether he be a farmer, home owner, merchant, manufacturer or public utility in any one of the 57 counties outside of New York City and indirectly, it will benefit every taxpayer of the greater city."

New York State the Commissioner described as the most valuable parcel of real estate in the world, worth in round figures today, \$33,000,000,000 or \$23,000,000,000 more than it was worth 25 years ago. He described it as a leader in financial, commercial, industrial and agricultural lines and predicted for the state a wonderful future when its waterways and power possibilities are fully developed.

The full development of the state and the resulting benefits to all its people can be obtained if all taxpayers and taxable abilities receive equal treatment. The gradual shift of population from rural to urban centers and the development of the state as an industrial state has caused shifts in the wealth of the state, causing the tax-paying ability of some sections to decrease, while others have increased. The true burden of taxation has increased more rapidly in rural communities than in urban centers.

Although the counties are now de-

veloping improved highway systems with limited aid from the state, under the Lowman Act, the plan of the Governor's Commission is to have a substantial share of the gasoline tax used to speed up the development of such systems more directly under state supervision. If this feature of the Advisory Commission's program is adopted by the legislature, the counties will receive additional revenue out of the gas tax during the next ten years, amounting to \$60,000,000, or an average of \$6,000,000 yearly. This should accomplish much in the way of speeding up the construction of a secondary or lateral system of highways without imposing an additional heavy burden upon real property.

In addition to the foregoing, it is proposed to relieve the towns and villages now contributing toward the maintenance of the state highway system. Towns are now required to pay \$50 for each mile of such highway within their borders, and villages at the rate of one and one-half cents per square yard of such highways within their limits.

To provide necessary funds to give relief to real property in connection with highway costs, the Governor's Commission recommends a two-cent gas tax. The state and its localities

are spending, annually, more than \$250,000,000 for the construction and maintenance of streets and highways. Toward this vast bill the motoring public is paying annually about \$35,000,000. This sum, it is contended, is not as large as the motorists should pay.

Referring to the cost of completing the state highway system, Commissioner Graves pointed out that under existing laws it will cost a taxpayer in Columbia, Delaware, Franklin, Hamilton, Seneca, Tioga, Washington, Wyoming and Yates counties, from 25 to 42 times as much to pay his share of the cost of completing this system as it will a taxpayer owning a like amount of real property situated in Albany, Erie, Monroe, Nassau and Westchester counties. The plan of the Governor's Advisory Commission tends to equalize this cost and also the cost of completing bridges. These two items will save real property taxpayers \$40,000,000 in the next ten years, or \$4,000,000 yearly.

The Governor's Commission also found that state aid for the maintenance of town highways is being distributed under a statute enacted twenty years ago in such a way that gross inequalities now occur. The poor towns are limited to \$25 for each mile of highway, while the wealthier towns are receiving more than \$500 per mile

of highway. Tax rates for the maintenance of town highways were found to vary from less than \$5 per thousand in wealthy towns to more than \$30 per thousand in poor towns. The Governor's Advisory Commission has recommended a plan which will narrow this range in highway tax rates by granting more aid to the poorer townships and less to the wealthier ones without involving any greater outlay by the state.

In connection with school costs, it was found with respect to one teacher-one room school districts, of which there are 7,350 in the state, that tax rates ranged from less than one dollar per thousand to more than \$23 per thousand. To equalize this tax load, and to relieve taxpayers in rural communities, the Governor's Advisory Commission recommended a plan which will guarantee to each such district an acceptable standard of school with a uniform tax rate of \$4 per thousand based on true value. This plan, if adopted, will relieve real property in the next ten years of from \$35,000,000 to \$40,000,000 in taxes and it will give relief where assistance is most needed. Not only will it give tax relief, but it will guarantee to children in purely rural communities equality of educational opportunity.

New York County Notes

Cattaraugus County—The spring session of the County Pomona Grange will be held at Olean March 6th and 7th. A debating team from the Little Valley high school will present the subject, "Is the young man making a mistake who chooses farming as a life work?" William E. Glover of Randolph, one of the charter members of the order of Pomona and one who rarely missed a session of the Pomona in the 35 years of its organization, died suddenly from a heart attack following an attack of flu. The funeral was held February 1st and was largely attended by grangers from many parts of the county. Mr. Glover was a member of the Executive Committee and his last official act in grange work was to arrange for the June session with his home grange at Emerald.—Mrs. M. M. S.

Tioga County—Real winter weather was here during the last week in January and a few days this month. The cold winds blew fierce and the light snow drifted. On some of Tioga's hills the drifts were six feet deep and farmers had to take to the fields and then shovel to get their milk to the stations. The mail carrier on the Ketchumville-Tioga route was unable to make his trips for two days. Fine ice, from 10 to 14 inches thick, has been harvested and many ice houses have been filled with the best ice ever.

On February 5, a rain came and the thaw which followed sent much water where needed and much where not wanted. Several markers are suggested to be installed at different points in Owego to give the history of the village and county, one of them being where the Owego and Ithaca Railroad was, as that was the second railroad to be incorporated in the State of New York and also the second one to be built in the United States. This road is now the Cayuga division of the Lackawanna Railroad. There was another big fire of the home and barns of Watson W. Colby on February 5th. Much property was also burned. The house was about 30 by 60 feet, a substantial residence. The barns were commodious and had basements. There have been many fires of late and of such good buildings. Tioga County is placed in the new Dry District of Oswego, Cayuga, Tompkins and Tioga. The enforcement work will be under the charge of William Shakespeare, as group head of the newly erected Auburn District, which went into effect February 1st. Plans are being made for the largest series of farm meetings ever brought to the people of this county, starting on March 4th and continuing through to April 4th. A total of 7 specialists will be here for a series of 30 community meetings and a tractor school. Subjects of practical interests to both dairymen and poultrymen will be discussed. Other spring work is planned following these meetings. Probably 50 farmers will be visited personally by the Farm Bureau Manager, A. R. Blanchard, and soil specialist, A. F. Gustafson. Prof. J. H. Baron, pasture specialist, will probably visit 75 to 100 farmers in connection with the pasture improvement campaign started by the Farm Bureau for permanent pasturage. Other specialists will be here at later dates. Mr. Jennings, specialist in drainage and water supply problems, will aid in solving this difficulty. The committee in charge will meet at the Farm Bureau office in Owego, February 11th, to make all preliminary arrangements for the coming meetings, etc. They are: Arthur C. Ellis, Waverly; Seymour Dart, Spencer; Fred J. Frost, Newark Valley; Fred A. Blewer, Owego; Archie McNeil, Lounsberry; J. H. Best, President of the Farm Bureau, is a member ex-officio of the committee.—Mrs. D. B.

Ontario County—The weather for the past month has been quite cold for January with not many real thaws like we used to have. The winds have been variable and very chilly and not enough snow for sleighing. Wheat and grass have been exposed most of the time. There is quite an amount of sickness among the community. Grange work is doing well. Hopewell Grange 472 sent three resolutions on the school question to the State Grange at Rochester and the same to our state senate and assemblyman. We are square again with Uncle Sam; our taxes are paid and they were some taxes. Farms are assessed twenty-five dollars an acre more than they would bring in the market. When will we be relieved? Times are quite dull. Potatoes are a drug on

the market. Hens are not laying as good as usual. Eggs are 40 cents per dozen, butter 45 cents per pound. Cows are selling high at auctions. Wheat has fallen to \$1.35 for a bushel, timothy hay \$12 per ton.—E. T. B.

Cayuga County—We are having a few days of sleighing and farmers are taking advantage of it to get in their ice which runs from 7½ inches to 11 inches thick. Not many farmers are changing hands this year and auctions are few. Grain and feeds have advanced recently. "Gluten", the dairymen's standby, has gone to \$2.75 per hundredweight, and oil meal is \$3.40. Farmers are watching with interest the doings at Albany. There is a hopeful attitude but many are cynical. They cannot really believe the politicians mean to offer any relief.—A. D. B.

In the Hudson Valley

Columbia County—We have had zero weather the past week. Ice harvesting is being carried on all over the county from farmers who fill their ice houses to ice companies filling large storage houses. There has been 12 inch ice cut in the Hudson river and it is of fine quality. The Clermont Ice Company reports hundreds of tons of clear 12 inch ice in their storages. The quarantines have been lifted in Austerlitz homes for scarlet fever. Sick folks at Copake are getting better. Melonville homes were visited by grippe. Fruit meetings were held in various parts of the county. County Agent A. B. Buckholz arranged for Kinderhook Grange Hall, February 5th at 1 P. M., and at Hudson Court House 7:30 P. M. On February 6th the meetings were at Livingston, Germantown and Clermont. Columbia County is rated fifth of the counties in this important fruit state in the production of apples. Butter is 46 cents a pound in trade at stores and eggs 40 cents a dozen.—Mrs. C. V. H.

Saratoga County—February 9th was a very stormy day with a wet snow and the warm weather makes it very slushy and sloppy. The state roads were ploughed but it was not necessary on dirt roads. Autos have been able to run all winter. L. H. Burch is preparing to start his large incubators for the spring chick hatching. Seed orders are being made out for spring planting in hot beds and gardens. Hay is rather scarce in this section. Many farmers fear they will have to buy some silo feed as it is nearly gone in many places.—Mrs. L. W. P.

Sullivan County—The Dairymen's League meeting was held at White Sulphur Springs recently to elect officers. All of the old ones were re-elected. A Lincoln dinner was held on February 12th at the Monticello Inn and a large gathering was present. James Smith, one of Sullivan County's best known men, died at his home at Eureka on Sunday, February 10th, after a long illness. Neal Misner was drowned as a large truck sunk through White Lake ice. Another man who was ahead of Misner's truck with his truck jumped to safety. Snow is about all gone and the birds are singing as though spring is just around the corner.—P. E.

G. L. F. Holds Annual Meeting

AT the annual meeting of the G. L. F. stockholders in Rochester on February 4, announcement was made by H. E. Babcock, General Manager, of the plans of developing the milling facilities of the Exchange by a new mill and elevator at Buffalo.

The expansion program is already under way, Mr. Babcock stated. An elevator in the Buffalo Harbor has been purchased, together with a site nearby on which will be built a big modern feed mill. The elevator has capacity for 750,000 bushels of grain and will be put in use as soon as transportation opens up on the Great Lakes to provide storage for the G. L. F. mill now in operation at Buffalo.

It is expected that the new mill will be in operation by January 1930. The entire expansion program involves an investment of more than \$1,000,000. When the new facilities are in use the G. L. F. will have milling capacity for over three quarters of a million tons of mixed poultry and dairy feed a year, and plans are laid for eventual capacity of one million tons. The Exchange now has storage capacity for 1,750,000 bushels of grain at Buffalo and Peoria, Illinois, where the Exchange owns controlling interest in the Burlington Elevator.

Mr. Babcock pointed out that con-

stantly increasing demands on the two mills now in operation made it absolutely necessary for the Exchange to secure increased storage and milling facilities.

Both the mill owned at Buffalo and the one leased at Peoria run twenty-two hours a day for at least eight months of the year and are never closed down from one end of the year to the other. He stated that Buffalo was selected for the new mill and elevator because it gives the Exchange an opportunity to take advantage of the low water haul rates down the Great Lakes on grain from the West.

Shareholders elected three directors, nominees of the Grange, the Dairymen's League Co-operative Assn. and the New York State Farm Bureau Federation. Leigh Kirkland of Randolph, nominated by the Federation, was elected to succeed M. C. Burritt of Hilton, who declined renomination. George Kirkland of DeWittville, nominated by the Grange and Henry Burden of Cazenovia, nominated by the League, were re-elected.

The following officers were elected: President, N. F. Webb of Cortland; Vice President, Fred Porter of Crown Point; Secretary, George Kirkland; Treasurer, Edson J. Walrath of Evans Mills.



With the A. A. Farm Mechanic



Operating Farm Machinery By Electricity

MANY farmers are experiencing difficulty in the use of electric motors on farm machines that were formerly operated by gas engines. This trouble is due to not making proper allowance for the difference in speed. Operators of various pieces of labor saving machinery should consult a competent mechanic or engineer before attempting to operate feed grinders, fodder cutters and other types of farm machinery. Reductions of speed should not be attempted by using a very small pulley on the motors as this wastes considerable power through slippage and is very hard on the belt. To equalize the speed, it is advised that the pulley on the machine be increased rather than try to reduce the diameter of the pulley on the motor. Another important point to keep in mind is that pulleys on motors should be at least six inches wide to accommodate the ordinary farm belting. No pulley on a motor should

be less than four inches in diameter. It must also be borne in mind that portable units are not much cheaper than those purchased fully equipped and the practice of mounting motors on stone-boats and skids should be discouraged, especially when the farm equipment includes makeshift starting apparatus.

Oiling Wagon Wheels Paid

I WOULD like to give my experience, which agrees exactly with your advice to a recent inquirer advising him to run his wagon wheels in hot oil before painting, and the effects were so good that my wagon maker said it was the best preserved wagon he ever saw. I did not use creosote, although I know it is a good wood preservative, but used a preservative put out by some of the oil refineries. This is not only a good preservative for fence posts, wag-

on wheels, and so on; but it can also be used for destroying lice and other vermin in hog houses, poultry houses, and so on.—I. W. D.

Proper Use of Leather Belts

LEATHER belting must be kept dry. As moisture will cause it to stretch and weaken. Hence it is intended mostly for indoor use and not where steam or spray is likely to be prevalent. When used on grain separators, protection against rain must be given.

Leather belts do not stretch much after the first few days' use and hence are very satisfactory belts for use between fixed pulleys. Where one of the pulleys can be adjusted for distance, a cemented joint endless belt is the quietest and most satisfactory. Almost any type of joint or lacing desired can be used, but the hinged type of wire lace is rapidly becoming standard practice.

Leather belts should be kept well lubricated with neat's foot oil or other animal grease. Mineral oils of any kind are harmful and should not be used. Lubrication, even with the proper oil, is easily overdone, as it softens the belt unduly, causes it to pick up dust and grit, and cuts down the power and shortens the life. Only a small amount should be applied at any one time and the oil should not show on the surface. If leather belts are kept in good shape,

belt dressings usually are not needed, and as many of them actually are harmful, should not be used except with the approval of the belt manufacturer.

Extensive tests made at Cornell University establish beyond any question that the hair or grain side of leather belts has much greater pulling capacity than the flesh side and hence should go next to the pulleys. In general the belt will transmit from two to three times the power and will give much longer service when the grain rather than the flesh side is run next to the pulleys.—I. W. D.

How the Central School Act Works

(Continued from Page 8)

of the sum actually expended for the erection, enlargement or remodeling of a school building in such a district.

How the Plan Works Out

More than fifty central districts have been established since the act took effect. In many of these districts, there was a considerable amount of opposition at first. In order to find out how the parents of children, those most vitally interested, liked the system after it had been in operation for a while, American Agriculturist sent a representative into two central districts in the State where there had been opposition when the districts were established. Many calls were made, without making any effort at selection, except to call on as many parents of children as possible. Our representative found only one man who was opposed to the system, and he had no children. Many of the others stated that they had been bitterly opposed at first but after some experience, they would not return to the old system for any price. Our representative was not able to call on every family in both central districts, but enough calls were made so that we believe it a fair statement to say that so far as those two districts were concerned most of the opposition had fairly well ceased after experience had shown how the central district worked.

On page 5 we print a little table which was a result of a questionnaire sent to parents in 1928 in central rural school districts. The questionnaires were distributed to practically all the parents whose children were being transported. It was intended for all, and if any were omitted it was because there was not a full list of names on record, and the omission was unintentional. Districts recently formed as well as those which had been formed for some time were included in this study. Bear in mind that the questionnaires were sent only to parents in order to get their attitude. Of course, not every parent replied but enough did so as to give a fairly good idea of parental sentiment in these central rural districts.

In conclusion, let us make an appeal to reason in this whole matter of the rural schools and the welfare of our boys and girls. If your community does not wish to establish a central school district, do not do it. No one is urging you to. In fact, there are many sections in New York State where it is probable that such a district might not work well. Also, if your community is interested, go slowly and study the plan so that all thoroughly understand it before voting. If you do want to consider the proposition, or any other measure that relates to your schools or to the welfare of the boys and girls, consider it on its merits.

Let us lay aside prejudices based on misunderstandings, cast out the bitterness toward those who do not happen to see eye to eye with us on the school question, and study the whole problem of the educational welfare of the boys and girls in the spirit suggested by Abraham Lincoln when he said:

"With malice toward none; with charity for all; with firmness in the right, as God gives us to see the right, let us strive on to finish the work we are in."

There is no best breed of poultry—choose the one you like best, suitable for the purpose desired and that is available. Then keep it pure.—M. F. M., Ark.

Each step of the Goodrich Giant measures months of steady wear

POUNDING, twisting, scraping, machines in our factory make strenuous tests of the rubber used in the manufacture of Goodrich rubber boots and overshoes. In a few minutes they give a rubber boot or overshoe harder treatment than you would give in many months of wear.

The first machine rubs a section of sole rubber violently back and forth—one hundred times a minute.

Another machine stretches the rubber used in the uppers. Makes sure it is really "rubbery"—elastic yet strong.

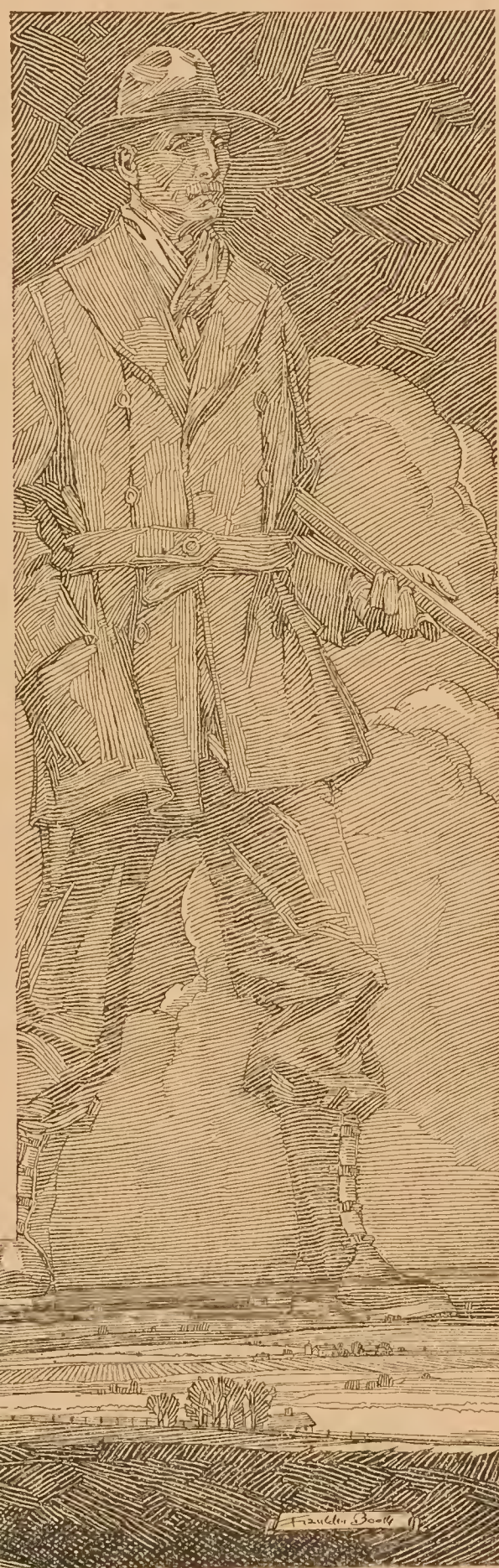
Still another machine takes a piece of the special rubber used in toe and instep and twists and bends it over and over again, as you might do in walking—but a thou-

sand times as hard!

These tests are amazing! It's as if a "giant farmer"—working for your protection—were to pull on a pair of Goodrich boots and stride through a whole year's wear in a single afternoon.

These tests assure you of good value when you buy Goodrich footwear. Look for the name Goodrich. It is plainly stamped on all our boots, overshoes and rubbers—the honor mark of a great company.

From sturdy boots, overshoes and work-rubbers for men and boys to dainty stylish Zippers and rubbers for women and girls, the Goodrich line of tested rubber footwear meets the needs of every member of your family. The B. F. Goodrich Rubber Company, Akron, Ohio.



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A favorite with farmers—this brown Goodrich boot with white sole. Sizes, boys' to men's. All lengths, knee to hip.



This sturdy Norka comes in black with white or brown sole. Unrivaled for heavy wear.

These strong, comfortable all-rubber overshoes come in all sizes with 4, 5, or 6 buckles.



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Thousands of customers know. Order year after year. A satisfied customer my best advertisement. Join the old reliable plant. 16 years satisfactory service cuts down expensive advertising. My customer reaps the benefit by ordering from this small advertisement. S. C. White and Brown Leghorn SPECIALIST. 200 to 290 Egg Strain CHICKS \$13.00 per 100; 500 or more, \$11.00 per 100. Assorted chicks, \$8.00 per 100. FREE & 100% LIVE DELIVERY GUARANTEED. HOUSEWORTH'S LEGHORN FARMS, Port Trevorton, Penna.

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Learn how to make your poultry pay Extra PROFITS

Our new book contains information which vitally affects your profits in poultry keeping. It explains the great importance of calcium. It tells why PEARL GRIT makes and saves money for you. We'll gladly send you the book if you'll mail the coupon.

Your birds need PEARL GRIT now. This is the season of increasing egg production. You must guard the health and vitality of your layers. They'll slump or break down unless you supply them with the calcium which PEARL GRIT provides in the most economical, most effective form.

Build for Future PROFITS

PEARL GRIT gives potency to breeding stock. It supplies the calcium which must be stored in the egg to help nourish the chick germ during incubation. A larger percentage of eggs will hatch if you feed PEARL GRIT to your breeding stock. And the chicks will be bigger, stronger, livelier. Since your profits for another year depend on the chicks you succeed in rearing, be sure to get your mated birds in good condition by feeding PEARL GRIT now.

If you have any trouble in securing PEARL GRIT from feed dealers, let us know. We'll see that you are supplied.

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Send me your free book "The Poultry Raiser's Pay Envelope", and give me the names of dealers who handle PEARL GRIT.

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Address _____

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Tell us your dealer's name and address

With the A. A. POULTRY BREEDER



Enforcing the New York Egg Law

By KENNETH FEE

Director, Dairy and Food Bureau, N. Y. S. Department of Agriculture and Markets

AFTER having wrestled with problems connected with the enforcement of the new egg law for the past 16 months, I have read Mr. Cosline's article appearing in your issue for January 12, with considerable interest.

He calls attention to the fact that the law removes the distinction between fresh and cold storage eggs. As a matter of fact, in this State, the term "fresh" as applied to eggs, now has a definite meaning for the first time. Before the enactment of the law, as it is pointed out in the article, any eggs which had not been held in a cold storage warehouse could be sold as fresh. The quality of eggs held for a short period in cold storage certainly should be better than the quality of eggs held for an equal length of time elsewhere. Yet under the old regime the latter could be sold as fresh unless they were actually unfit for food while the former must be sold as "cold storage eggs" although they might be of excellent quality.

Difficult to Identify Cold Storage Eggs

The situation would not have been so bad before the enactment of the new law if there had been any way to prove which eggs had been held in storage. Because it was often possible by means of required labeling and otherwise to trace eggs stored in New York State back to the storage warehouse, many storers of eggs placed them in warehouses in other States where the labeling requirements were less rigorous. These eggs arrived on our markets without means of identifying them as cold storage eggs and were often represented as fresh eggs.

Mr. Cosline states that one cause of dissatisfaction with the new law is that it has resulted in lower prices now being received by producers. The fact is that the most dependable figures show the average price paid for eggs during the past year to have been a fraction of a cent per dozen higher than the price paid the preceding year.

EDITOR'S NOTE—Market price records doubtless show better prices than last year. However, we are interested in the price received by the average producer and thousands of them are ready to testify that they have received lower prices this winter than they did last. Not all of our readers ship to the New York Market.

It is undoubtedly true that many eggs out of cold storages have been sold during the past few months as fresh eggs or at least as Grade A. Had this not been the case it is conceivable that the price for high quality eggs of recent production might have been higher than it was.

Present Grades Not Always Observed

Although eggs from cold storage warehouses have been sold as Grade A and possibly as fresh eggs, it does not follow that they have been properly so represented. In fact, we have ample evidence to prove that they were not properly represented in many instances. If there had been strict compliance with the law the number of eggs sold as Grade A or Fresh would have been greatly reduced. The real difficulty, however, is not with the law or with the grades but with lack of adherence to them.

It may not be out of place to call attention to the fact that no appropriation for the enforcement of this new law has ever been made. The Department has been compelled to strive to secure adherence to the law demanding an almost revolutionary change in the method of selling in a hundred thousand stores one of the most essential

(Continued on Page 18)

Dairy Farmers Read this Book!

It contains information of tremendous value to every farmer who is thinking about remodeling his old barn or building a new one. The ideas it will suggest to you on profitable dairy farming would make it worth paying real money for, but we send it to you FREE.

A complete line of modern barn equipment, including stalls, stanchions, pens, carriers, waterbowls, ventilators, etc., is illustrated and described in detail in its pages. Exclusive patented features, which make long-headed farmers prefer Mitchell equipment, are explained fully. You will learn what lies back of the Mitchell name; how design, materials and workmanship unite to make Mitchell equipment an outstandingly good investment.

Mitchell experience can be worth a lot to you. Mitchell dealers, salesmen, and architects stand ready to help you make your barn a source of both pride and profit. Getting the catalog is your first step.



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MITCHELL MANUFACTURING COMPANY,
1906 Forest Home Ave., Milwaukee, Wis.
Send me a free copy of your Barn Equipment Catalog
Name _____
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BABY



CHICKS

BABY CHICKS

	25	50	100	500	1000
S.C.W. Leghorns.....	\$3.25	\$6.50	\$12	\$57.50	\$110
Bd. Rocks & S.C. Reds	3.75	7.25	14	67.50	130
Heavy Mixed.....	3.25	6.50	12	57.50	110
Light Mixed.....	2.50	4.75	9	42.50	80

A Special Discount on orders placed in advance Will ship C.O.D.

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Herbert Miller, Prop. Box 12 Richfield, Pa.

200,000 CHICKS 1929

Goodling's Super Quality. Healthy, Strong and Vigorous	50	100	500	1000
Single Comb, White Leghorns.....	\$6.50	\$12.00	\$57.50	\$110
Barred Plymouth Rocks.....	7.00	13.00	62.50	120
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Broiler Chicks, Heavy Breed.....	5.50	11.00	52.50	100
Order direct. Prepaid 100% live delivery guaranteed.	5.00	10.00	47.50	90

Circular Free. Box A, R. No. 1, RICHFIELD, PA.

CLEAR SPRING QUALITY CHICKS

	per 100	500	1000
S.C. White Leghorns.....	\$11.00	\$52.50	\$100.00
Barron and Wyckoff Leghorns.....	12.00	57.50	110.00
Barred Rocks and R.I. Reds.....	14.00	67.50	130.00
Light Mixed, \$9.00 per 100; Heavy Mixed, \$12.00 per 100, for March and April. 100% live delivery. Postpaid. New circular free giving full details of all breeds.			

CLEAR SPRING HATCHERY, McAlisterville, Pa. Box 49

BABY CHICKS

Famous Tanager Strain, Single Comb White Leghorn Chicks, from heavy laying free range flocks. Our flocks are headed with 260 egg strain cockerels. Write for our new free circular and our prices.

Cocolamus Poultry Farm, Box 40, Cocolamus, Pa.

Chicks, Barron Eng. White Leghorns

Common Leghorns, Barred Rocks, Light & Heavy Mixed, as low as 8c each. 100% guaranteed. "New Circular Free." Prepaid. TWIN HATCHERY McAlisterville, Pa.

CHICKS

White Leghorns \$12. Barred Rocks \$14. Light Mixed \$9. 100% live delivery. Postpaid. Circular free. L. E. STRAWSER, Box 30, McAlisterville, Pa.

BABY CHICKS

	100% Live Delivery. Postage Prepaid	500
Wh. and Br. Leghorns.....	\$6.00	\$11.00
Buff and Bl. Leghorns.....	6.00	11.00
Anconas.....	6.00	11.00
Barred Rocks.....	6.50	12.50
Wh. and Buff Rocks.....	6.50	12.50
SC and RC Reds.....	6.50	12.50
SC Bl. Minorcas.....	6.50	12.50
Wh. and SL Wyandottes.....	7.50	14.00
Buff Orpingtons.....	7.50	14.00

All absolutely first class purebred stock from culled flocks. Prompt shipments. James F. Krejci, 9507 Meech Av. Cleveland, O.

BABY CHICKS Delivery After February 15th.

Full count and quality guaranteed	
Free Range Bred	25 50 100 500 1000
White and Brown Leghorns....	\$3.25 \$6.25 \$12 \$58.75 \$115
Anconas and Black Leghorns....	3.25 6.25 12 58.75 115
White and Barred Rocks.....	3.75 7.25 14 68.75 135
Rhode Island Reds.....	3.75 7.25 14 68.75 135
Mixed chicks all breeds.....	2.75 5.25 10 48.50 95
Write for catalog and special discount on early orders	
<i>Hatchery Chicks for Greater Profit</i>	
Ulsch Poultry Farm and Hatchery	
Port Trevorton, Pa.	Box 12

Write for catalog and special discount on early orders Hatchery Chicks for Greater Profit

Ulsh Poultry Farm and Hatchery Port Trevorton, Pa. Box 12

BABY CHICKS

Tanager Strain W. Leg. \$12 per 100	
Wh. Leghorns.....	11 per 100
Barred Rocks.....	14 per 100
S. C. Red.....	14 per 100
Heavy Mixed.....	12 per 100
Light Mixed.....	9 per 100
500 lots 1/2c less; 1000 lots 1c less.	

100% live delivery guaranteed. Order from this ad. or write for free circular. C. P. Leister, McAlisterville, Pa.

PROFIT BRED CHICKS

County Line Chicks are from proven producers. They can be secured in five breeds, S.C. White Leghorns, Reds, Barred and White Rocks and White Wyandottes all from range reared healthy bred to lay parents. Send for folder which gives prices and information every poultry raiser should know.

COUNTY LINE POULTRY YARDS AND HATCHERY, Box 10 Telford, Penna.

CHICKS

CHICKS	Will ship C. O. D.	25	50	100
	S. C. Reds.....	\$4.00	\$7.50	14.00
	Barred Rocks.....	4.00	7.50	14.00
	White Leghorns.....	3.50	6.50	12.00
	Heavy Mixed.....	3.50	6.50	12.00
Light Mixed.....	2.75	5.00	9.00	

500 lots 1/2c less, 1000 lots 1c less. Free range. 100% Delivery. Circular. W. A. LAUVER, McAlisterville, Pa.

BABY

CHICKS

**KERR'S
1929
CHICKS**

Bred to lay from high record contest stock

KERR'S Quality Chicks are from high-scoring stock selected for breed type, constitutional vigor and freedom from disease. These factors are combined with four and five generations of known laying inheritance based upon public records of up to 294 eggs in White Leghorns, 280 eggs in Rhode Island Reds, and 277 eggs in Barred Rocks. The poultryman who buys his 1929 baby chicks from the Kerr Chickeries is assured of good chicks that will live, grow and lay. They are bred to return a profit on money and time invested.

Write for booklet giving an illustrated account of the Kerr way of producing livable, profitable chicks. It shows our attractive 1929 prices.

KERR CHICKERIES, Inc.
Department 10

Frenchtown, N. J. Camden, N. J. Paterson, N. J. Trenton, N. J.

Binghamton, N. Y. E. Syracuse, N. Y. Lancaster, Pa.

Danbury, Conn. W. Springfield, Mass.



(Continued from Page 18)

articles of food, and has been furnished with no additional inspectors or funds to accomplish this task. The thousands of inspections made have been solely by the use of the regular Department inspectors many of whom have developed marked proficiency in determining the quality of eggs.

Wholesalers Must Sell By Grades

No doubt many wholesalers and jobbers thought that their cold storage eggs could be sold as Grade A. There is no reason for them to think so longer and most of them know it. A percentage of eggs from cold storage will appear to meet Grade A requirements if they are candled quickly after taken out before they have warmed up. Many of the eggs that do so then will fail to meet Grade A requirements a little later.

Retailers depend largely on wholesalers to furnish them with graded eggs. If a retailer finds his wholesaler has failed him in this respect he will seek another source of supply. To hold his trade the wholesaler will be compelled to furnish eggs which not only meet the Grade requirements at the time of delivery but for a reasonable length of time thereafter. It is not to be expected, therefore, that wholesalers in general will continue to sell cold storage eggs as Grade A.

Producers May Grade Own Eggs

It is believed that when the law is better understood and wholesalers and jobbers learn to classify properly the eggs which they sell that there will be more general compliance. The Department will do everything within its power to bring into line those who fail to grade their eggs properly.

True it is that the law does not compel the seller of eggs of his own production to grade such eggs. There is nothing to prevent him doing so however, and, in fact, it is believed that herein lies his opportunity. General regard for the new law will result in a demand for newly produced eggs of high quality and these eggs should bring a premium price, especially during the fall and early winter months. The New York State poultrymen who are progressive enough to take advantage of their location and furnish eggs of known high quality should be benefited by this demand.

Very truly yours,

Kenneth F. Fee,
Director.

Ducks Fail to Grow Properly

Could you let me know what is the trouble with my ducks. I started in May with about 60 and they have dwindled down to about 28 or 30. They get lame and get poor then so weak they stagger. They are slow to feather out, just the wing and tail grows. They have died three or four in a night. What would you suggest feeding them. They have free range, lots of creek water.—C. E. B., New York.

I AM afraid that your trouble is due to feed. As general practice, grain is not desirable as a duck feed until the birds reach a matured state. The reason for this is probably due to the fact that a duck does not possess a crop, and hence, lacks that softening and mixing process which takes place in a hen before the food goes to the gizzard. Under these circumstances you can see where whole corn would be especially disastrous. I should change things so that your birds have a good growing mash until they are well matured. A good mash of this kind is as follows: 2 parts wheat bran, 1 part wheat middlings, 1 part corn meal, 1/2 part beef scrap, and five per cent of sharp sand. Give them as much green food as they will eat. Feed about four times a day.—L. H. H.

May We Send You



A COPY OF THE
**1929
EAGLE
NEST
CATALOG
FREE?**

THE EAGLE NEST HATCHERY COMPANY,
BOX 70 UPPER SANDUSKY, OHIO



CHICKS with vim and vigor

Hatched by men with 19 years experience, from culled flocks, 100 per cent live delivery guaranteed by Prepaid Parcel Post at the following prices:

S. C. White Leghorns.....	11c each—\$100.00 per 1000
S. C. Brown Leghorns.....	11c " 100.00 " 1000
Barred Rocks.....	12c " 110.00 " 1000
S. C. R. I. Reds.....	14c " 130.00 " 1000
S. C. Black Minorcas.....	14c " 130.00 " 1000
Mixed Broilers.....	9c " 80.00 " 1000

Order now for spring delivery. Capacity 60,000 eggs. \$1.00 will book your order. Catalogue free.

The Pennsylvania Hatchery, Liverpool, Pa.
Our Slogan "Service After Delivery"

100% Live Arrival

	100	500	1000
Ferris Strain White Leghorns.....	\$12	\$57.50	\$110
Everlay Brown Leghorns.....	12	57.50	110
Basom's Barred Rocks.....	14	67.50	130
White Rocks.....	14	67.50	130
Owens' R. I. Reds.....	14	67.50	130
Black Minorcas.....	14	67.50	130
Mixed Chicks.....	9	42.50	80



JUNIATA POULTRY FARM
Box A Richfield, Pa.

PENNA. "State Supervised" CHICKS



Flocks inspected by officials from the Penna. Dept. of Agriculture. Our 19th year. Get our low prices on Reds, Rocks, Leghorns and Minorcas. Member I.B.C.A.

Catalogue free.
THE KEYSTONE HATCHERY,
(The old reliable plant) RICHFIELD, PA.

BABY CHICKS

From Heavy Laying Free Range Flocks

	25	50	100	500	1000
S.C.W. & Br. Leghorns.....	\$3.50	\$6.00	\$12	\$57.50	\$110
S.C.B. and Wh. Rocks.....	4.00	7.50	14	67.50	130
Buff Orpingtons & Reds.....	4.00	7.50	14	67.50	130
White Wyandottes.....	4.00	7.50	14	67.50	130
Assorted Chicks.....	3.00	5.00	9	42.50	80

100% prepaid safe delivery guaranteed.

Order from this ad. or write for circular

J. N. Nace Poultry Farm RICHFIELD, PA.

White Leghorn Baby Chicks a Specialty

	Per 50	100	500	1000
S. C. W. Leghorns.....	\$6.50	\$12.00	\$57.50	\$110.00
Barred Rocks.....	7.50	14.00	67.50	130.00
R. I. Reds.....	7.50	14.00	67.50	130.00
Heavy Mixed.....	6.50	12.00	57.50	110.00
Light Mixed.....	5.00	9.00	42.00	80.00

Our White Leghorn Cockerels: Sire—from hen that laid 312 eggs per year. Hens—254-290 eggs. Actual 365 day trap nest record. All chicks Postpaid to your door. 100% live delivery guaranteed. Order direct or write for free circular.

SUNSHINE HATCHERY, Dalmatia, Pa.

HIGH GRADE CHICKS

Blood Tested and Utility Stock

Leghorns, Rocks, Reds, Wyandottes, Anconas, Black Minorcas and Mixed. Also two and six weeks old chicks.

Pekin Ducklings.

Write for circular and prices.

TAYLOR'S HATCHERY, BOX 12, LIBERTY, N. Y.

Ruehle's Sunnyside Farm

PLEASANT VALLEY, N. Y.

Single Comb White Leghorns trapnested and pedigreed since 1904. Orders for chicks and eggs booked now. Catalogue on request.



DUCKLINGS \$33; EGGS \$14-100 "Duck News" Free. ROY PARDEE, Islip, L. I., N. Y.

Hampton's Black Leghorn Day Old Chicks. Circular free. A. E. HAMPTON, Box A, Pittstown, N.J.

WOLF SELECTED CHICKS

10 FREE CHICKS WITH EACH 100 ORDERED BEFORE MARCH 1st.
Don't miss this chance to get a start with Wolf's extra quality pure-bred high producing stock. Every breeder produced on free range and health of chicks is safeguarded. **Get Our Catalog and Price List**

Tells about prizes won by our birds. Read about Mary Hencel who made over \$1000 profit in one year with birds of our breeding. All leading breeds—prices very attractive. Write today. Chicks shipped C.O.D. Toe picking stopped instantly with Wolf's "No-Pick." Order box today. \$1.00 postpaid. Satisfaction guaranteed or money refunded.

WOLF HATCHING & BREEDING COMPANY, BOX 1, GIBSONBURG, OHIO



HUBER'S RELIABLE CHICKS

10 FREE CHICKS—ON orders booked before March 1st, we give 10 Chicks free with each 100 ordered. When we say RELIABLE—we mean RELIABLE in every way. Breeding stock of highest quality of 19 years of careful development. Special attention paid to health of flocks and records kept.

CATALOG FREE—CHICKS SENT C. O. D. IF YOU WISH
Write for details—get our illustrated catalog which tells all the story. Our prices reasonable. A book on Raising Chicks worth many dollars given free with each order of \$10.00 or more. Big discount for early orders.

HUBER'S RELIABLE HATCHERY, No. High St., Fostoria, Ohio

QUALITY BABY CHICKS

Five extra given free with every box of one hundred ordered. April hatched chicks, Leghorns, White, Brown, Buff, Black—\$14.00 per 100; Barred Rocks, Reds, Minorcas, Anconas, \$16.00 per 100; White Rocks, Wyandottes, Buff Orpingtons, \$18.00 per 100. March, \$2 more; May, \$2 less; June \$4 less. Custom hatching. Eggs for hatching. Odds and Ends, Left Overs, Mixed broiler chicks, Light, 10c; Light and Heavy, 12c; All Heavy, 14c; Better order now. Will send C.O.D. Thousands hatching daily all year around. Active, husky, chicks hatched from healthy free range breeders that will live, grow and lay. Prompt shipments. Postage prepaid. Live delivery. Send for folder. **SCHOENBORN'S HATCHERY, 335 Main St., Hackensack, N. J. Phone 1603 or 1604.**

BABY CHICKS

hatched by the best system of incubators from high class bred-to-lay stock. White, Brown, Buff Leghorns, Anconas \$14.00 per 100; Barred, White Rocks, Minorcas, Reds \$16.00 per 100; White Wyandottes, Buff Orpingtons \$17.00 per 100; Giants \$20.00 per 100; Heavy Broilers \$12.00 per 100; Light Broilers \$10.00 per 100; Pekin Ducklings \$30.00 per 100. Add 25c on orders for less than 100. Safe delivery guaranteed by parcel post.

Nunda Poultry Farm, Desk H, Nunda, N. Y.
Member of the International Baby Chick Ass'n, and the N. Y. State Co-Operative Chick Producers Ass'n.

Wyckoff Tancred White Leghorns

Book your order now for March and April Chicks.
\$12.00 per 100 \$57.50, 500 \$110, 1000

100% prepaid safe delivery guaranteed.

J. N. NACE POULTRY FARM, Box No. 50, Richfield, Pa.

BABY CHICKS

	25	50	100	25	50	100
Barred Rocks.....	4.00	7.50	14	S.C.W. Leg.....	3.50	6.50
S.C.R.I. Reds.....	4.00	7.50	14	Heavy Mixed.....	3.50	6.50
500 Lots 1/2c less.				1000 Lots 1c less.		

Free Range Flocks. Live Delivery.

B. N. LAUVER, McAlisterville, Pa.

ATHENEON CHICKS

EXHIBITION QUALITY—BRED TO LAY

Atheneon Blue-Blood Chicks Best Investment In Poultry Field Today

Our matings from the world's finest egg laying strains. Pedigreed males from 300 egg dams. Every chick an actual Blue Blood. GENUINE TOM BARRON PEDIGREED MALES direct from the famous Tom Barron Farms of England head our Special Matings. Large 2-year-old dams of proven high egg production. Late moulters. Heavy layers of winter eggs.

MODERATE PRICES—COMPLETE SATISFACTION

You take no chances in buying Atheneon Bred-To-Lay Chicks. They grow faster, lay earlier and produce an easier profit than ordinary chicks due to careful and scientific breeding. Consider these high quality strains in our matings: Regal Dorcas W. Wyandottes, 200 egg pedigree line direct; Holterman's Aristocrat; Park's Bred-To-Lay Barred Rock, egg pedigree line direct; TANCRED WHITE LEGHORNS and OWEN'S S.C. REDS. Similar Atheneon quality in 14 Popular Money Making Varieties.

PRICES ON GRADE A CHICKS

	100	500	1000
S.C. Wh., Bf., Brn. Leghorns—Anconas	\$13.00	\$62.00	\$120.00
Barred & White Rocks—S.C. and R.C. Reds.....	15.00	72.00	140.00
White Wyandottes—Buff Rocks—Campines	16.00	78.00	150.00
Bf. Orpingtons—Wh. Minorcas—Sil. Wyandottes	17.00	82.00	160.00
Selected Heavy Breeds, Odd Lots.....	12.00	60.00	110.00

FOR GREATER PROFITS BUY HATCHERY CHICKS FROM

ATHENS CHICK HATCHERY

ATHENS Box 96 OHIO

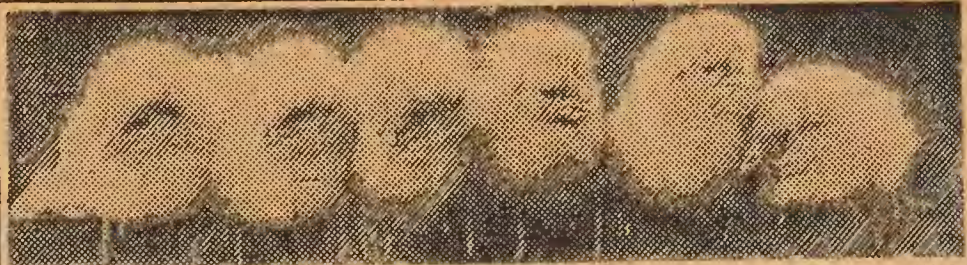
Athens Chick Hatchery,
Box 96, Athens, Ohio.

Send me FREE your illustrated Catalog, complete price list and Special Combination Offers.

Name

Address

BABY



CHICKS

5 Lb. Leghorns
The old reliable Heavyweight stock. Produced High Up on Pennsylvania's healthy mountain top. Get your chicks from certified record strains above 300 eggs. R.O.P. Hollywood, Tancred, Barron Matings. Hatch weekly pure white eggs up to 24 ounces per dozen. *Beautiful Color Plate Leghorn Catalogue Free.*
FARM SERVICE
ROUTE A10 TYRONE, PENNA.

S.C. WH. LEGHORNS BARRED ROCKS R.I. REDS
Send for low price list and booklet, describing our farm, stock, etc. Our Tancred Strain Leghorns are as good as the best. Eighteen years in the Chick and Chicken business.
Brookside Poultry Farms,
Dept. A. E. C. Brown, Prop., Sergeantsville, N. J.

HILLPOT
Quality Chicks
Leghorns Rocks Reds Wyandottes

Let the Hillpot Low-Egg-Cost Breeds Make Extra Profits for You This Year

The flocks from which your Hillpot Quality Chicks come have been tested out on the one sure basis of profit-production—low-egg-cost. These special low-egg-cost breeds are, undoubtedly, one of the most attractive values in the poultry market to-day. At a price no higher than that of many chicks of merely average quality, you can buy these big producers that are so easy to raise, that mature so quickly and lay so heavily that you will find your egg-cost cut to a new and remarkable low figure, while the fine, big, uniform eggs command the top price in the select markets.

THIS VALUABLE BOOK FREE
It gives the actual experience of successful poultrymen with Hillpot Quality Chicks; describes each of my breeds fully; contains important poultry data, house plans, etc.

W. F. HILLPOT, Dept. 129, FRENCHTOWN, NEW JERSEY

FINGER LAKE REGION BABY CHICKS

22 years' progressive success with Cornell's advice in culling, grading, and feeding in operating a 71 acre Poultry Farm, Strong, Liveable, Productive and Profitable Baby Chicks. Leghorns, Rocks, Reds, Wyandottes and Giants. Ask for price and mating lists. Custom Hatching.

THE DERORY TAYLOR CO.,
NEWARK, NEW YORK

CHICKS OF QUALITY

	In lots of...	25	50	100	500	1000
Wh. Wyandottes	\$4.50	\$8.50	\$16.00	\$77.50	\$150	
Rocks or Reds	4.00	7.50	14.00	67.50	130	
Wh. Leghorns	3.50	6.50	12.00	57.50	110	
Heavy Mixed	3.50	6.50	12.00	57.50	110	
Light Mixed	3.00	5.50	10.00	47.50	90	

From carefully selected free-range flocks, 100% arrival. Postpaid. Valuable illustrated 96-page booklet FREE. Telling all about poultry.

The Commercial Hatchery,
Box 75-A (The dependable plant) Richfield, Penna.

EIGENRAUCH FARMS
RED BANK, NEW JERSEY

18TH YEAR breeding White Leghorns for size, vigor and heavy production of large White EGGS. 8,000 LAYERS are housed on our farm.

Our Chick Guarantee
100% satisfactory arrival on the exact date we promise shipment. Every chick sold by us is hatched from eggs laid by breeders on our own farm.
Write for Free Folder and Prices on Pullets and Chicks
EIGENRAUCH FARMS Dept. G, Red Bank, N. J.

Hall's Chicks
Leghorns-Reds-Rocks-Wyandottes

"WELL BRED FROM WELL BREEDERS"

Not just a hatchery, but a real Breeding Farm of 100 acres. Careful management, finest possible equipment, and years of experience guarantee you a better, more profitable chick. State tested annually for B.W.D. *Free Circular.*

Hall Bros. Poplar Hill Farm, Box 59 Wallingford, Conn.

300,000 White-Brown Buff Leghorn **CHICKS**

Shipped C.O.D. Send No Money
PURE STRAINS—Tancred—Hollywood—Barron—American S. C. White Leghorns—Brown and Buff Leghorns—Eggs and Chicks Produced from some of the finest matings in Pennsylvania. Breeders Specializing in High Egg Production—Dependable Chicks for Commercial Poultrymen—100% Live Arrival—Send No Money—Chicks Shipped C.O.D.—Catalogue.

Pennsylvania Co-Operative Leghorn Farms, Box 314 Grampian, Pa.

HERE: NEARLY EVERYONE RAISES FULL BLOODED "AMERICAN" QUALITY CHICKS

AMERICAN CHICKERIES

	50	100	500	1000
American or Eng. SC. Wh. Leghorns	\$6.75	\$13.00	\$62.00	\$120.00
Hollywood Wh. or Brown or Buff Legs	7.25	14.00	67.00	130.00
Tancred Wh. Leg. Anconas—Barred Rocks	7.75	15.00	72.00	140.00
RC or SC Reds, Wh. Rocks, Parks Rocks	8.25	16.00	77.00	150.00
Wh. Wyandottes, Buff Orp., Blk. Minorcas	9.25	18.00	87.00	170.00
Brahmas, Col. Rocks, Blue Andalusians	11.25	22.00	105.00	200.00

Light Mixed \$9.00 a hundred. Mixed any breeds our selection \$10.00. Heavy Mixed \$12.00 a hundred.

Get our NEW CATALOGUE—It proves to you the SUCCESS our Customers have with our chicks—Breeders culled and Bred for High EGG PRODUCTION in Winter when eggs are demanding large premiums. Reference, Curwensville National Bank—100% Live Arrival—Dependable Service. Order Early.

AMERICAN CHICKERIES, BOX 214, GRAMPIAN, PA.

CHERRY HILL CHICKS

S.C.W. Leghorns—Wyckoff Strain	100 \$12.00
S.C. Everlay Brown Leghorns	12.00
Barred Rocks—Wm. Nace's select	14.00
S.C. Rhode Island Reds	15.00
Mixed or Broiler Chicks	9.00

1/2c less in 500 lots. 1c less in 1,000 lots.
25 chicks add 2c, 50 chicks add 1c. Full count. 100% live arrival guaranteed. Parcel Post prepaid. Bank reference. Order direct from this ad or write for free circular.

CHERRY HILL POULTRY FARM,
WM. NACE, Prop. McALISTERVILLE, PA.

Special Offer on Sunshine Chicks
Sunshine Chicks will be better than ever this season, blood tested for 5 years, selected for high egg production, bred for vigor and vitality. In fact, Sunshine Chicks are of such high quality that we not only back them with a guarantee of live delivery but we are going still further.

We Guarantee Them To Live
over the first critical 10 days of their life. We will replace loss up to 90% free of charge. Play safe and send for our folder and price list now.
WRITE TODAY!

Sunnycrest Hatcheries, 1925 Charleston Avenue, Huntington, W. Va.

Lone Oak Poultry Farm
A breeding farm where nothing but our own production and rearing is sold.

Chicks of Known Ability
Breeders used this season were sired by males whose dams' production records ranged from 200-278 eggs. This same blood is being intensified still more in the present flock matings. Make sure of the production ability of your future flock by securing chicks from these choice matings.

Choice breeding cockerels, priced right.
LONE OAK POULTRY FARM, Box 661, BABYLON, N. Y.

BABY CHICKS
13 Leading Varieties—White Leghorns, Black Minorcas, Rocks, Reds, Wyandottes, Hamburgs, Speckled Sussex, Buff Orpingtons.

\$9.00 per hundred and up.
Free Catalog and Price List
Lantz Hatchery, Tiffin, Ohio

National "Superbred" Chicks
500,000 SUPER-QUALITY CHICKS FOR 1929

Insure next winter's poultry profits by ordering NATIONAL "SUPERBRED" CHICKS NOW

We breed and hatch 13 of the leading Breeds. Send for our FREE illustrated catalog with prices on our utility and special mated chicks. All chicks sent prepaid. We guarantee 100% delivery of good lively chicks. Member of International Baby Chick Ass'n. You will save money by writing us now.

National Chick Farms, Box 408, Mifflintown, Penna.

CHICKS! Breeders on Our Farm
WYCKOFF LEGHORNS
5000 Chicks Weekly

Bargain price \$18.00 per hundred. Ten per cent with order, balance C.O.D. Refund if ordering dates are filled. SPECIAL—200 chicks weekly from pedigreed matings, price on request.

Hatchery Chicks For Greater Profits
MAPLEWOOD POULTRY FARM,
OFFICE 196 LARK STREET, ALBANY, N. Y.

Fairport Quality Chicks
are bred to make money for you. Strong, healthy, vigorous from the world's best and heaviest laying strains such as—Tancred, Ferris, Owen Farms, Daniels, Thompson, Martin, Shepard, Fishel and others. Free range flocks, scientifically culled and supervised, Smith Hatched, 100% live delivery guaranteed. 16 breeds 9c and up. Postpaid. Members International Baby Chick Association. Send now for free poultry book and prices. Buy Hatchery Chicks for Greater Profits.

FAIRPORT HATCHERIES • Box 44 Fairport, N. Y.

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"LIVE AND LAY"

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The subjects of the debates are:

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* * *

Should farmers use Saturday afternoon as a half holiday?

* * *

Is prohibition under present conditions a damage rather than a benefit?

* * *

Does poor cooking cause more misery than strong drink?

* * *

Should farmers adopt an 8 hour day.

* * *

Is it more economical to buy concentrates for the dairy than to grow them?

Any one of the following debate outlines will be sent to Granges, Farmers' Clubs or others who will make use of them on receipt of 2 cents each to cover mailing costs.

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Don't Forget the Home Equipment

Home Should Be As Well Equipped As Any Part of the Farm Plant

I FEAR that too often when we talk about modern farm power equipment most of us are thinking too much about tractors and trucks and combines and self feeding balers and the other newer equipment for saving the farmer's time and energy, and are perhaps overlooking the other half of the farm partnership and the junior partners and their need of better equipment to make the household duties less exacting and the home life more comfortable and attractive. Many farmers are slow about putting in labor-saving home equipment because they overestimate the cost of the installation. Much can be done for a very reasonable sum if the work is carefully planned and the farmer does part of the labor of installation.

The price of a new grain binder, which often can be saved by better care and adjustment and a few minor repairs, will pay for a good heating system, or a satisfactory pressure hot and cold water system; a good steer will pay for a good power washer with engine or a good water softener; the saving by repainting the family car and using it for three more seasons will finance a good farm lighting plant with wiring and many accessories; while the price of a combine or of a medium priced four-door sedan will completely modernize the average farm home with furnace, hot and cold running water, bathroom and sewage disposal, farm lighting plant, and so on. We do not mean by such comparisons to discourage the purchase of these other things, provided they are needed and the farmer can afford them; but we would like to set up with the farmer and his wife a proper sense of proportion when he spends his money.

What Equipment Does the Housewife Need?

Most women value running water as having the greatest labor saving possibilities in the home and it is their first choice in home improvements. Probably this is true when one considers the many ways in which running water affects the woman's work. To my mind, however, the power washer and wringer is of almost equal importance, where water is available at a cistern pump. The power washer is used only once or twice a week, while the running water comes into use a score of times every day.

Often farm wives could enjoy years earlier the labor and time saving benefits of water in the home if more farmers realized that, with proper planning, a water system can be put in on the installment plan. First a kitchen sink with small forcepump and waste water discharge, such as I put in our old home. Then to this can be added a barrel elevated on a stand above the stove with a waterfront connection to the range for hot water at the sink, the water being pumped up with the sink force pump by using a two-way valve. Next a complete pressure system can be put in using a galvanized tank in the attic, set in a metal pan to catch any condensation or leakage and fitted with cover and overflow. The water would still be pumped up with the hand force pump for a few minutes each day. The barrel hot water tank would be replaced with a range boiler. Next when the basement is dug and a furnace put in, it is a simple matter to connect a furnace coil right on to the hot water tank so as to heat from either or both range and furnace.

Power Pump Can Be Used

When gas engine or electric power is available, it is a simple matter to disconnect the supply pipe from the hand pump and attach it to a power driven pump, the hand pump still being available for pumping soft water. If carefully planned beforehand, practically every pipe or other part can be utilized in making the various changes. Even the discarded attic tank can be put to service for cooling milk, as a barn yard tank, and so on.

I have spoken of the attic tank as one of the steps in these changes, partly

because it is so commonly used and partly because many homes do not have a basement and the attic tank is about the only pressure system which can be used. It has many shortcomings, however, and wherever a pressure tank can be installed it will be found far more satisfactory and considerably cheaper in the long run.

Sewage Disposal Important

Along with the water supply system naturally should go sink, bathroom and sewage disposal system. Here again, if funds will not permit of all

clean, and is a constant disappointment.

A shower bath for the men is a wonderful boon in hot weather, and is easily arranged in the basement. On many farms a simple but effective shower bath has been arranged at the barn, by setting a tight barrel or tank on the barn roof, with a shower nozzle over a board or cement platform. The barrel is pumped full of water in the morning and is warmed up by the hot sunshine, so that at night it will be at about the right temperature for comfort.

Sewage disposal is not very expensive if most of the work of digging and laying tile and mixing and pouring concrete is done with farm labor, although it is wise to have an experienced plumber layout and oversee all plumbing work. Some form of septic tank should be used, as a cesspool is more or less dangerous to the water supply and nearly always becomes a nuisance after a few years and then has to be cleaned out regularly. Waste water from the kitchen sink should always be run through a grease trap to harden and remove the grease before it is run into the septic tank. Laundry water, cistern overflow, downspout water, and water from flushing the basement should not go through the septic tank but into a separate drain. Your agricultural college will be glad to send you free bulletins and other helps on water supply, sewage disposal, and so on.

Good Heating is Important

As quickly as possible a good heating plant should be installed. A central heating plant not only keeps a house more comfortably and evenly heated, but usually with less fuel than anything like equal comfort from individual stoves. But from the housewife's side, the important things are that the central heating plant takes the carrying and handling of the fuel, the shaking and poking of the fire, and the cleaning and carrying out of the ashes entirely out of the living part of the house.

There are many different types of heating plants, depending on how the heat is distributed, such as hot water, pressure steam, vacuum or low pressure steam, forced air or fan system, piped hot air, pipeless hot air, and so on. Also various types as regards the fuel used; such as wood, hard coal, soft coal, petroleum coke, gas oven coke, briquettes, gravity oil, automatic oil, and so on. Space will not permit of discussing these in detail, since the selection of a heating plant would require an article by itself. However, any of these plants or fuels will give satisfactory results if properly designed for the given conditions and installed by an experienced and responsible dealer. Mistakes are easily made by the inexperienced and nothing is more annoying than a heating plant which is too small or which is not properly installed. The convenience and satisfaction of a heating plant are very much increased with the use of an automatic system of temperature and draft control, so that the heat will be automatically held at any desired temperature.

Electric Power and Light

One of the greatest boons to the housewife is to have available electric light and power. Not only does it relieve her of the burden of cleaning and filling kerosene lamps and the inconvenience of carrying lamps up and down stairs and of hunting frantically for matches in an emergency, but it puts the light where and how it is needed, does away with eye strain and accidents from insufficient light, and adds very greatly to the beauty and comfort of the home through the use of handsome fittings and shaded and colored effects.

But all this is only a beginner of the good points about electric power. Even more important is the saving of time and labor from electrical appliances

(Continued on Opposite Page)

Becomingly Feminine



PATTERN 2710 with its bow neckline and swathed bodice is charmingly feminine. The lovely lightweight tweeds or figured silk crepes are especially adapted to use in such a design and would make a very useful and attractive model. The pattern cuts in sizes 16, 18 years, 36, 38, 40 and 42 inches bust measure. Size 36 requires 3 1/2 yards of 40-inch material with 1 yard of 36-inch for camisole. PRICE 13c.

these at one time, they can be put in on the installment plan, provided the building and the complete equipment are carefully planned at the outset. It may be that the first bathroom may be a small closet-like room off the kitchen, with toilet and lavatory, close to the hot water supply at the kitchen range and also heated from the same. This is especially convenient where there are small children in the family. Later a complete bathroom may be placed near the head of the stairs and convenient to all the upstairs bedrooms, while the old bathroom is retained as a wash-room and toilet for the small members of the family and for the men as they come in to their meals. Even though bought piecemeal, the bathroom equipment should be of good quality, as a cheap poorly finished bath tub soon becomes an eyesore, is difficult to keep

Aunt Janet's Counsel Corner

What Would George Washington Think of Our Democracy at Work ?

WHAT do you suppose the Father of His Country would say if he could come back and see this democracy at work? It would be interesting to know just how much we have succeeded and in what respects we have failed in making this truly the government by the people that those early pioneers planned it should be. No doubt we have exceeded their hopes in some of our achievements. I wonder, I really wonder, if they honestly thought women would ever vote here on an equal footing with men. And I question if they expected that there would be women congressmen, doctors, judges, lawyers or business executives. Well, we have them, and good ones too.

But what would our honored founders think of some of the thoughtless things we do? For instance, take our attitude toward our officials that we fight so hard to elect to office. As soon as the ballyhoo and heat of the election are over then we settle coldly back and leave it to 'em—at least most of us do.

Then take the way we treat our veterans. We boil with enthusiasm and patriotic zeal when the war is on and the need is great. When the battles have been fought and the boys have saved our face for us, we again settle back and forget—except those of us who have bitter reminders in the form of vacant chairs or disabled loved ones. They are not complaining, but a trip

to a hospital full of those heroes who are still fighting the war for the rest of us would serve as a reminder of the price they paid and are still paying.

The same courage that took them through will serve them still—we are the ones who are shamed by our forgetfulness and neglect.—AUNT JANET.

Tested Recipes

Sweet Potato Croquettes

Combine three cupfuls mashed potatoes with two tablespoonfuls butter, the yolk of one egg, one half teaspoonful salt, one fourth cupful chopped nut meats and a dust of pepper. Divide in twelve equal portions and shape in balls. Combine equal parts of fine bread crumbs and chopped nut meats. Dip the balls first in beaten egg white and

butter. Add this to the strained soup.—MRS. T. T., Canada.

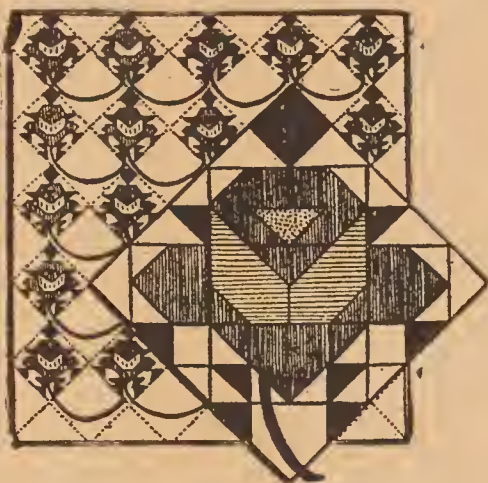
The long cooking will kill the vitamins in the tomatoes but when this recipe is used the lack of vitamins may be made up by a fresh cabbage or lettuce salad.

Sweet Potato Loaf

To two cupfuls mashed sweet potato add two tablespoonfuls butter, a seasoning of salt and pepper, two tablespoonfuls sweet cream, one cupful chopped nut meats and one tablespoonful fine cracker crumbs. Butter a baking pan, dust liberally with ground nut meats and fine cracker crumbs, put in the sweet potato and bake forty minutes in a moderate oven.—L.M.T., New York.

Diced pineapple combines very effectively with this loaf mixture.

Make a Rose Quilt— or Pillow



No. 555, 20 Cents

This order includes cardboard cutting patterns of all parts and instructions for making. These patterns piece a plump little rose in two values of pink with a yellow center, green leaves and applique stem. This stem curves over the alternating white blocks. Each block is 12½ sq. and the quilt finishes 80x88. Patterns only 20 cents.

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then in the crumb mixture and fry in deep fat.—L.M.T., New York.

If you want to make a very attractive luncheon dish, shape the potato croquettes like small apples, flattening the two opposite sides of the croquette ball. Insert a whole clove in one end, make a depression in the other flat side and when the croquettes are fried insert a spray of parsley in this depression. You then have sweet potato apples which are both delicious and attractive.

* * *

Stuffed Sweet Potatoes

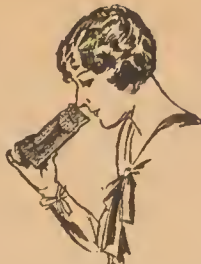
Bake six potatoes, cut in halves and scoop out centres. Mash the scooped out portion, add two tablespoonfuls butter, the juice of one orange, one cupful shredded pineapple, one fourth cupful chopped walnut meats, one half teaspoonful salt, and a little white pepper. Refill the potato shells with this mixture, cut one dozen marshmallows in small pieces and heap them on top of the halves. Reheat in oven slightly, browning the top and serve at once.—L.M.T., New York.

* * *

Tomato Soup

Slice three large onions and fry in butter until brown. Remove them and fry 1 dozen ripe tomatoes or 1 tin tomatoes just enough to heat them through. Put all into a pan with about 10 cupfuls of boiling water, a blanched head of celery cut down and a carrot sliced and boil gently for two hours. Put all through a sieve. Rinse out pan and return strained soup, add ½ cup cream and serve. Small squares of toasted bread are nice dropped in this—a few in each plate. Or instead of adding the cream have 2 tablespoons of rice cooked in water with a piece of

Did you ever try making your net and scrim curtains with hems the same width at top and bottom. When washed they may be reversed, and will last much longer.—M. F. M., Ark.



Smelling is believing, too!

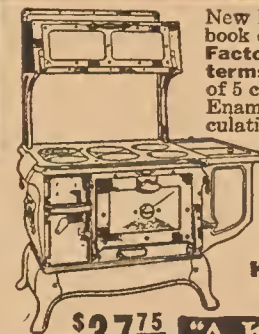
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PATTERN 2705 with its new seaming effect in the bodice is particularly well chosen for its slenderizing effect. Necessary skirt flare is obtained by means of the wide box pleats in front while the flat belt provides the snug hipline so essential to smartness. Heavy silk crepes in dull finish or sheer wools are best used in making up this design. Pattern cuts in sizes 16, 18 years, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 36 requires 3½ yards of 40-inch material with ½ yard of 18-inch contrasting. PRICE 13c.

TO ORDER: Write name, address, pattern numbers and sizes clearly and correctly and enclose with correct remittance in stamps or coin (although coin is sent at own risk). Add 12c for one of the new spring fashion books and send to Pattern Department, American Agriculturist, 461-4th Avenue, New York City.

The Little Shepherd of Kingdom Come *By John Fox, Jr.*

IT was on these scouts and skirmishes that the four—Harry and Chad, and Caleb Hazel and Yankee Jake Dillon, whose dog-like devotion to Chad soon became a regimental joke—became known, not only among their own men, but among their enemies, as the shrewdest and most daring scouts in the Federal service. Every Morgan's man came to know the name of Chad Buford; but it was not until Shiloh that Chad got his shoulder-straps, leading a charge under the very eye of General Grant. After Shiloh, the Fourth Ohio went back to its old quarters across the river, and no sooner were Chad and Harry there than Kentucky was put under the Department of the Ohio; and so it was also no queer turn of fate that now they were on their way to new head-quarters in Lexington.

Straight along the turnpike that ran between the Dean and the Buford farms, the Fourth Ohio went in a cloud of thick dust that rose and settled like a gray choking mist on the seared fields. Side by side rode Harry and Chad, and neither spoke when, on the left, the white columns of the Dean house came into view, and, on the right, the red brick of Chad's old home showed through the dusty leaves; not even when both saw on the Dean porch the figures of two women who, standing motionless, were looking at them. Harry's shoulders drooped, and he stared stonily ahead, while Chad turned his head quickly. The front door and shutters of the Buford house were closed, and there were few signs of life about the place. Only at the gate was the slouching figure of Jerome Conners, the overseer, who, waving his hat at the column, recognized Chad, as he rode by, and spoke to him, Chad thought, with a covert sneer. Farther ahead, and on the farthest boundary of the Buford farm, was a Federal fort, now deserted, and the beautiful woodland that had once stood in perfect beauty around it was sadly ravaged and nearly gone, as was the Dean woodland across the road. It was plain that some people were paying the Yankee piper for the death-dance in which a mighty nation was shaking its feet.

On they went, past the old college, down Broadway, wheeling at Second Street—Harry going on with the regiment to camp on the other edge of the town; Chad reporting with his colonel at General Ward's head-quarters, a columned brick house on one corner of the college campus, and straight across from the Hunt home, where he had first danced with Margaret Dean.

That night the two lay on the edge of the Ashland woods, looking up at the stars, the ripened bluegrass—a yellow, moonlit sea—around them and the woods dark and still behind them. Both smoked and were silent, but each knew that to the other his thoughts were known; for both had been on the same errand that day, and the miserable tale of the last ten months both had learned.

Trouble had soon begun for the ones who were dear to them, when both left for the war. At once General Anderson had promised immunity from arrest to every peaceable citizen in the State, but at once the shiftless, the prowling, the lawless, gathered to the Home Guards for self-protection, to mask devilry and to wreak vengeance for private wrongs. At once mischief began. Along the Ohio, men with Southern sympathies were clapped into prison. Citizens who had joined the Confederates were pronounced guilty of treason, and Breckinridge was expelled from the Senate as a traitor. Morgan's great raid in June, '61, spread

consternation through the land and, straightway, every district and county were at the mercy of a petty local provost. No man of Southern sympathies could stand for office. Courts in session were broken up with the bayonet. Civil authority was overthrown. Destruction of property, indemnity assessments on innocent men, arrests, imprisonment, and murder became of daily occurrence. Ministers were jailed and lately prisons had even been prepared for disloyal women. Major Buford, forced to stay at home on account of his rheumatism and the serious illness of Miss Lucy, had been sent to prison once and was now under arrest again. General Dean, old as he was, had escaped and had gone to Virginia to fight with Lee; and Margaret and Mrs. Dean,

but Jerry heard him and smiled viciously.

"Well, that's what I'm goin' with you fellers fer—to meet mine."

"What!" said Dan, puzzled.

"We've been lookin' fer each other sence the war broke out. I reckon he went on t'other side to keep me from killin' 'him.'"

Dan shrank away from the giant with horror; but next day the mountaineer saved the boy's life in a fight in which Dan's chum—gallant little Tom Morgan—lost his; and that night, as Dan lay sleepless and crying in his blanket, Jerry Dillon came in from guard-duty and lay down by him.

"I'm goin' to take keer o' you."

"I don't need you," said Dan, gruffly, and Rebel Jerry grunted, turned over

"Well, Woolums, you're a 'plug.' I wanted to see how you handled the key. Yes, Woolums, you're a plug."

Then Lightning seated himself, and Woolums' mouth flew open—Lightning copied his style with such exactness. Again the instrument clicked and Lightning listened, smiling:

"Will there be any danger coming to Midway?" asked a railroad conductor in Lexington. Lightning answered, grinning:

"None. Come right on. No sign of rebels here." Again a click from Lexington.

"General Ward orders General Finnell of Frankfort to move his forces. General Ward will move toward Georgetown, to which Morgan with eighteen hundred men is marching."

Lightning caught his breath—this was Morgan's force and his intention exactly. He answered:

"Morgan with upward of two thousand men has taken the road to Frankfort. This is reliable." Ten minutes later, Lightning chuckled.

"Ward orders Finnell to recall his regiment to Frankfort."

Half an hour later another idea struck Lightning. He clicked as though telegraphing from Frankfort:

"Our pickets just driven in. Great excitement. Force of enemy must be two thousand."

Then Lightning laughed. "I've fooled 'em," said Lightning.

There was turmoil in Lexington. The streets thundered with the tramp of cavalry going to catch Morgan. Daylight came and nothing was done—nothing known. The afternoon waned, and still Ward fretted at head-quarters, while his impatient staff sat on the piazza talking, speculating, wondering where the wily raider was. Leaning on the campus-fence near by were Chadwick Buford and Harry Dean.

It had been a sad day for those two. The mutual tolerance that prevailed among their friends in the beginning of the war had given way to intense bitterness now. There was no thrill for them in the flags fluttering a welcome to them from the windows of the loyalists, for under those flags old friends passed them in the street with no sign of recognition, but a sullen, averted face, or a stare of open contempt. Elizabeth Morgan had met them, and turned her head when Harry raised his cap, though Chad saw tears spring to her eyes as she passed. Sad as it was for him, Chad knew what the silent torture in Harry's heart must be, for Harry could not bring himself, that day, even to visit his own home. And now Morgan was coming, and they might soon be in a death-fight, Harry with his own blood-brother and both with boyhood friends.

"God grant that you two may never meet!"

That cry from General Dean was beating ceaselessly through Harry's brain now, and he brought one hand down on the fence, hardly noticing the drop of blood that oozed from the force of the blow.

"Oh, how I wish I could get away from here!"

"I shall the first chance that comes," said Chad, and he lifted his head sharply, staring down the street. A phaeton was coming slowly toward them and in it were a negro servant and a girl in white. Harry was leaning over the fence with his back toward the street, and Chad, the blood rushing to his face, looked in silence, for the negro was Snowball and the girl was Margaret. He saw her start and flush when she saw him, her hands giving a little convulsive clutch at the reins; but she came on, looking straight ahead.

(Continued on Page 26)

The Story Thus Far

CHAD leaves "Lonesome" with his dog "Jack." His foster parents are both dead from the plague and plans have been laid to bind Chad out to a hard fisted neighbor. After the funeral, Chad collects a rifle, some powder, and shot and a haversack and with "Jack" by his side, starts out for unknown parts. He meets the sons of Joel Turner from over the mountain who take him home. Chad's cleverness at school gains the admiration of Caleb Hazel, the schoolmaster. They become close friends. Hazel tells Chad of the "Bluegrass Country" beyond the hills. Logging operations take Chad to a distant city where he gets lost and starts home on foot. He is picked up by Major Calvin Buford. It appears that Chad is also a Buford and is believed to be a kinsman of his new found friend, who takes him to his home in Lexington in the heart of the "Bluegrass." Chad accepts the Major's offer of a home and an education. Chad enters into the social life and becomes very popular at school. He falls in love with Margaret Dean, daughter of General Dean, neighbor of the Bufords. Meanwhile feeling grows bitter between North and South and war clouds gather. Chad joins the Union forces under Grant. His command takes him back to Lexington.

with a few servants, were out on the farm alone.

But neither spoke of the worst that both feared was yet to come — and "Taps" sounded soft and clear on the night air.

XXIII

Chad Captures An Old Friend

MEANWHILE Morgan was coming on—led by the two videttes in gray—Daniel Dean and Rebel Jerry Dillon—coming on to meet Kirby Smith in Lexington after that general had led the Bluegrass into the Confederate fold. They were taking short cuts through the hills now, and Rebel Jerry was guide, for he had joined Morgan for that purpose. Jerry had long been notorious along the border. He never gave quarter on his expeditions for personal vengeance, and it was said that not even he knew how many men he had killed. Every Morgan's man had heard of him, and was anxious to see him; and see him they did, though they never heard him open his lips except in answer to a question. To Dan he seemed to take a strange fancy right away, but he was as voiceless as the grave, except for an occasional oath, when bush-whackers of Daws Dillon's ilk would pop at the advance guard—sometimes from a rock directly overhead, for chase was useless. It took a roundabout climb of one hundred yards to get to the top of that rock, so there was nothing for videttes and guards to do but pop back, which they did to no purpose. On the third day, however, after a skirmish in which Dan had charged with a little more dare-deviltry than usual, the big Dillon ripped out an oath of protest. An hour later he spoke again:

"I got a brother on t'other side."

Dan started. "Why, so have I," he said. "What's your brother with?"

"Wolford's cavalry."

"That's curious. So was mine—for a while. He's with Grant now." The boy turned his head away suddenly.

"I might meet him, if he were with Wolford now," he said, half to himself,

on his side and went to sleep. Night and day thereafter he was by the boy's side.

A thrill ran through the entire command when the column struck the first Bluegrass turnpike, and a cheer rang from front to rear. Near Midway, a little Bluegrass town some fifteen miles from Lexington, a halt was called, and another deafening cheer arose in the extreme rear and came forward like a rushing wind, as a coal-black horse galloped the length of the column—its rider, hat in hand, bowing with a proud smile to the flattering storm—for the idolatry of the man and his men was mutual—with the erect grace of an Indian, the air of a courtier, and the bearing of a soldier in every line of the six feet and more of his tireless frame. No man who ever saw John Morgan on horseback but had the picture stamped forever on his brain, as no man who ever saw that coal-black horse ever forgot Black Bess. Behind him came his staff, and behind them came a wizened little man, whose nickname was "Lightning"—telegraph operator for Morgan's Men. There was need of Lightning now, so Morgan sent him on into town with Dan and Jerry Dillon, while he and Richard Hunt followed leisurely.

The three troopers found the station operator seated on the platform—pipe in mouth, and enjoying himself hugely. He looked lazily at them.

"Call up Lexington," said Lightning, sharply.

"Go to hell!" said the operator, and then he nearly toppled from his chair. Lightning, with a vicious gesture, had swung a pistol on him.

"Here—here!" he gasped, "what'd you mean?"

"Call up Lexington," repeated Lightning. The operator seated himself.

"What do you want in Lexington?" he growled.

"Ask the time of day?" The operator stared, but the instrument clicked.

"What's your name?" asked Lightning.

"Woolums."



AMERICAN AGRICULTURIST

Classified Ads

A Place to Buy, Sell or Trade



DOGS AND PET STOCK

COLLIE PUPPIES, males \$6.50, females \$4.50. P. HAMILTON, Cochransville, Pa.

SCOTTISH COLLIES and Welsh Shepherds Puppies. Shipped on approval. MAPLE GROVE FARMS, Pope Mills, N. Y.

PEDIGREED CHINCHILLA BUCKS for sale at \$2 up. JOHN PARRY, Camden, N. Y.

FLEMISH GIANT RABBITS, Black or Gray. Pure bred, healthy, low priced. JOHN HALL, Norwood, N. Y.

IF YOU ARE interested in an English or Welsh Shepherd you will be proud to own, don't miss one of these, they will bring your cows home this summer. GEO. BOOKMAN, Marathon, N. Y.

LIVE STOCK

(See Page 24)

POULTRY

Baby Chicks, Breeding Stock, Eggs

EARLY SPRING BROILER CHICKS—Butchers. Market men pay extra prices for your purebred Rocks, Reds, Wyandottes, Orpingtons. Descriptive Picture Folder Free, showing best varieties money making market chickens. FARM SERVICE, Route A1, Tyrone, Pa.

PEAFOWL, Pheasants, Bantams, Pigeons, Guineas. Free circular. JOHN HASS, Bettendorf, Iowa.

KEISER'S SINGLE COMB Brown Leghorns and Golden Buff Orpingtons. Excellent matings. Catalogue. F. KEISER, Grampian, Pa.

FOR SALE—Single Comb White Leghorn chicks. L. H. HISCOCK, Skaneateles, N. Y. Circular on request.

SINGLE COMB REDS—Barred Rocks. Eggs. Chicks. Extraordinary matings. Fine type. Bred for winter production. Catalogue. Low prices. GRAMPIAN HILLS POULTRY FARMS, Grampian, Pa.

AMERICAN MOTTLED ANCONAS—Record Layers. Lay large white eggs. Extra large type. Exceptional markings. Fine matings. Low prices. Catalogue. AMERICAN ANCONA FARMS, Grampian, Pa.

PRODUCTION BRED CHICKS that live. Large type S.C.W. Leghorns, \$20-100; \$180-1000; Invest now and take profits in 1929. ADAM SEABURY, Sayville, L. I.

SUNNYFIELD EXTRA LARGE Single Comb Black Minorcas. Exclusively. Chicks. Eggs. Stock. Extraordinary layers. Lay exceptionally large white eggs. Two matings. Low prices. Catalogue. SUNNYFIELD MINORCA FARMS, Grampian, Pa.

REGAL DORCAS WHITE WYANDOTTES—Eggs, chicks, stock. 256 egg record. Ledger. North American contest. Winter layers. Excellent type. Fine matings. Low prices. Catalogue. KEISER'S WHITE ACRES, Grampian, Pa.

GIANT LIGHT BRAHMAS—chicks—eggs—extraordinary large breeders—fine color—record layers—standard bred—low price—Catalogue. GIANT BRAHMA FARMS, Grampian, Pa.

ROSE COMB RHODE Island Red Cockerels, superb quality, \$2.50 and up, shipped on approval. ROBERT H. PURVES, Waddington, N. Y.

LEGHORNS, ANCONAS 10c. Rocks, Reds, Minorcas 12c. Wyandottes 13c, heavies 11c. Light mixed 9c. CONTINENTAL HATCHERY, York, Pa.

BUCHER SUPER-QUALITY CHICKS from inspected free range money-making stock. Reds, White Wyandottes, White Barred Rocks, Giants, Black Minorcas. Anconas, White and Brown Leghorns. Booklet Free. Low Prices. Pure Breeds. BUCHER BROS., HATCHERY, Dept. C, Bucyrus, Ohio.

QUALITY CHICKS—S.C. White Leghorns per 100-\$11. S.C. Barred Rocks \$13. Light mix \$9 per 100. Heavy \$11. Special prices on larger lots. 100% live delivery, postpaid. New circular free. EDGAR C. LEISTER, McAllisterville, Pa.

Classified Advertising Rates

CLASSIFIED ADS ARE INSERTED at the rate of 7 cents a word. The minimum charge per insertion is \$1. Count as one word each initial, abbreviation and whole number, including name and address. Thus "J. B. Jones, 44 E. Main St., Mount Morris, N. Y." counts as eleven words.

The More You Tell, The Quicker You Sell

ADVERTISING ORDERS must reach our office at 461 Fourth Avenue, New York City, not later than 14 days before the Saturday of publication date desired. Cancellation orders must reach us on the same schedule. Because of the low rate to subscribers and their friends, cash or money order must accompany your order.

Orders for these columns must be accompanied by bank references

POULTRY

Baby Chicks, Breeding Stock, Eggs

SINGLE COMB WHITE Leghorn Chicks from certified supervised and flock matings. R. B. PEARSALL, Groton, N. Y.

CHICKS—From Pedigreed Barron White Leghorns. Imported yearly from Barron, England; dams trapnest records to 313. Big females, long bodies, large eggs. Catalog free. BISHOP'S POULTRY FARM, New Washington, Ohio.

HEAVIEST LAYING BARRED Rock pen all eastern contests two consecutive years. Records to 2347. Circular, Chicks \$25 per hundred, Cockerels \$5. H. VAN WINKLE, Box A, Camden, N. Y.

BABY CHICKS: From heavy laying strains of Rocks and Reds \$14. White and Brown Leghorns \$12. Mixed \$10. prepaid. Member I.B.C.A. SUNNYSIDE HATCHERY, Liverpool, Pa.

FOR SALE EGGS for hatching, from Rhode Island Reds, High Laying strain, and beautiful dark red color, 15 eggs \$3. 30 eggs \$5. LAUREL CENTRE GARDENS, Port Jefferson Station, N. Y.

SINGLE COMB WHITE Leghorn chicks from two and three year hens only, 18c. Hatching eggs, 9c. RED RIDGE POULTRY FARM, Centre Moriches, N. Y.

BLACK SPANISH & RED CAPS, 15 eggs \$2.50; Duck eggs: White Muscovies, Buff Orpingtons, Pekins, 11-\$2.50. New Zealand Red Rabbits, \$5, each. BREEDERS SUPPLY, Cobleskill, N. Y.

WHITE WYANDOTTE COCKERELS: Mammoth Pekin ducks; drakes, Pearl guineas. LAURA DECKER, Stanfordsville, N. Y.

ANCONA COCKERELS and New Zealand red Rabbits for sale. Write WILLARD CRESSEY, Topsham, Maine.

POULTRY

Baby Chicks, Breeding Stock, Eggs

EVERLAY BROWN LEGHORNS. Tormohlen Famous strain. Baby chicks, eggs for hatching. SUNNYSIDE FARM, Emporium, Pa.

NEAL'S QUALITY CHICKS: Rocks, Reds and Leghorns priced right, 100% live delivery guaranteed. Write for price list. WINGATE NEAL, Denton, Md.

CHICKS OF KNOWN quality bring greater returns. 16 breeds. Circular free. How to raise Better Chicks. PERRY POULTRY FARM, Perry, N. Y.

STATE TESTED and Accredited S.C.R.I. and white Leghorns. Chicks healthy. High producing Birds. W. W. HAM, Branford, Conn. Phone 141.

WOODSIDE POULTRY YARDS, chicks, Tom Barron S.C. White Leghorns Imported 250-298 egg strain Breeder of Leghorns for 28 years. Catalogue. DAVID HAMMOND, Cortland, N. Y.

CHICKS: S.C. ENGLISH White Leghorn and common White Leghorns, Barred Rocks and Reds. Bank references. Be sure and get my prices before ordering. CLOYD NEIMOND, McAllisterville, Pa.

MAKE 12 to 15 POUND CAPONS with my Jersey black giant breeders, female from 10 to 12 lbs., males from 12 to 14 lbs. blue ribbon winners. Eggs and Chicks for sale. VIKTOR JADOWSKI, Allentown, N. J.

Turkeys—Ducks—Geese

TURKEYS MAMMOTH Bourbon Red, Narragansett, White Holland hens, toms, unrelated pairs and trios, highest quality. Reasonable prices. WALTER BROS., Powhatan Point, Ohio.

MAMMOTH BRONZE TURKEYS, Large, vigorous, healthy stock, free range. Prices reasonable. ELMER BERRY, Adams, N. Y.

LIVESTOCK ADVERTISING

After the issue of March 30th advertisements for livestock (cattle, swine, sheep, horses and goats) will not be accepted for the classified page.

All livestock advertising will be grouped together on one page under the heading "LIVESTOCK - BREEDERS". A special reduced rate of 50c per agate line, or \$7.00 per column inch, will be given this type of advertising.

In figuring the cost of your advertising seven words of type will average a line. Make some allowance of space for proper display.

This action is taken for the convenience of readers and also to make livestock advertising of greater value in the columns of AMERICAN AGRICULTURIST. This display advertising, while producing better results for advertisers will, in most instances, cost no more than classified.

MINIMUM SPACE—Four lines averaging 28 words costing \$2.00 for each insertion is the smallest order accepted.

COPY must be received eleven days prior to the issue in which the advertisement is to appear.

TERMS—Cash must accompany all orders for less than \$10.

REFERENCES either from your bank or from two reputable business men in your community are required from new advertisers. These references are required for the protection of both our readers and other advertisers.

For further information in regard to livestock advertising write—Advertising Department, AMERICAN AGRICULTURIST, 461 Fourth Ave., New York City.

POULTRY

Turkeys—Ducks—Geese

BOURBON RED TURKEYS for sale. Toms \$15, and hens \$12 each. MRS. WALTER B. SEXTON, Venice Centre, N. Y.

MAMMOTH BRONZE DAY old turkeys and hatching eggs. Place orders now for early delivery. PLYMOUTH TURKEY FARM, Plymouth, N. H.

FOR SALE: Thorobred Mammoth Bronze turkeys. Free from disease. Enclose Stamp. MAUDE MILLS, Hammond, N. Y.

PUREBRED MAMMOTH BRONZE large vigorous healthy May and June turkeys. Toms \$12-\$15, hens \$8-\$10. MRS. D. J. WASHBURN, Adams, N. Y.

BRONZE TURKEYS, largest size. Finest color. GLIDDEN, Freedom, Maine.

GIANT MAMMOTH BRONZE turkeys, vigorous, healthy, fine markings, satisfaction. JOHN WILLIAMSON, Hammond, N. Y.

BOURBON RED TURKEYS for sale, fine healthy stock. MRS. DWIGHT HARRIS, Moravia, N. Y.

PUREBRED BOURBON RED turkeys, toms \$7. Hens \$5. MR. LOYS W. NOBLE, Dekalb Junction, N. Y.

TURKEYS—Large, purebred, Mammoth Bronze, vigorous, healthy birds, highest quality, splendid markings, satisfaction guaranteed. CLIFTON LEE, Lowville, N. Y.

TURKEYS: PUREBRED MAMMOTH bronze healthy stock, exceptional plumage. Bred from leading prize winners. MRS. SPENCER LANE, Lowville, N. Y.

BEST PUREBRED MAMMOTH Bronze Turkeys. Well developed. Splendid markings. May hatched. Strain from Bird Bros. FLORENCE LEE, Lowville, N. Y.

MAMMOTH WHITE HOLLAND toms 21 and 23 lbs. From Madison Square winners 1929. MRS. HOWARD STEINHILBER, Evans Mills, N. Y.

MAMMOTH HOLLANDS RECENT winnings at Madison Square Garden, first cockerel, first hen, second cock, second pullet, two firsts on two entries at Rochester, breeding stock, eggs in season. MRS. A. H. SMITH, Sodas, N. Y.

SEEDS—NURSERY STOCK

PEACH AND APPLE TREES \$5; \$7.50 per 100 and up. Complete assortment fruits, berries, vines, ornamental trees, vines, shrubs, evergreens. Catalog in colors free. TENNESSEE NURSERY COMPANY, Box 102, Cleveland, Tenn.

PEACH AND APPLE TREES \$5 per 100 and up. Fruits, ornamental trees, vines. TENNESSEE NURSERY CO., Box 202, Cleveland, Tenn.

HIGH GRADE SEED Potatoes—Russets. Green Mountain, Gold Coin, Cobbler, Banner, Walter Raleighs and Carman No. 3. Prices right. Catalog free. THE KEYSTONE POTATO FARMS, Richfield, Pa.

MARTHA WASHINGTON ASPARAGUS Crowns, \$3.75 per Thousand, above Ten thousand \$3. Thousand. M. MAZURSKY, Barnwell, S. C.

GLADIOLUS BULBS—36 page illustrated Catalog free, 175 varieties. Thirty All Different \$1. postpaid. HOWARD GILLET, Box J, New Lebanon, N. Y.

MILLIONS, CABBAGE, ONIONS, and Tomato Plants, \$1. 1000. Pepper and Potato Plants \$1.75 1000. Gladiolus Bulbs \$1. Hundred. CLARK PLANT CO., Thomasville, Ga.

FARM SEEDS APPROVED varieties. Officially analyzed and tested. Beans, Barley, Buckwheat, Potatoes, Corn, Oats. Free sample and circular. E. F. HUMPHREY, Ira, N. Y.

EARLY JUNE RED Raspberry sets for sale. The earliest, largest, heaviest bearing berry grown. Send for literature telling what the New York State Experiment Station says of the June. LESTER BENNETT, Victor, N. Y.

Additional
Classified
Advertising

On
Page
24

HANDY ANDY Says "Here's How"

To Keep Skim Milk from Freezing

By Ray Inman

YOU CAN KEEP SKIM MILK AND SLOP FROM FREEZING IF YOU HAVE AN OLD OIL DRUM AND MANURE SPREADER APRON



adjust the apron around the drum so there's a foot of space between drum and apron



FILL THE SPACE WITH MANURE AND MAKE A WOODEN LID



if built on a small sled it may be easily transported





Livestock



Breeders



CATTLE

CATTLE



A High Test Means A Bigger Check!

A few points on the test of the milk that you ship will make a surprising difference in your check. Profit begins where cost ends, so any extra return means higher net profit.

JERSEY MILK AVERAGES 5:36% BUTTERFAT.

Write now for free booklets on Jerseys and Jersey milk

The American Jersey Cattle Club

324E West 23rd Street,

New York City

BIG MID-WINTER SALE

160 Registered Holstein-Friesian Cattle

selling for the high dollar at public auction

FEBRUARY 26-27, 1929, EARLVILLE, NEW YORK
15th EARLVILLE SALE

in a heated sale pavilion, located 40 miles south of Syracuse, N. Y. 30 miles from Utica; 50 miles from Binghamton, on 3 railroads and good highways in all directions. Cattle consigned from 50 different herds of New York and Pennsylvania.

HEALTHY—all from herds under State and Federal Supervision—many Accredited, 60 day retest.

110 FRESH COWS OR VERY CLOSE SPRINGERS—every cow under 9 years of age, many with large cow testing records—or official records—these include two 1000 lb. cows that gave 23,000 and 25,500 lb. of milk in a year.

25 BULLS OF RICH BREEDING from prominent herds, out of high record dams, nearly all are ready for service. Selected for their type, breeding, and quality. They include several sons of cows with records from 800 to 1000 lb. in 365 days.

THIS IS TRULY A SALE "WHERE OPPORTUNITIES ABOUND"

COME TO THIS SALE REGARDLESS OF DISTANCE. Cattle placed aboard cars free of charge, and provided with the necessary hay and bedding to make the journey.

COME TO THIS SALE BECAUSE hundreds of dairymen and breeders throughout the east have bought cattle here with satisfaction.

COME TO THIS SALE BECAUSE you can select just what you want from a large number all in one place, and sold through a sales manager, who assures you of all papers and takes care of all details.

BE SURE THAT YOU ARE ON HAND WHEN THIS SALE STARTS.

R. AUSTIN BACKUS, Sales Manager, MEXICO, N. Y.

COL. GEORGE W. BAXTER, Auctioneer, ELMIRA, N. Y.

FISHKILL FARMS offer the BULL CALVES

sired by that highly bred bull—KING PIEBE 19th, a grandson of the great K.P.O.P.

FISHKILL DEKOL JENNIE PIEBE FISHKILL VEEMAN PIEBE

both born January 25, 1929

FISHKILL DEKOL JENNIE PIEBE is out of Fishkill Jennie DeKol, she being a granddaughter of that famous sire Dutchland Colantha Sir Inka, on her dam's side, and a great granddaughter of the same sire on her sire's side.

FISHKILL VEEMAN PIEBE is out of Fishkill Inka Veeman DeKol, another granddaughter of Dutchland Colantha Sir Inka on her dam's side, and a great granddaughter of the same eminent sire on her sire's side.

It will be difficult indeed to find a better buy than we offer here, considering the high breeding and price of each

\$75.00 Offered subject
F.O.B. to prior sale

For full details of pedigree, terms of sale, etc., write

FISHKILL FARMS HENRY MORGENTHAU, JR., Owner
461-4th Ave., New York, N. Y.

FOR SALE: 13 head of registered Holstein heifers. Begin to freshen in March. One 2 year old bull, Canadian bred. Accredited herd. BEN NEWTON, Salamanca, N. Y.

REGISTERED GUERNSEY HEIFER calves and Shetland ponies, STEPHEN KELLOGG, Burdette, N. Y.

SWINE

FARMERS BUY FROM FARMERS

Let us suggest to you as breeders the best kind of a pig to start to raise is a good one. You save time and money. We sell all pigs with a trial of two weeks, and then if dissatisfied, return pigs and we will return your money.

7-8 wks. old, \$3.75 ea.; 8-10 wks. old, \$4 ea. Breeds—Chester and Yorkshire cross, and Berkshire and Chester cross. Crating free. These prices F.O.B. our depot. Will ship any number C.O.D. or send check or money order.

MISHAWUN STOCK FARM,
MISHAWUN ROAD, WOBURN, MASS.
P. S. No pigs sold at the farm; only by appointment.

PIGS FOR SALE OLD RELIABLE STOCK

Heavy legged, square backed, Chester and Yorkshire crossed, Poland China and Chester crossed, Barrows, boars or sows—8 to 10 weeks old, \$4.00 each. Fancy Berkshires, also Chester Whites, 2 months old Sows and unrelated Boars, \$5.00 each. 10 days trial or your money back. Shipped C.O.D. Crating free of charge. Yours for quality hogs.

ED. COLLINS, 35 Waltham Street,
LEXINGTON, MASS.

6 COWS, 11-2 year old heifers, 6 bulls 3 to 18 months old. 4 calves 3 months old, 2 registered guernsey calves 3 months old TB Tested.

SPOT FARM, TULLY, N. Y.

SWINE

Pigs From Reliable Stock

Buy where quality is never sacrificed for quantity. We sell only high grade pigs, fast growers, that will prove a good investment—thrifty and rugged, having size and breeding. Will ship C.O.D.

Chester and Yorkshire—Berkshire & Chester
7 to 8 weeks old.....\$3.75
8 to 10 weeks old.....\$4.25
Satisfaction guaranteed, or money refunded. 10 days trial allowed. Crates supplied free. A. M. LUX, 206 Washington St., Woburn, Mass. Tel. Wob. 1415.

BEST GRADE Chester, Berkshire and Poland China Pigs. 3 months old, \$12.00 each; 6-8 weeks old, \$7.00 each. (Express Paid). Bred Sows and Boars. C. E. BOSSERMAN, York Springs, Pa.

REGISTERED O.I.C. sows bred to farrow, boar pigs certificates accepted, GEO. N. RUPRACHT, Mallory, N. Y.

TWO CHESTER WHITE service boars, 7 months and 1 yr. AMOS C. AVERY, Halcott, N. Y.

New York State Jersey Cattle Club Elects Officers

At a recent meeting of the New York State Jersey Cattle Club, held in Syracuse, action was taken to support the movement for a farm products show at Albany next January. Other business included a resolution favoring the erection of better buildings to accommodate the 4-H Club exhibits at the State Fair and the appointment of a committee to cooperate with the College and County Farm Bureaus in advancing calf club work. The following officers were elected for 1929:

President, I. G. Payne, East Scho-dack; 1st Vice President, C. H. Jennings, East Durham; 2nd Vice President, T. E. Grow, Lockport; Secretary-Treasurer, C. B. Mitchell, Cohoes; Ex-

American Agriculturist, February 23, 1929
 Executive Committee, Frank Collins, Mannsville; John Tucker, Skaneateles; H. S. Nichols, Curriers.

Orange County 4H Club Boys Attend Banquet

Four-H Club workers in Orange Co. were recently entertained at a banquet. Fifty bankers and seventy-five farmers attended this affair, which was the first of its kind to be held by the Orange County Bankers Ass'n. Short talks were given by three outstanding 4-H Club boys, Charles DuBois, Isadore Demarest, and Clifford Hoppenstedt. The principal address was given by L. J. Taber of Columbus, Ohio, Master of the National Grange. Dr. V. B. Hart of Agriculture College, spoke on the importance of credit for farmers.

Additional Classified Advertising

SEEDS—NURSERY STOCK

CERTIFIED SEED POTATOES. Smooth and Russet Rurals. Buy direct from one of New York's Premier growers, car lots or less. A. A. WEEKS, Locke, N. Y.

CERTIFIED SEED POTATOES, Irish Cobblers and original strain Carman No. 3. Buy direct from grower. Write today for prices. N. A. BAKER & SONS, Fairport, N. Y.

BEAUTIFUL DAHLIAS, Choice varieties, 8 our best, all different \$1. postpaid. 10 Pompons \$1. 6 choice Gladioli bulbs with orders before March 15th. C. P. EARLE, Dahlia Specialist, 1806 W. Genesee St., Syracuse, N. Y.

COOK'S CERTIFIED POTATOES. Cobblers and Russets. Better than ever. Attractive prices. We pay freight. IRVING E. COOK, Munsville, N. Y.

CERTIFIED HEAVYWEIGHT POTATOES, N. Y. State test 99.5 free from disease, yield 324 bushels per acre. RATH BROS., Pittsford, N. Y.

HARDY ALFALFA SEED 93 per cent pure, \$10. bushel; Sweet Clover 95 per cent pure, \$4.50. Return seed if not satisfied. GEO. BOWMAN, Concordia, Kansas.

CERTIFIED LATHAM AND HERBERT RASPBERRIES, Howard 17 and Mastodon Strawberries, Washington Asparagus. Other leading varieties Raspberries, Strawberries, Blackberries, Fruit trees, Shrubs, Evergreens, etc. Prices low. Everything guaranteed. Send for price list. BERT BAKER, Hoosick Falls, N. Y.

MISCELLANEOUS

USED CIVIL WAR ENVELOPES with flags, designs, etc., \$1 to \$15 paid. Other stamps on envelopes before 1871 bought. W. RICHMOND, Cold Spring, N. Y.

LONG'S PURE HONEY—Direct from producer, clover or buckwheat, 5 lbs. pail \$1.15 postpaid, wholesale prices on request. Satisfaction guaranteed. W. C. LONG, Millville, Pa.

PURE HONEY, Satisfaction guaranteed, 5 lbs. clover, \$1; 10, \$1.90; buckwheat \$1.65. Prepaid. C. N. BAL-LARD, Valois, N. Y.

MILKING MACHINE, New Automatic, 2 single units, pump, tank, etc.; like new, reasonable. Also 2 double units. O. HENDRICKSON, Cobleskill, N. Y.

WANTED USED BAGS any quantity and grade. Highest prices and freight paid. HOFFMAN BROS. BAG CO., 39 Gorham St., Rochester, N. Y.

PATCHWORK: Rayon, Percale, Prints, 3 lbs. \$1. 100 assorted pieces 6x8, \$1. Special trial package, 50 cents, postpaid. NEW ENGLAND PATCHWORK CO., Hartford, Conn.

\$2 to \$500 EACH paid for hundreds of Old or Odd Coins. Keep all old money, it may be very valuable. Get Posted, Send 10 cents for Illustrated Coin Value Book, 4x6, 25 years in business. We buy and Sell. CLARKE COIN EXCHANGE, Box 25, Le Roy, N. Y.

FARMERS' "EVERY-DAY-PAY-DAY-PLAN." You can make \$30 to \$150 weekly distributing Whitmer Products to your friends. Experience unnecessary. We teach you how free. Earn while learning. Team or car needed. Write today for Farmers' "Every-Day-Pay-Day-Plan." THE H. C. WHITMER CO., Columbus, Indiana. Farm Dept. 12.

LEARN AUCTIONEERING at home. Every student successful. SCHOOL, Box 707, Davenport, Iowa.

INCUBATORS: 2 new Prairie State 120 eggs, each \$12; Cream separator cheap; Harder Silo; round brooder house; large camera (Premo); Registered Airedale brood bitch. LLOYD HALLENBECK, Greendale, N. Y.

FOUR HUNDRED BEE hives, new and used, Barnerville type. One four basket reversible honey extractor. International three ton truck. Hydraulic hoist, pneumatic tires, in good shape. ARTHUR POLLOCK, Sprakers, N. Y.

PRINTING—STATIONERY

GUMMED MAPLE LABELS. Attractive designs, illustrated, printed in colors. Positively stick to tin, never peel off. Samples free. PRINTER HOWIE, Beebe-plain, Vt.

250 BUSINESS ENVELOPES printed postpaid \$1. Samples free. 50 calling cards 10c. WALTER G. COLLINS, Cohocton, N. Y.

WOMEN'S WANTS

FOR SALE: Switches, etc., Combs made up. Booklet. EVA MACK, Box 298, Ithaca, N. Y.

WOOL—HIDES—FURS

MINK FURS WANTED. Large \$30. Medium \$24. Small \$20. Red fox, large \$30. Medium \$24. Small \$20. E. T. SHERMAN, Whitman, Mass.

WANTED—RAW FURS, Rabbits, Especially good Muskrats, \$1.75. Also want live Rabbits, Muskrats, Minks, Foxes, Raccoons, STERNS FUR CO., New Brunswick, N. J.

AGENTS WANTED

AGENTS—Make \$25.—\$100 weekly, selling Comet Sprayers and Autowashers to farmers and Autoists. All brass, Throws continuous stream. Established 35 years. Particulars free. RUSLER CO., Johnstown, Ohio. Box C12.

FARMS FOR SALE

MODERN DAIRY FARM for sale: 200 acre central New York bargain. Deal direct with owner. Description, cuts on request. DRAWER 113, Morrisville, N. Y.

DEL-MAR-VA—THE PENINSULA OF PLENTY. Three to ten hours by motor truck to markets supplying twenty millions of people. Pennsylvania Railroad permeates entire Peninsula. Low-priced farms, town and waterfront homes. Very little snow and freezing. Finest concrete highways. Good Schools, low taxes. Handsome descriptive booklet, FREE. Address 164 Del-Mar-Va Building, Salisbury, Md.

75 ACRE POULTRY AND DAIRY farm, tourist home, road stand buildings, good improvements. Team, tools, Liberty Highway. 300 acres. 40 cows, team tractor, all tools. 2 miles from village. \$5000, first payment. Best one man farm in county. 60 acres, 15 head cattle, team, tools, electricity, running water, improved road. Gravel bed. C. P. TAYLOR, Apalachin, Tioga County, N. Y.

145 ACRES DELMARVA PENINSULA. 90 acres tillable, remainder woodland. 300 apple trees. Pears, Peaches, Plums, Grapes for family use. Six room house, shade trees, good water, cellar granary, stable, tool, shed, metal corn crib, chicken house, brooder house, etc. Hard road, milk route, mail route, school bus, telephone line. Six railroad stations within five miles. \$7000. Possession 30 days. For particulars write, R.D. 1; Box 63 B. Townsend, Delaware.

FARM EQUIPMENT

FOR SALE INTERNATIONAL tractor cheap with governors and pulleys, good shape. Set plows. W. C. HALL, Genesee, Pa.

ROOFING PAPER, 3-ply, \$1.35 per roll, 100 sq-ft. Prepaid. Asphalt shingles, roofing, paint. Send for price list. WINIKER BROS., Millis, Mass.

ELECTRIC LIGHTING PLANT large capacity, guaranteed good as new, a bargain. LESTER BENNETT, Victor, N. Y.

EXTENSION LADDERS, 20 to 32 ft. 25c per ft. 32 to 40 ft. 27c per ft. Freight prepaid. ARTHUR L. FERRIS, Box A, Interlaken, N. Y.

HELP WANTED

RELIABLE MEN WANTED to sell guaranteed trees, shrubs and roses. Steady work. Pay weekly. Start now for Spring business. Wholesale and retail. WEBB NURSERY CO., Rochester, N. Y.

WANTED IN MARCH young man experienced in greenhouse and garden work also capable of attending Seed Store and keeping accounts. Protestant American of good family connection preferred. LAUREL CENTRE GARDENS, Port Jefferson Station, N. Y.

EVERY HOME A PROSPECT. Make big money. Employ crew. Take orders trees, shrubbery. Work entire year. All or part time. Complete cooperation. Landscape service. Com. paid weekly. We deliver, collect. Apply WILLEMS, SONS' NURSERIES, Desk A, Rochester, N. Y.

HOUSEWORKERS—Mother and adult son desires sensible experienced woman who knows how to do the simple things well. Neatness and good disposition essential. State age, experience and references. \$50 per month. Permanent and exceptional home for right person. Address EVERGREEN, 1274 Alicia Ave., West Englewood, N. J.

WANTED TO BUY

WANTED—HAY, GRAIN, Potatoes, Apples, Cabbage, Carloads. Pay highest market prices. THE HAMILTON CO., New Castle, Pa.

WANTED TO BUY old bags. We pay excellent prices. Write for prices. We pay freight. OWASCO BAG CO., Rochester, N. Y.

TOBACCO

HOMESPUN TOBACCO: Chewing 5 lbs. \$1.50; Smoking 5 lbs. \$1.25. Fifty cigars \$1.75. Pay when received. Pipe free. FARMERS UNION, Paducah, Ky.


HOMESPUN TOBACCO Chewing 5 lbs. \$1.50. Smoking 5 lbs. \$1.25. Pipe free, pay when received. FARMERS ASSOCIATION, West Paducah, Kentucky.

LEAF TOBACCO—Good sweet chewing, 3 lbs. 90c; 5, \$1.25; 10, \$2.00. Smoking, 3 lbs., 60c; 5, 90c; 10, \$1.50. UNITED FARMERS, Mayfield, Kentucky.



The Service Bureau

A Department Devoted to the Interests, Welfare and Protection of A. A. Readers



Dog Law Changes Proposed

ASSEMBLYMAN D. P. Witter of Tioga County has introduced a bill into the New York Legislature which makes radical changes in the New York State dog licensing law aiming to further curb the depredations of sheep killing dogs, to more definitely fix the ownership and the requirements of licenses and to more quickly make indemnity available.

At present the listing of dog owners outside of cities is done by assessors. The proposed law provides that the Town Board appoint a resident of the town who is responsible for preparing a list of dog owners. This method is already in force in Suffolk County and is giving satisfaction.

The license fee for male dogs and spayed female dogs remains at \$2.00. The bill provides a license fee of unspayed females to be increased from \$5.00 to \$10.00.

The bill authorizes the Board of Supervisors to offer bounties for the depredation of dogs attacking domestic animals and for the payment of bounties from dog license fees.

The proposed law does away with the present uncertainty as to indemnities for animals killed. It provides that the dog license money in the county treasury be used as far as adequate but if it is inadequate that funds from other sources be appropriated by the Board of Supervisors. Under the present law the determination of the damages is made by the assessor. This method has resulted in some dissatisfaction and the new bill provides for an entirely new plan. It provides that any causes of dissatisfaction over the awarding of damages that either the owner or the county treasurer may make a request for a review to the Commissioner of Agriculture and Markets. Following this the commissioner will make a decision either confirming the action of the assessor or modifying it either by increase or decrease.

Insist on Registration Papers With Purebred Stock

"I got a Berkshire sow and the man has failed to produce the papers. I have written to this man but can get no reply. I could have gotten the same pigs here at home for twelve dollars, not registered. Will you please see if you can get the papers for me?"

LETTERS to this man still remain unanswered. In ordering live stock you must first bear in mind that if an animal is advertised as pure bred you are entitled to a registry certificate and if you do not get it you should

take action by either notifying the breed association or writing us for assistance within a reasonable length of time.

Another suggestion is that you patronize only advertisers in publications which guarantee their advertising. A man who advertises pure bred stock and then is unable to furnish registration certificates is plainly misrepresenting facts. If all buyers would insist that papers be delivered this practice could be stopped.

Insurance Company Not Licensed in New York

"Can you give me any information regarding the insurance policies that the Sterling Insurance Underwriters of Chicago, Ill., are issuing? Are they licensed to do business in New York State and are their policies reliable?"

IN a report received from the State Department of Insurance we are advised that the Sterling Insurance Underwriters have not been authorized to do business in the State of New York.

We are further informed that any person who represents an insurance company not authorized to do business in the state, as an agent or who in any manner aids in the transaction of business for it becomes liable to prosecution for misdemeanor, the penalty for which upon conviction is \$500 fine or one year's imprisonment, or both. However, a citizen of this state may, if he so wishes, insure his life or his property in an unauthorized foreign insurance corporation—dealing with it direct—without committing any violation of law, but in so doing he assumes all the risks incident to dealing with them.

Commission Firm Acknowledges Error

"I have a claim for eleven crates of cauliflower shipped to on August 11, 1927, for which I have never received returns. Will you try and collect for me?"

SEVERAL letters to the consignee showed that an error had been made in sending returns to the wrong party for this shipment. After waiting a considerable length of time after which this party would not return the check, the firm gave us a duplicate which was forwarded to our subscriber in final settlement.

This is just another instance of the service we are rendering through our Service Bureau to subscribers. We stand ready at all times to be of assistance and a request will bring a prompt reply.

Reward Goes to Monroe County Man

ON December 21, 1928, our subscriber, Mr. William Somerville, R. D. 3, Brighton Station, N. Y., discovered three men in an attempt to steal some geese from a pond on his farm. The thieves dropped the geese and escaped but their license number was obtained and five days later they were arrested and sentenced to serve 25 days in the Monroe County Jail.

The three men convicted were Richard Schlesing, Charles LaPash and Norman Frisch. The men were arrest-

ed by Deputy Sheriffs Gordon and Leary and were tried before Justice Cooman.

At the time of the theft our subscriber had a Service Bureau sign posted, consequently our publisher, Mr. Henry Morgenthau, Jr., sent him a check for \$25.00. The chicken thief rewards offered by Henry Morgenthau, Jr., were discontinued on January 1st but inasmuch as these men were arrested before January 1st the reward was paid.

NUMBER 21043

NEW YORK, N. Y. *January 25th 1929*

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William Somerville

Brighton Station

R.D. 3 New York

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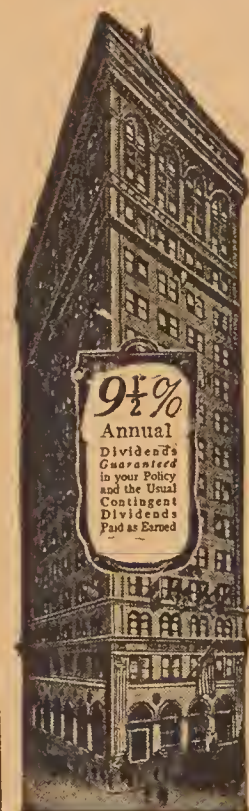
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There have been paid to policy beneficiaries	\$36,680,941
On claims by death.....	14,350,545
In matured endowments.....	1,786,788
In surrender values and dividends	4,189,959
In loans on policies.....	16,353,649

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Standard policy-reserves, resources	\$22,000,000
Standard old-line legal reserve.	
Standard policy provisions, approved by the New York State Insurance Department.	
Operates under strict requirements of New York State and subject to United States Postal authorities everywhere.	
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2. Your Occupation;
3. Exact Date of Your Birth.

All Standard forms of Life and Endowment insurance are issued by this company and information as to any of them will be gladly furnished.

When your inquiry reaches us no agent will be sent to visit you. We desire to co-operate with you directly, and have you think out with us your problems, from documentary matter submitted. Because we employ no agents the resultant commission savings go to you. It is the only non-agency life insurance company in America.

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Address.....

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Human Labor is Costly

(Continued from Page 3)

engine to operate the elevator and shaker mechanism, especially in sandy soil or hilly ground where it is difficult to obtain traction with the digger wheels. One team can easily handle an engine driven digger. Tractor owners are also operating diggers with the power take-off. Two new devices are helping to eliminate the back-breaking work of hand picking. One is a bagger—crates may be used—which attaches to the rear of elevating diggers. One or two men or boys ride on the side of the bagger to remove stones and vines if necessary. The other is a bunching or crating attachment which goes on the side of an elevating digger and drops the potatoes in windrows, working in much the same manner as a bundle carrier on a binder. Crates can be used with this attachment where stones or lumps do not interfere.

Power sprayers covering, four, six, eight or more rows are doubling yields for many potato growers who have not formerly realized the value of thorough and frequent spraying. Grading machinery for use at the potato cellar or shipping station aid in marketing a more uniform product which commands a higher price.

New Equipment for the Truck Grower

Truck gardeners and truck farming methods are being aided by new and improved transplanters, garden tractors and their attachments, washing, bunching and tying machines and similar equipment. Two-row transplanters are new, as are transplanters equipped with a check-rowing attachment which permits cross-cultivation of tomatoes, cabbage and other transplanted crops. By using a garden tractor with a reduced speed gear ratio, celery has been successfully transplanted by machine. The tractor travels about 35 to 40 feet per minute to accomplish the necessary close spacing. The garden tractor and motor truck are rapidly increasing the number of horseless truck farms.

Low cutting attachments for corn binders, improved plows and covering attachments, stalk cutters, along with the standard husker-shredder and ensilage cutter are being employed in the fight against the European corn borer. Mechanical methods of control form the only successful way thus far discovered in which to combat the borer.

The side delivery rake and hay loader are two hay tools which form the basis of modern hay making methods. The side delivery is indispensable in the production of quality legume hays such as alfalfa, for these crops must be cured in the windrow in order to prevent the valuable leaves from becoming overdry and dropping off in handling. The recommended practice is to rake the hay into windrows with the side delivery immediately or soon after cutting. Even if rained on, the windrows can easily and quickly be turned with the same tool, resulting in quick drying and but little loss in color or nutritive value unless in a prolonged rainy period. The use of a hay loader in conjunction with the side delivery rake will save from 1½ to 2 hours of labor per acre in putting up hay.

Manure Spreader Handles Lime

For farms where more electric power is desired but central station current is not available, light plants of greater capacity than formerly fill the bill. A lime spreading attachment for tight bottom manure spreaders is a new aid in liming "sour" soils without much additional investment in lime spreading equipment. A hot water heater which attaches to gas engines and utilizes the waste heat from the exhaust is a new convenience around the dairy barn and farmstead. Simple, inexpensive running water systems have brought running water within the economic reach of every farm.

A new plow on which the moldboard is replaced by revolving beaters which pulverize the soil and make a finished seed bed in one operation has recently been announced. Two California importations, the orchard harrow and the heavy, offset cover-crop disk harrow are coming east, the former to help prepare a deep mellow seed bed for

potatoes in one operation, the latter to aid better cultivation of eastern orchards. The rotary hoe is a tillage tool which cultivates row or broadcast row or broadcast crops without injuring the crop plants, yet thoroughly eliminates small weeds and grasses. No attention need be paid to following the row when cultivating small corn or beans with this tool. The combined rotary hoe and soil pulverizer is the newest variation in tillage tool design. A two-row hoe pulled by a team will cultivate double or triple the acreage in a day that can be covered with a one-row cultivator.

The farm operator of today is less bound to custom and tradition than has ever been the case in the past. He is willing to try new crops, new methods of doing things, and is constantly on the alert for new ways in which to reduce labor, cut costs and make farm life easier and more comfortable. The manufacturers of farm equipment have also been alert to provide these modern farm aids. That both are being successful in their work is attested by the increasing production per agricultural worker, the gradually advancing standard of living on the farm and the concurrent increase in the amount and value of farm machinery and equip-

ment being purchased by farmers of the United States.

The Little Shepherd of Kingdom Come

(Continued from Page 22)

Chad's hand went unconsciously to his cap, and when Harry rose, puzzled to see him bareheaded, the phaeton stopped, and there was a half-broken cry: "Harry!"

Cap still in hand, Chad strode away as the brother, with an answering cry, sprang toward her.

When he came back, an hour later, at dusk, Harry was seated on the portico, and the long silence between them was broken at last.

"She—they oughtn't to come to town at a time like this," said Chad, roughly.

"I told her that," said Harry, "but it was useless. She will come and go just as she pleases."

Harry rose and leaned for a moment against one of the big pillars.

A pair of heels clicked suddenly together on the grass before them, and

an orderly stood at salute.

"General Ward's compliments, and will Lieutenant Buford and Lieutenant Dean report to him at once?"

Inside, the General looked worried, and his manner was rather sharp.

"Do you know General Dean?" he asked, looking at Harry.

"He is my father, sir."

The General wheeled in his chair.

"What!" he exclaimed. "Well—um—I suppose one of you will be enough. You can go."

When the door closed behind Harry, he looked at Chad.

"There are two rebels at General Dean's house tonight," he said, quietly.

"One of them, I am told—why, he must be that boy's brother," and again the General mused; then he added, sharply:

"Take six good men out there right away and capture them. And watch out for Daws Dillon and his band of cut-throats. I am told he is in this region. I've sent a company after him. But you capture the two at General Dean's."

(To be Continued Next Week)



STYLISH but STURDY

The durability of a Fisher Body, in and of itself, is sufficient reason for the selection of a Fisher Body car. This durability is the result of basic factors, such as superior engineering, use of the longest wearing materials, and steel-and-wood construction. Fisher Body cars, therefore, appeal powerfully to men and women whose first demand is long life, as well as to those whose first demand is appearance. It follows that when the buyer who knows the facts demands both style and sturdiness in highest degree, his choice is inevitably a car with Body by Fisher.



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1. **Body Bracing.** Fisher Bodies are rigidly braced. Braces made from malleable iron, drop forged steel and pressed steel.

2. **Roof Construction.** Fisher Body roofs are of slat and bow construction—much stronger and safer than construction commonly used.

3. **Roof Material.** Weatherproof fabric. Top material of Fisher Bodies is exceptionally durable and stands up under all weather conditions.

4. **Body Finish.** Lacquer finish on a Fisher Body retains its luster over a long period of time because of careful finishing methods.

5. **Panels and Paneling.** Steel panels of Fisher Bodies are reinforced by the wood framework. There is no metal-to-metal contact.

6. **Body Sills.** Body sills are made of selected hardwood lumber, weather-proofed. They are unusually large and strong.

7. **Composite Construction.** All Fisher Bodies are of wood and steel, the wood reinforcing the steel and the steel reinforcing the wood. It has been proved that this construction gives maximum strength, maximum safety and maximum resiliency. Because of composite construction, rumbles and body noises are avoided.

8. **Door Construction.** In the average sized door of a Body by Fisher, there are approximately 9¼ board feet of lumber and 15½ square feet of sheet steel.

9. **Wood Frame Construction.** Selected hardwoods are used throughout the wood framework of Fisher Bodies. All joints in the body framework are mortised, glued, screwed or bolted together. No nails are used. There are approximately 200 wood parts in a Fisher Body and 1200 operations are necessary to complete these wood parts for body framing.

AMERICAN AGRICULTURIST

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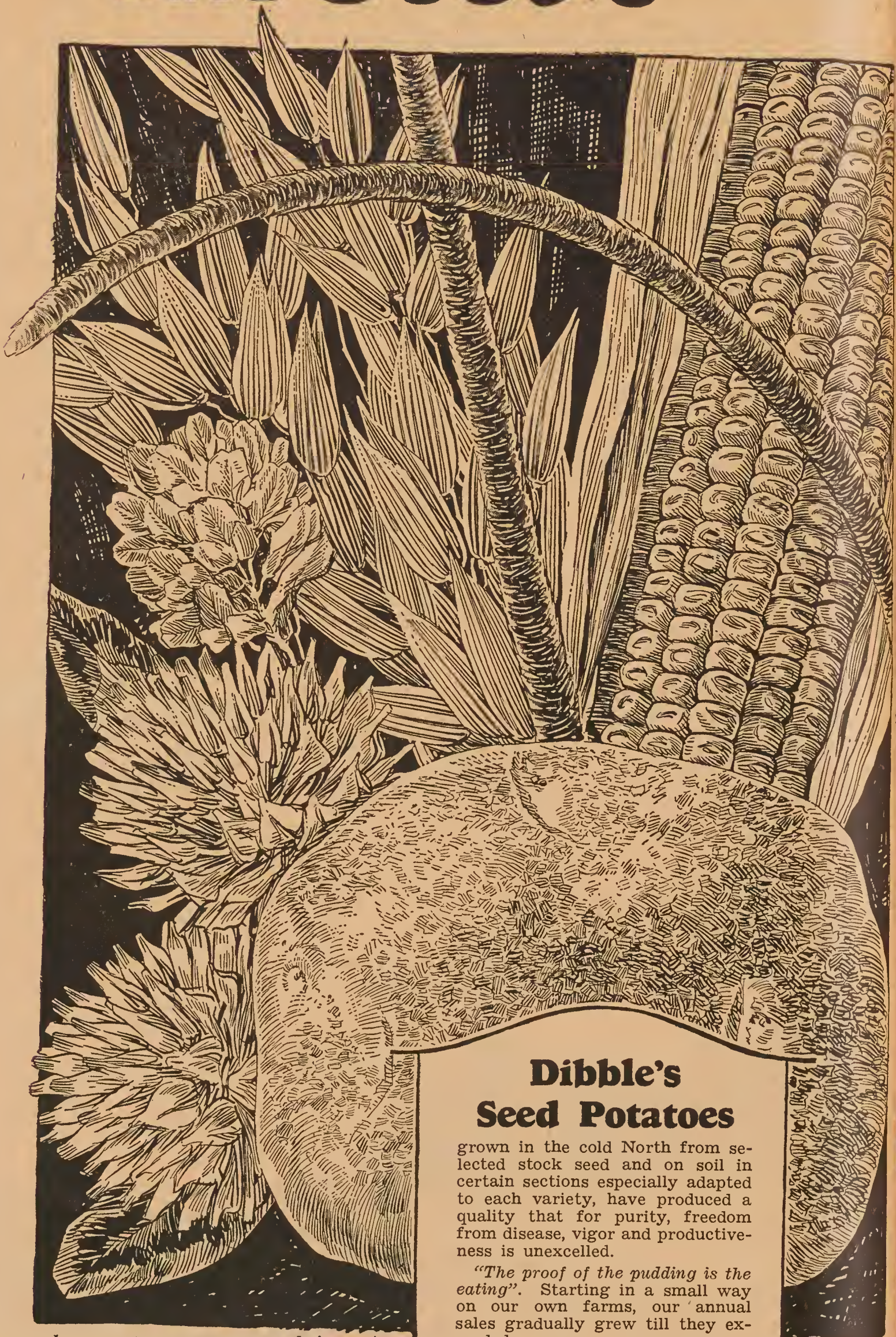
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The Outlook for Farming in 1929

EDITOR'S NOTE: The following comments on the outlook for agriculture as applied to the United States as a whole, were taken from the crop outlook issued by the U. S. Department of Agriculture. Comments applying to this section come from various sources including State Department of Agriculture reports, correspondence with readers and personal experience.

General

In general farmers in American Agriculture territory should aim to grow the things the West cannot grow, either because of climate or distance from markets. Products that offer promise of good returns over a period of years are milk, potatoes, apples, alfalfa, eggs, canning factory crops and cabbage. Beans may return some profit where efficiently grown but do not promise as good returns as those listed above.

Market Opportunities

Farmers in A.A. territory have market opportunities not available to other sections. For example, there is some demand for grade A milk as well as a special market for milk high in butterfat. Another opportunity is marketing at the roadside. At present where retail prices are so much above wholesale prices there is an especial inducement to sell at retail when possible.

Dairying.

Returns from dairying will continue to vary rather sharply from season to season according to pastures, feed conditions, and urban demand. The gradually increasing demand for milk and milk products will probably maintain about the present spread between the prices of feed and the prices of dairy products until there is such a material change in the beef situation that farmers will increase milk production by milking a larger number of cows. Milk producers in the New York

milk shed are especially interested in the problem of furnishing New York its milk supply during the short period in the fall so that it will be unnecessary to widen the New York milk shed. It is generally recognized that the milk shed has the ability to produce milk in quantities sufficient to supply New York's demand for years to come if a price can be secured which will make it profitable. If the New York milk shed is widened during the short period it is believed that it will be impossible to exclude this milk during the remainder of the year.

In New York State the number of dairy cows remained about stationary during the past year but more calves have been raised indicating that another period of high production may be due by 1930. New York State has been importing dairy cows in considerable numbers. The sane course to follow is to weed out the low producers, feed properly, and change the breeding dates of some of the herd so they will freshen in the fall. It would seem to be a poor time to raise more heifer calves than will be needed to maintain the herd.

There is much evidence to show that the purebred business will not reach a point of overexpansion until after the dairy business reaches the down grade again. However cycles of low and high prices in purebred cattle are more violent than in grade cattle and it would seem to be a poor time to plunge in the purebred business, although an excellent time to start in a small way.

The feed supply, including feed grains, feedstuffs, and hay, is slightly larger than last year, and well above the average of the past five years. Prices of these commodities may be expected to hold generally steady until spring pasturage is available, since more cattle are on feed and prices of livestock and dairy products are

generally favorable to a maintenance of relatively heavy consumption of concentrates, legume hay, and feed grains.

Hogs.

The hog outlook for 1929 is favorable. Slaughter is expected to be considerably smaller than in 1928, with some improvement in foreign demand and no material change in domestic demand. The seasonal levels of hog prices in 1929 and 1930 are expected to average higher than in 1928. Stabilization of hog production at a level represented by the pig crop of 1928 appears to be the most suitable program for securing a profitable balance between corn and hog production in the Corn Belt.

The number of swine on farms in New York, Pennsylvania and New Jersey decreased during 1928. While this section cannot compete with the corn belt in producing pork, it would seem that it offers promise as a side line this year.

Sheep.

Although increased numbers of sheep in this country have not as yet affected the markets, caution should enter into production plans as present lamb prices can not be maintained if expansion is continued too rapidly. Sheep numbers continued to increase during 1928 and the lamb crop this year may show some increase above last year. Active business conditions will continue to help support the lamb and wool market well through 1929, with possible slackening in late 1929 or in 1930.

Sheep have increased on eastern farms. New York state is considering changes in the dog law and payment of sheep indemnities.

The ups and downs in the sheep business are getting more violent, that is the good years are better and the poor years poorer. Sheep prices are affected both by meat prices and wool prices.

The outlook for sheep is decidedly good for the next year or two.

Horses.

Horse prices during 1929 may continue upward, especially in Eastern States. Mule prices during 1929 are expected to remain higher than during 1927, and may even exceed the prices of 1928.

Eastern farmers should not be influenced to join a "Horse Association" because of increased prices for horses. On many farms it will doubtless pay to raise a colt or two for use on the farm.

Poultry.

The prospective poultry supply and demand situation indicates higher prices during the first half of the current year than prevailed a year ago and prices for eggs during the first six months lower than those in 1928 but higher than those in 1927. The situation is favorable to the producer of poultry for meat because of the relatively smaller stocks of chickens on farms, smaller cold storage holdings and larger supplies of feed.

Although egg prices on the New York market have averaged slightly better than a year ago, many producers in New York State report lower returns than last season.

The situation would seem to warrant the maintenance of present flocks in the East with perhaps closer attention to efforts to reduce the cost of production. Poultrymen who have their business on an efficient basis should make money during the coming year.

Apples.

Commercial production of apples for the country as a whole will continue at a high level and probably will increase over a period of 5 or 10 years. The rate of increase is likely to be

(Continued on Page 9)

CENSUS COUNTS AND VALUES BY COUNTIES FOR NEW YORK STATE—U. S. CENSUS, 1925

COUNTIES	Number of Farms	Farm Population	Tractors on Farms	Farm Implement Values	Number of Dairy Cows	Value of Dairy Products	Expenditures for Feed	Apples (Bushels)	Potatoes (Bushels)	Vegetables (Com. Acreage)	Hay (Acreage)	Number of Hogs	Number of Chickens
ALBANY	2,661	10,985	276	2,504,918	11,698	\$1,038,774	\$ 717,685	304,924	108,546	2,804	79,198	5,295	221,419
ALLEGANY	4,203	15,306	510	3,278,902	32,472	2,222,269	844,166	100,381	1,390,686	82	136,907	5,028	297,598
*BRONX	41	180	0	14,150	33	3,500	18,160	0	13,300	165	16	16	550
BROOME	3,515	13,199	268	2,396,466	28,457	2,324,101	1,445,547	138,526	384,948	471	108,150	3,157	220,270
CATTARAUGUS	5,353	19,520	493	4,098,266	49,814	3,756,819	1,891,085	167,372	778,187	303	137,930	6,053	299,221
CAYUGA	4,412	15,887	554	4,076,207	19,882	1,700,098	464,351	345,301	938,019	2,231	111,612	8,479	363,564
CHAUTAUQUA	7,354	27,383	970	5,651,723	42,522	3,474,568	2,283,361	345,301	690,455	3,189	127,337	7,079	500,622
CHEMUNG	1,925	7,765	191	1,452,205	10,488	877,680	461,428	65,793	286,747	293	46,599	1,682	147,788
CHENANGO	3,698	13,799	319	3,128,809	41,528	3,596,919	2,194,864	123,331	337,210	1,134	139,613	3,402	361,988
CLINTON	3,385	15,445	198	2,585,224	29,026	2,368,200	525,584	109,383	905,752	138	102,911	3,870	119,875
COLUMBIA	2,589	10,919	463	2,643,823	13,017	1,271,709	692,366	911,191	177,683	344	79,333	3,823	187,240
CORTLAND	2,192	8,677	192	2,029,765	23,167	2,220,597	1,176,619	84,991	589,160	2,134	75,751	1,342	140,585
DELAWARE	4,293	18,535	144	3,844,355	73,734	7,331,012	4,211,873	197,314	236,421	69	170,197	3,748	313,129
DUTCHESS	2,303	11,379	413	2,581,916	20,632	2,303,123	1,262,609	665,129	141,414	304	80,760	3,959	216,265
ERIE	7,899	33,527	1,263	7,761,425	36,392	3,319,738	2,292,452	282,663	2,662,849	2,663	139,714	14,172	567,670
ESSEX	1,873	7,790	134	1,193,485	10,131	719,404	356,686	101,797	239,986	139	61,163	2,576	66,230
FRANKLIN	3,103	13,453	112	1,857,524	28,843	2,327,431	685,511	37,436	928,098	156	95,530	3,129	98,744
FULTON	1,922	7,288	126	1,023,172	9,159	781,009	394,784	18,741	144,539	103	53,075	1,863	87,392
GENESEE	3,055	12,812	745	3,396,218	14,900	1,338,996	422,811	247,710	1,355,205	1,622	58,451	6,447	215,264
GREENE	2,328	8,669	177	1,576,837	13,252	1,104,584	694,821	574,765	102,902	162	64,471	2,884	217,816
HAMILTON	316	1,216	1	130,210	955	56,729	65,972	3,067	28,239	5	5,333	269	8,963
HERKIMER	2,739	11,643	402	2,863,210	35,785	3,492,413	1,347,235	69,850	235,770	396	103,855	2,305	147,441
JEFFERSON	5,007	19,876	779	5,023,140	58,703	5,356,952	1,280,026	64,594	383,606	503	230,668	7,725	249,362
*KINGS	40	150	3	36,350	170	28,760	18,180	0	11,870	88	13	0	2,725
LEWIS	2,974	12,301	175	2,361,480	34,934	2,902,875	1,327,995	20,127	344,463	38	106,071	5,169	102,279
LIVINGSTON	2,686	11,532	594	3,182,995	17,079	1,650,675	340,569	100,494	1,003,567	3,662	72,669	5,076	187,273
MADISON	3,632	14,248	540	3,012,367	31,416	2,899,138	1,393,814	87,050	445,441	3,248	106,333	3,648	236,790
MONROE	5,004	23,746	1,379	6,752,270	17,275	1,427,039	976,621	1,481,640	2,146,296	8,129	67,717	10,585	376,067
MONTGOMERY	2,024	8,781	453	2,215,704	19,346	1,931,412	406,542	57,780	79,386	136	79,215	2,789	128,443
NASSAU	766	4,658	297	1,277,038	1,740	278,316	784,234	6,796	1,638,259	5,275	1,140	219	69,903
*NEW YORK	5	15	0	5,450	19	2,760	2,500	0	2,700	20	0	0	150
NIAGARA	4,303	18,229	1,807	5,430,735	13,308	1,283,561	547,765	2,411,701	452,247	5,190	68,734	8,404	335,573
ONEIDA	5,822	23,367	691	4,916,992	55,689	4,803,205	2,508,114	210,843	857,672	3,480	163,212	7,343	355,420
ONONDAGA	5,538	22,665	764	5,064,064	30,755	2,585,305	1,110,367	259,005	1,812,556	6,253	130,213	7,263	369,358
ONTARIO	3,685	16,037	851	4,352,263	13,431	965,965	340,315	594,258	1,301,130	8,582	67,932	10,912	291,201
ORANGE	3,706	17,268	255	2,885,524	33,895	4,358,882	3,134,066	252,588	232,335	4,672	104,743	2,667	363,836
ORLEANS	2,767	11,175	998	3,880,907	7,989	588,570	291,832	2,261,604	337,547	6,469	43,692	6,827	188,761
OSWEGO	5,815	20,501	461	3,752,302	31,628	2,408,137	1,592,865	222,049	680,292	3,291	111,537	5,289	343,080
OTSEGO	4,887	17,909	323	3,615,160	46,063	4,100,611	2,290,799	219,635	573,197	205	163,573	5,129	473,204
PUTNAM	385	1,687	40	321,270	4,243	576,259	426,902	23,051	18,038	19	13,371	144	18,268
QUEENS	191	1,044	79	630,350	481	150,580	200,575	208	110,165	1,867	7	186	5,707
RENSSELAER	3,130	12,954	267	2,295,544	17,407	1,458,091	1,240,325	178,857	512,130	1,060	97,372	3,746	212,784
*RICHMOND	159	886	12	239,951	344	78,272	159,868	630	6,480	573	434	598	15,690
ROCKLAND	889	4,595	104	572,190	1,797	384,577	468,117	113,553	15,851	637	7,043	289	83,292
ST. LAWRENCE	7,583	29,879	772	6,302,680	99,128	8,392,312	2,364,657	77,882	695,156	170	272,782	12,661	315,623
SARATOGA	3,298	13,469	329	2,013,592	15,379	1,406,103	880,909	97,166	290,252	831	83,192	4,036	203,438
SCHENECTADY	1,092	4,518	178	986,498	5,051	465,589	247,356	28,308	55,030	516	37,605	1,095	62,931
SCHOHARIE	2,889	10,478	205	2,277,200	25,404	2,540,095	961,518	255,770	208,474	48	102,197	3,207	190,680
SCHUYLER	1,600	6,073	240	1,434,331	5,388	366,335	261,342	99,863	207,913	43	38,843	2,446	164,448
SENECA	1,902	7,709	549	2,144,925	7,044	594,865	157,864	228,353	219,987	1,123	49,897	5,326	156,772
STEUBEN	5,786	21,895	752	5,148,643	34,067	2,577,300	742,757	235,809	2,698,692	267	188,040	7,520	402,735
SUFFOLK	2,222	11,212	523	3,161,700	4,811	821,567	2,647,946	27,712	4,271,554	3,163	7,406	3,305	322,945
SULLIVAN	3,163	12,807	50	1,759,594	19,003	1,462,390	1,602,173	123,867	126,642	80	74,264	1,660	348,384
TIOGA	2,506	9,393	215	1,820,071	15,757	1,264,211	894,084	83,606	454,540	146	59,584	1,913	244,205
TOMPKINS	2,363	9,319	317	1,968,671	11,673	992,689	467,233	100,361	444,083	669	60,465	3,391	204,977
ULSTER	4,036	16,993	298	2,889,567	16,516	1,310,127	1,918,209	689,452	155,980	883	70,885	4,386	417,830
WARREN	1,504	5,430	16	629,111	5,524	387,169	327,411	39,053	130,572	214	29,398	1,048	60,034
WASHINGTON	3,389	13,491	304	2,780,717	28,808	2,738,674	935,728	147,438	662,290	261	126,071	4,158	201,217
WAYNE	4,814	19,947	990	5,344,014	16,699	1,279,911	600,227	1,967,331	660,541	4,063	60,176	8,452	419,281
WESTCHESTER	782	5,052	132	1,210,985	5,189	1,068,212	803,357	128,261	32,080	316	17,740	1,164	117,964
WYOMING	3,254	12,880	548	3,515,400	25,579	2,330,043	829,083	421,647	1,639,383	240	83,294	4,414	210,876
YATES	1,997	7,954	440	2,084,697	5,985	456,565	140,923	351,611	211,128	808	40,142	4,420	155,580
Total for New York.....	188,754	767,500	25,681	169,385,252	1,330,604	\$118,303,772	\$62,075,138	18,459,974	38,805,641	98,375	5,015,576	259,189	13,408,720

Handy Facts For the Dairyman

Dairy Cow Has Six Reasons For Eating

THE dairy cow must eat for at least five reasons over and above the fact that she gets hungry. She must eat first in order to maintain her body, keeping up her normal temperature and providing for the repair of her tissues. A large proportion of her total feed goes into milk production. Reproduction calls for another important supply of nutrition. When the cow is dry, she should be fattened, because, just after she has freshened, she actually produces more milk than she eats feed to produce, and must have a reserve on her body. Finally, she must eat to grow, because the average large cow is a better producer than the average small cow.

How to Feed Grain and Roughage

1. Under most circumstances the cow should be fed all the roughage that she will eat up clean, adjusting grain ration to milk production. Only when the cow tends to become overfat should quantity of roughage be restricted.

2. A grain mixture should be fed in proportion of 1 lb. to each 3 pints or lbs. of milk produced daily by cow, except in case of a cow producing a flow of 40 lbs. or more, when ration can be 1 lb. to each 3½ lbs. or 4 lbs. of milk. An even better rule is 1 lb. of grain each day for every lb. of butter fat produced during the week by the cow.

3. Feed all the cow will respond to in milk production. When she begins to put on flesh, cut down grain.

Minerals in Ration

The animal body requires a dozen or more different minerals. All of these, except common salt, lime and phosphorus, are found in sufficient quantities in an ordinary ration.

Legume hay, especially clover and alfalfa, is well supplied with minerals and less need to be added where these legumes are used.

A cow is in especial need of extra quantities of lime and phosphorus during the period of heaviest milk production.

The addition of one or two per cent of pure ground limestone, ground rock phosphate or steamed bone meal should be included in the dairy cow's ration

during production.

As insurance, minerals may be added at all other times also, as well as to the rations of other animals.

A cow should receive one or two ounces of salt a day.

Commercial Feeds

There are now available many good commercial feeds. Whenever a dairy-

Do not milk cows completely dry for 48 hours after calving.

Feed cows sparingly the first few days after calving.

Warm water and a few quarts of scalding bran or oats and good hay is sufficient for the first day or two after calving. Gradually work cows onto full feed, which ordinarily requires two or three weeks.

Be careful not to overfeed.

part of the dried material should be added to nine parts of warm water and fed as milk. Add only a small amount of water first and break up the lumps before adding the rest of the water.

How to Prevent the Growth of Horns

1—Horns should be removed from calves to be raised before they are one week old.

2—Clip the hair from the little horn button and for a short distance around it.

3—Rub vaseline in a circle around the horn button.

4—Rub the button with a stick of caustic potash until a spot about the size of a dime is red. Put the potash only on the horn button.

5—Do not put on too much potash as it may run down and burn the hair or injure the eyes.

6—Do not turn the calf out in the rain as the potash will be washed into the eye.

7—Do not handle caustic potash with bare hands.

8—Keep it in a tightly corked bottle or it will absorb moisture from the air and become a liquid.

Cattle on Farms in New York

Year	Dairy cows and heifers 2 years old or older	Dairy heifers 1 year old and under 2 years	Cattle of all ages, including dairy and beef cattle	Total value of cattle
1910*	1,410,000	260,000	2,423,000	\$ 83,062,000
1911	1,410,000	230,000	2,432,000	93,703,000
1912	1,395,000	250,000	2,389,000	82,435,000
1913	1,395,000	230,000	2,341,000	92,522,000
1914	1,365,000	270,000	2,341,000	107,332,000
1915	1,410,000	245,000	2,403,000	117,260,000
1916	1,435,000	270,000	2,478,000	113,290,000
1917	1,475,000	300,000	2,478,000	130,683,000
1918	1,455,000	285,000	2,438,000	163,799,000
1919	1,455,000	225,000	2,378,000	168,442,000
1920†	1,499,000	253,000	2,144,000	189,101,000
1921	1,477,000	202,000	2,104,000	126,871,000
1922	1,462,000	193,000	2,090,000	113,696,000
1923	1,449,000	206,000	2,030,000	105,966,000
1924	1,422,000	191,000	1,940,000	106,118,000
1925	1,383,000	182,000	1,852,000	98,482,000
1926	1,362,000	168,000	1,824,000	124,066,000
1927	1,318,000	178,000	1,811,000	134,830,000

* U. S. Census of April 15, 1910, revised for comparability.

† Data from 1920 to 1926 revised, based on analysis of 1920 Census and 1925 Census. Changes from figures in Table 10, Agricultural Bulletin 180, and Table 2, Agricultural Bulletin 192, are slight.

man has to buy his concentrated grain ration it will often be found more practical and convenient to use a good commercial feed.

In choosing a commercial mixed feed the following should be observed:

1. When the hay is timothy or low protein, use a 24% protein feed.
2. When the hay is a good mixed hay 30 to 50% clover or alfalfa, 20% protein is enough.
3. With clear clover or alfalfa 16 or 18% is enough.

Handling Cows At Calving Time

Have cows in good flesh.

Provide a comfortable box stall or suitable place for calving.

Be prepared to treat an attack of milk fever by having a clean sterilized pump to inflate udder with air.

Blanket cow immediately after calving if there is danger that the cow will become chilled.

Remove the calf from its mother after the first two to four days and teach it to drink from a pail.

How to Raise Good Calves

- (1) Keep the calves warm and dry;
 - (2) Feed them only from clean utensils;
 - (3) Guard against infection;
 - (4) Feed the milk at body temperature, 90 to 100 degrees F.;
 - (5) Feed them hay and grain and give the calves all the water they want to drink;
 - (6) Serious scouring may be checked by adding one tablespoonful of dried blood to the milk ration. Sometimes lime water is added to the milk as it is very helpful;
- () Don't overfeed. More have been ruined by overfeeding than underfeeding.

How to Feed Calves

Experience has demonstrated that it is possible to raise good calves without skim milk.

Keep the calves on sweet whole milk as long as you possibly can in order to give them a good start.

Then change gradually to a good calf meal gruel.

There are many proprietary mixtures on the market, all of which are good.

In general, such a mixture should have from 20 to 25 per cent protein, not over 5 per cent of crude fiber, and should have compounds of lime and phosphorous. It should not settle too rapidly when placed in water.

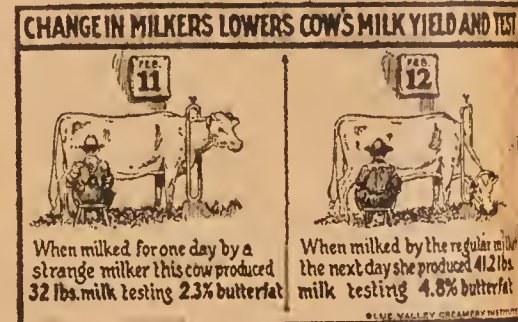
Directions for feeding calf meals are usually furnished by the manufacturers. Follow the directions carefully.

Increase the mixture gradually to reach about 15 pounds a day at four months of age, and continue at that amount for two months. The calf should have this gruel until six months of age, beginning at four months to decrease it gradually.

Dried skim milk is becoming increasingly popular with calf feeders. One

Age of Heifer in Relation to Milk Production

It is safe to judge the cow on the basis of her production as a two-year-old, at which heifers are usually bred to freshen. In general it may be said that the production of the two-year-old is about 70 per cent of the mature production, and that it increases about ten



per cent per year up to five years when the cow reaches her greatest production. This varies for different breeds and individuals but may be used as a general guide.

The test of the milk or percentage butterfat is slightly higher in the heifer stage than at maturity.

Information About Ice

About 40 cubic feet of space is required to store 1 ton of ice. About 50 percent more should be stored than needed. About one-half to 1 ton allowed per cow for cooling cream only and 1½ to 2 tons per cow if whole milk is cooled. One cubic foot solid ice weighs about 57 pounds. Standard block of manufactured ice is 12 by 22 inches and weighs 100 pounds. (U. S. D. A. Ext. Service Handbook)

Curing the Self-sucker

One of the simplest and surest methods of breaking a cow of sucking herself is to put an old work bridle on her. The bit of the bridle should be divided in the middle.

This will stop the confirmed sucker. The bit will bother her for a day or two, but she will soon get used to it. This method does not interfere with the cow moving around as she desires.

Gestation Table

	Average Gestation Period		Extremes (days)
	Weeks	Days	
Sow	16	112	109 to 120
Ewe	22	150	146 to 157
Cow	40½	283	240 to 311
Mare	48½	340	307 to 412

DATE ANIMAL DUE TO GIVE BIRTH				
Date of Service	Mare	Can	Ewe	Sow
Jan. 1	Dec. 7	Oct. 11	May 31	Apr. 25
Jan. 11	Dec. 17	Oct. 21	June 10	May 5
Jan. 21	Dec. 27	Oct. 31	June 20	May 15
Jan. 31	Jan. 6	Nov. 10	June 30	May 25
Feb. 10	Jan. 16	Nov. 20	July 10	June 4
Feb. 20	Jan. 26	Nov. 30	July 20	June 14
Mar. 2	Feb. 5	Dec. 10	July 30	June 24
Mar. 12	Feb. 15	Dec. 20	Aug. 9	July 4
Mar. 22	Feb. 25	Dec. 30	Aug. 19	July 14
Apr. 1	Mar. 7	Jan. 9	Aug. 29	July 24
Apr. 11	Mar. 17	Jan. 19	Sept. 8	Aug. 3
Apr. 21	Mar. 27	Jan. 29	Sept. 18	Aug. 13
May 1	Apr. 6	Feb. 8	Sept. 28	Aug. 23
May 11	Apr. 16	Feb. 18	Oct. 8	Sept. 2
May 21	Apr. 26	Feb. 28	Oct. 18	Sept. 12
May 31	May 6	Mar. 10	Oct. 28	Sept. 22
June 10	May 16	Mar. 20	Nov. 7	Oct. 2
June 20	May 26	Mar. 30	Nov. 17	Oct. 12
June 30	June 5	Apr. 9	Nov. 27	Oct. 22
July 10	June 15	Apr. 19	Dec. 7	Nov. 1
July 20	June 25	Apr. 29	Dec. 17	Nov. 11
July 30	July 5	May 9	Dec. 27	Nov. 21
Aug. 9	July 15	May 19	Jan. 6	Dec. 1
Aug. 19	July 25	May 29	Jan. 16	Dec. 11
Aug. 29	Aug. 4	June 8	Jan. 26	Dec. 21
Sept. 8	Aug. 14	June 18	Feb. 5	Dec. 31
Sept. 18	Aug. 24	June 28	Feb. 15	Jan. 10
Sept. 28	Sept. 3	July 8	Feb. 25	Jan. 20
Oct. 8	Sept. 13	July 18	Mar. 7	Jan. 30
Oct. 18	Sept. 23	July 28	Mar. 17	Feb. 9
Oct. 28	Oct. 3	Aug. 7	Mar. 27	Feb. 19
Nov. 7	Oct. 13	Aug. 17	Apr. 6	Mar. 1
Nov. 17	Oct. 23	Aug. 27	Apr. 16	Mar. 11
Nov. 27	Nov. 2	Sept. 6	Apr. 26	Mar. 21
Dec. 7	Nov. 12	Sept. 16	May 6	Mar. 31
Dec. 17	Nov. 22	Sept. 26	May 16	Apr. 10
Dec. 27	Dec. 2	Oct. 6	May 26	Apr. 20

Capacity, in Tons, of Ice Houses of Various Sizes*

Size of house (feet)	Packing capacity (feet)	Depth of filling									
		6	7	8	9	10	12	14	16	18	feet
10x10	7x7	7.4	8.6	9.8	11.0	12.3	—	—	—	—	—
12x12	9x9	12.2	14.2	16.2	18.2	20.3	24.3	—	—	—	—
14x14	11x11	—	21.2	24.2	27.2	30.3	36.3	42.4	—	—	—
16x16	13x13	—	29.6	33.8	38.0	42.2	50.6	59.0	67.4	—	—
18x18	15x15	—	39.3	45.0	50.7	56.3	67.4	78.7	90.0	130.0	—
20x20	17x17	—	—	57.7	65.0	72.2	86.7	101.1	115.6	162.5	—
24x24	19x19	—	—	72.3	81.1	90.3	108.2	126.2	144.2	198.5	—
22x22	21x21	—	—	88.4	99.4	111.0	132.2	154.5	176.3	—	—

* Allowance is made for one foot of insulating material between the stack and the walls.

More Helps For the Dairyman




Clean Milk Keeps Sweet

Milk cooled promptly to 50 degrees kept 118 hours.
Milk not cooled kept 23 hours.
When sterile utensils were used it kept 118 hours.
With unsterile utensils it kept 66 hours.
When the small top pail was used milk kept 118 hours.
When the ordinary pail was used it kept 85 hours.
When the cow was properly brushed and her udder washed, milk kept 118 hours.
When the cow was dirty it kept 92 hours.
A better grade of cream will also be obtained when these conditions are watched.—U. S. D. A.

How to Sterilize Dairy Utensils

1. Rinse thoroughly in clean, hot water.
2. Wash thoroughly in warm water to which a dairy cleansing powder has been added. Use a good brush.
3. Rinse in cold water after using.
4. Sterilize thoroughly with boiling water or steam until container is too hot to be handled comfortably.

It Pays to Grade Up the Herd

Breeding of Cow	Yearly Milk and Butter-fat Production	For Year's Work, Profit above Feed Cost—Milk Sold at 6.44 per qt., or \$ 3.00 per 100 lbs.
 Typical Dam	4110 lbs. Milk 191 lbs. Fat	\$6.58
 Typical Daughter	5828 lbs. Milk 226 lbs. Fat	\$13.40
 Typical Granddaughter	8163 lbs. Milk 370 lbs. Fat	\$42.45

The diagram shows the result of an experiment conducted by the Iowa Experiment Station to demonstrate the value of a purebred bull to increase the productiveness of the offspring of grade cows.

5. Pour out water or condensed steam and allow to dry thoroughly by inverting in the sun or in a protected spot on a rack where no animals or dust may reach them. The importance of thorough heating and absolute drying cannot be over-emphasized.—New Jersey Circular 189.

Cleaning Milking Machines

There are several good commercial materials for disinfecting milking machine parts on the market. They are sometimes spoken of as hypochlorite solutions and are very similar. They are ordinarily used in connection with a salt solution.
A hypochlorite solution can be made at home as follows:
1—Buy a 12-ounce can of chloride of lime, making sure that it is fresh.
2—Mix it with a gallon of water, first adding enough water to make a paste and then adding the remainder of the water.

Relation Between Milk Production, and Returns for \$1 in Feed, and Feed Cost per 100 Pounds of Milk*

Production range (pounds of milk per year)	Number of cows	Average production (pounds)	Average Fat (pounds)	Average returns for \$1 in feed	Average feed cost per 100 pounds of milk
3,000-4,000	100	3,528.1	144.7	\$1.41	\$1.78
4,000-5,000	240	4,560.8	180.6	1.62	1.43
5,000-6,000	390	5,453.4	207.4	1.74	1.30
6,000-7,000	444	6,644.4	243.6	1.87	1.23
7,000-8,000	469	7,465.6	268.4	2.03	1.14
8,000-9,000	331	8,501.4	299.6	2.07	1.10
9,000-10,000	213	9,474.6	327.6	2.18	1.05
10,000-11,000	144	10,440.1	351.0	2.24	1.01
Total	2,331				

* Tailby, G. W., jr. Some results of dairy improvement associations. Cornell Ext. Bul. 83:1-19. 1924.

- 3—Keep the solution covered. After the sediment has settled for a few hours, a pint of the clear liquid is added to the brine solution.
- 4—A 20-gallon stone jar should be used to contain the brine and hypochlorite solution. Wooden or metal tubs cause the solution to deteriorate.
- 5—This jar is filled with clean water and clean salt added until some remains in the bottom of the jar. Then the pint of clear hypochlorite solution is added to it.

Estimated Dairy Cows and Heifers on Farms in the North Atlantic States

	Milk Cows and Heifers 2-Years Old and Over (Thousands)		Dairy Heifers 1 to 2 Years Old (Thousands)		Total Cattle and Calves All Kinds (Thousands)		Value of All Cattle (Millions)	
	1928	1929	1928	1929	1928	1929	1928	1929
NEW YORK	1,330	1,330	197	222	1,865	1,895	\$169	\$190
Maine	139	139	32	34	224	228	13	15
New Hampshire	75	75	14	15	112	115	9	10
Vermont	286	286	49	55	412	422	32	33
Massachusetts	135	134	17	18	181	183	19	20
Rhode Island	20	21	3	3	27	28	3	3
Connecticut	108	109	13	13	142	144	16	17
New Jersey	122	122	16	17	161	163	16	19
Pennsylvania	855	855	136	149	1,332	1,372	103	119
NORTH ATLANTIC	3,070	3,071	477	526	4,456	4,550	\$379	\$427
UNITED STATES	21,824	21,820	4,201	4,377	55,681	55,751	\$2,845	\$3,309

- 6—The hypochlorite solution should be added to the brine once a week in cool weather and twice a week in warm weather.
- 7—Where commercial hypochlorite solutions are used, follow the directions of the manufacturer.

Buying a Herd Sire

According to the authorities Savage and Maynard, look first at the bull, and second at his pedigree.
Insist on size, but without too large bone and coarseness.
The dairy bull should have an active, nervous disposition with no signs of sluggishness.
Unfortunately, most dairymen have to buy young bulls. Look for indications of constitution, capacity and quality in the calves.
They should have long, level, wide rumps, and thin thighs.
A bull without a good pedigree is apt to be worthless. Find out what his ancestors did before you purchase.

Feeding and Care of the Young Bull

For the first six months, feeding and care of the bull calves will not be materially different from the treatment of the heifer calves except that it is even more important to continue the bull on whole sweet milk as long as possible.
The main thing is to keep them growing, for size is one of the very important things in a bull.

The Impotent Bull

If your cows are not getting with calf, your bull may be impotent. This can easily be determined by an examination of the spermatozoa to see that they are alive and fertile.
If the bull is valuable, do not get rid of him, even if examination shows that he is impotent until you have tried to correct the trouble.

Several things may be the matter. He may not be getting enough exercise. His rations may be wrong, or you may have been using him too much.

How to Ring a Bull

Select a ring of non-rusting material, such as copper, gun metal, or brass. Before attempting to place the ring in the bull's nose, fasten the bull securely in a strong stanchion, making sure

clean floor, a canvas or blanket should be spread below the bull's head to prevent loss of the screw, in case that it should be dropped.

Avoid handling the bull by the ring until the wound is healed. The nose will be tender for some time after the bull has been ringed.—Dairy Cattle, by Yapp and Nevens.

Rations for Dairy Cows

The following grain mixtures are taken from "Better Dairy Farming" by Savage and Maynard.
Much attention has recently been given to the advisability of home mixing grains. Many dairymen feel that better results can be secured with less work by buying a ready mixed ration manufactured by a reliable concern. The following points should at least be considered before deciding to mix grain at home.

- 1—Will it be possible to obtain a supply of the necessary ingredients whenever they are needed?
- 2—Is it possible to mix grain as uniformly as purchased dairy rations are mixed?
- 3—Will the time required to mix at home return most profits, or is it advisable to use this time for some other activity?

Grain Mixture for Dry Cows

100 lbs. Hominy feed 100 lbs. Ground oats
100 lbs. Wheat bran 50 lbs. Oil Meal

Grain Mixture for Milk with Clover or Alfalfa

100 lbs. Wheat bran 200 lbs. Hominy
150 lbs. Ground oats 50 lbs. Oil Meal
This mixture will contain about 14% Protein
200 lbs. Ground oats 100 lbs. buckw't mid.
100 lbs. corn f'd meal 100 lbs. gluten feed
100 lbs. ground barley 50 lbs. Oil Meal
This mixture will contain about 16% Protein

Grain Mixture for Timothy Hay

100 lbs. wheat bran 100 lbs. Oil Meal
100 lbs. hominy 50 lbs. cottonseed meal
150 lbs. gluten feed
This mixture will contain about 24% Protein

Grain Mixture to be Fed with Pasture

300 lbs. wheat bran 200 lbs. gluten feed
300 lbs. hominy 100 lbs. oil meal

Grain Mixture for Young Stock

500 lbs. gluten feed 400 lbs. wheat bran
500 lbs. ground oats 100 lbs. oil meal
500 lbs. hominy feed

Preventing Cows from Kicking

Cows are given to few vices, and those are mainly due to faulty management. The most common vice is that of kicking when milked. Cows always kick at first, either from pain or fear, and if not handled properly,
(Continued on Page 16)

Silo Capacity Table

Approximate Capacities of Cylindrical Silos in Tons (Use height of silage after settling two days)

Depth of silage two days after filling (Feet)	Inside diameter of silo in feet					
	10	12	14	16	18	20
2	2	2	3	4	5	6
4	3	5	7	9	11	13
6	5	8	11	14	17	21
8	8	11	15	20	25	31
10	10	15	20	26	33	41
12	13	19	25	33	42	52
14	16	23	31	41	52	64
15	18	25	34	45	57	70
16	19	28	38	49	62	77
17	21	30	41	53	67	83
18	23	32	44	58	73	90
19	24	35	48	62	79	97
20	26	38	51	67	85	105
21	28	40	55	72	91	112
22	30	43	59	77	97	120
23	32	46	63	82	103	128
24	34	49	66	87	110	135
25	36	52	70	92	116	143
26	38	55	74	97	123	152
27	40	58	79	103	130	160
28	42	61	83	108	137	169
29	44	64	87	119	144	178
30	47	67	91	124	151	187
31	49	70	96	131	158	195
32	51	74	100	138	166	205
33	53	77	109	143	173	214
34	56	80	114	149	181	224
35	58	84	118	155	188	232
36	61	87	123	161	196	242
37	63	90	128	167	204	252
38	66	94	133	174	212	262
39	68	97	138	180	221	272
40	70	101	143	187	229	280

What is left in a silo after part has been used can be estimated as follows: Find original amount of silage put in silo by referring to table. Find amount of silage that has been used by same method, using as depth the difference between present depth and depth two days after filling. Subtract amount used from original amount. The difference is approximate amount of silage remaining in silo.—Cornell.

Useful Facts For the Crop Grower

Recommended Crop Varieties for New York

Alfalfa.

Avoid all imported seed that is stained either 10 per cent red, 10 per cent orange, red or 1 per cent green.

Ontario Variegated—(Should be stained 1 per cent purple.) Recommended for most New York conditions.

Grimm—Use registered or certified seed of Grimm, avoid so-called "affidavit" or "bootleg" Grimm. Recommended for the most severe climatic and soil conditions and when seed of Ontario Variegated cannot be obtained.

Northwestern Common—Hardy strains of common alfalfa should be used only on the natural soils of the state where alfalfa has previously been successfully grown and it is planned to leave the alfalfa down only two to three years.

Red Clover—Avoid all imported seed that is stained 10 per cent red or 1

same, but dry weight yield slightly less.

Cornell No. 12—About a week earlier than West Branch Sweepstakes. Gives high yields of green and dry weight, but seed supply is limited.

Cornell No. 11—Many strains of this popular variety have been developed. Original strain requires 110 to 115 days to mature. A good variety for silage on fertile soils at high elevation, or at lower elevations where silage with a high proportion of grain is desired.

Golden Glow—Popular in extreme Northern New York. Many strains exist. In general maturity about like Cornell No. 11. Avoid late maturing strains as grown in Iowa.

Oats.

For general use the gray-kernelled Cornelian and the white-kernelled Ithacan have proven superior in yield. Cornelian has led in yield tests in Central,

To avoid this, treat with carbon disulphide as per the following directions:—

Fill a tight bin, box, or other container with beans to within a few inches of the top. On top of the beans place a shallow dish or pan large enough to hold the required amount of the fumigant, which is one ounce for each 100 pounds of beans. Cover the container with a tight lid immediately. Carbon disulphide vaporizes very rapidly and the fumes, which are heavier than air, will settle down among the beans, killing all insects present.

The germinating quality of the seed is not reduced by this practice. The container should not be opened for at least 24 hours. The temperature in the container should be above 65 degrees F., since at a lower temperature the gas is not as effective and more carbon disulphide may be required. It must be remembered that carbon disulphide is an explosive which ignites readily on exposure to flame or extreme heat.

The Heat Method.

The weevil may be controlled by heating the beans to a temperature of 130 to 150 degrees F. and holding at that temperature for three to five hours. This will not injure the beans for table use but it may injure their germinating power.

Seed beans may be protected by storing in air-slaked or hydrated lime. Enough of the lime should be used so that when it is shaken down it will be thoroughly mixed with and cover the beans. Beans treated in this manner should be kept in a dry place. Beans that have been injured by the weevil should not be used for seed.

How to Grow Alfalfa

1. Use a hardy variety—grimm, Ontario variegated or northern grown Common.
2. Inoculate the seed.
3. Lime the soil (ask your county agent to test the soil for lime requirement).
4. Prepare the land thoroughly and seed between June 15 and July 1.
5. Sow on well prepared soil only.
6. Topdress new seeding with manure or superphosphate (superphosphate will give less trouble from weeds.)
7. Do not cut too close in the fall. Allow the seeding to go into the winter with a 6-inch growth.

Sunflowers Versus Corn for Silage

1. Sunflower silage showed a distinct lack of palatability and none of the cows relished it as well as they did a good grade of corn silage. A mixture of one-half sunflowers and one-half corn forage proved to be somewhat more palatable than pure sunflower silage but this mixture was still much less palatable than a good quality of corn silage.

2. Cows produced less than 86.4% as much milk on a ration containing a normal amount of sunflower silage as

compared with one containing corn silage.

3. A ration containing an average amount of silage made of one-half sunflowers and one-half corn produced less than 92.6% as much milk as a ration containing a similar amount of good quality corn silage.

4. From a study of the complete data of two feeding trials it is concluded that the use of sunflowers as a silage crop is not advisable on Pennsylvania farms except in a very few localities where corn is not always a sure crop. A mixture of sunflowers and corn, the crops being grown together or separately, affords no real advantage when the poorer quality of silage and the added difficulty of harvesting is taken into consideration.—Pennsylvania Bulletin 172.

Control Measures for European Corn Borer

1. Cut low or break off all corn stalks.
2. Destroy all the borers in the stalks and ears by ensiling, feeding, shredding or burning.
3. Destroy all left in the field in the stubble, weeds or debris by plowing these down completely.
4. Avoid dragging up the stubble when cultivating. Hence do not use

Composition of an Acre of Corn at Different Stages of Maturity

Stage of growth	Date	Yield of corn per acre (tons)	Water per acre (tons)	Dry matter per acre (tons)	Crude protein per acre (pounds)
Tassel	July 30	9.0	8.2	0.8	240
Silk	August 9	12.9	11.3	1.5	437
Milk	August 21	16.3	14.0	2.3	479
Glazed	September 7	16.1	12.5	3.6	644
Ripe	September 23	14.2	10.2	4.0	678

Cornell R. C. Bulletin 114

per cent green. Use only northern-grown domestic seed (does not include Oregon seed) or purple-stained (Canadian) seed.

Corn for Grain.

There are many strains, of dent and flint corns, which possess local and limited adaptations. A few are: various strains of Cornell No. 11, early strains of Golden Glow, Alford's White Cap Yellow Dent, Oswego strains of flint corns, such as Angel of Midnight and King Philip.

Barley

Alpha—(two-rowed) is more widely adapted in New York than any other variety, and is superior in yield.

Featherston and Wisconsin Pedigree are superior six-row barleys, but earlier in maturity, shorter and weaker strawed than Alpha.

No hullless or beardless varieties have been found yet that give yields in New York comparable with those given by the above hulled and bearded varieties.

Mixed Grains—Where mixtures of oats and barley, or of oats, barley and peas are grown, the following recommendations as to seed will apply:

Barley variety, alpha—The only

Southern and Eastern New York; Ithacan in tests in the Ontario-St. Lawrence basin of Northwestern and Northern New York.

For any very fertile and moist soil where oats lodge repeatedly, the Upright variety will be found to possess the stiffest straw to give excellent yields under those conditions.

Avoid side or "horsemane" oats.

Wheat

Winter Wheat—The choice of a variety depends first upon whether a white or red-kernelled wheat is desired.

Forward—Red-kernelled, beardless, white-chaffed, stiff-strawed, winter-hardy and resistant to loose smut. Has surpassed Honor and Junior No. 6 in yield tests.

Honor—White-kernelled, beardless, bronze-chaffed, very stiff-strawed very winter-hardy, but susceptible to loose smut.

Junior No. 6—White-kernelled, beardless, bronze-chaffed, not as stiff strawed nor as winter-hardy as Honor. Resistant to loose smut.

Spring Wheat

Marquis—Red kernelled, beardless, white-chaffed.

Rye

Cornell Selections No. 45 and No. 76 and Rosen are superior.

How to Prevent Weevils in Peas and Beans

When one stores beans or peas for seed or eating purposes, considerable damage is liable to be done by weevils.

Potato Spraying Schedule

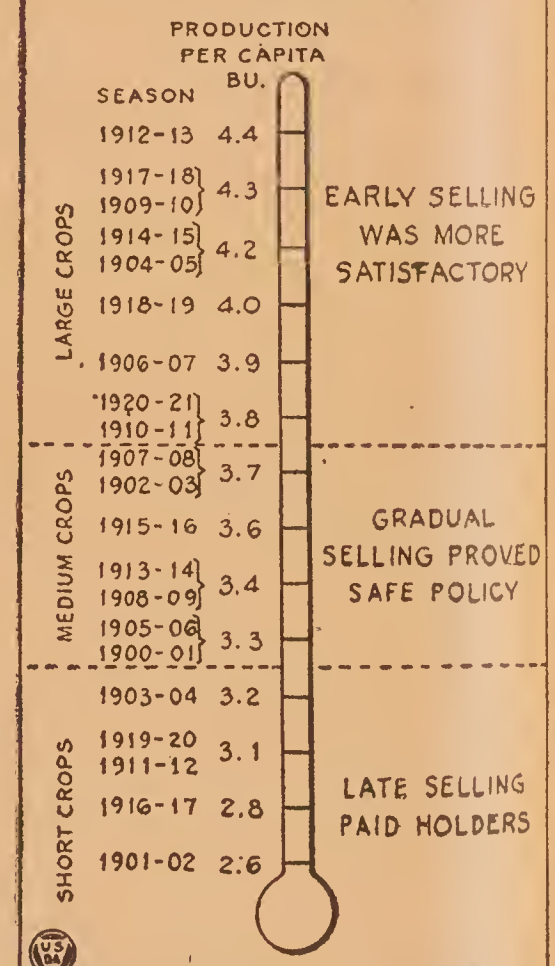
How	When	With what	For what
Spray	When plants are 6 in. - 8 in. high, or as soon as bugs appear.	Bordeaux 4-4-50 and lead arsenate 4 lbs.* paste to 50 gals.	Diseases— Early blight Late blight Tipburn Insects— Potato beetle Flea beetle
Spray	10-14 days later	Bordeaux 4-4-50 and lead arsenate 4 lbs.* paste to 50 gals.	Same as above
Spray	Same interval	Bordeaux 4-4-50** with lead arsenate as above if insects are present.	Late blight especially, and insects

*Use half as much powdered lead arsenate.

**If late blight is prevalent, use stronger bordeaux, 5-5-50, and repeat the sprays at 10 to 14 day intervals during the remainder of the growing season.

Pennsylvania Extension Circular 58.

POTATO BAROMETER



The size of the potato crop in bushels per capita can be used to determine whether it will pay better to sell in the fall or hold the crop. The above illustration shows what has happened in years past.

toothed implements, but a disc, and sow the field with a disc drill.

5. Have all the above control measures completed before June 1st.

6. In heavily infested areas plant most of the corn as late as possible without risking failure of a crop.

How to Treat Seed Potatoes

Corrosive Sublimite Treatment.

Corrosive sublimite (Mercuric chloride) 4 oz.
Water 30 gal.

Treat uncut seed.

Duration of treatment 1/2 to 1 1/2 hours.

Hot water should be used to dissolve this material. As the solution corrodes metal, it must be prepared and used in wooden containers. Corrosive sublimite is a deadly poison, so the solution must be kept away from children or livestock. In view of the fact that the solution loses strength after treating each lot of potatoes, it is necessary to renew its strength from time to time. The Wisconsin Agri-

(Continued on Page 8)

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CHRYSLER IMPERIAL

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CHRYSLER "65"

DODGE BROTHERS SENIOR

DODGE BROTHERS SIX

DE SOTO SIX

PLYMOUTH

DODGE BROTHERS TRUCKS,
BUSES and MOTOR COACHES

FARGO TRUCKS and
COMMERCIAL CARS

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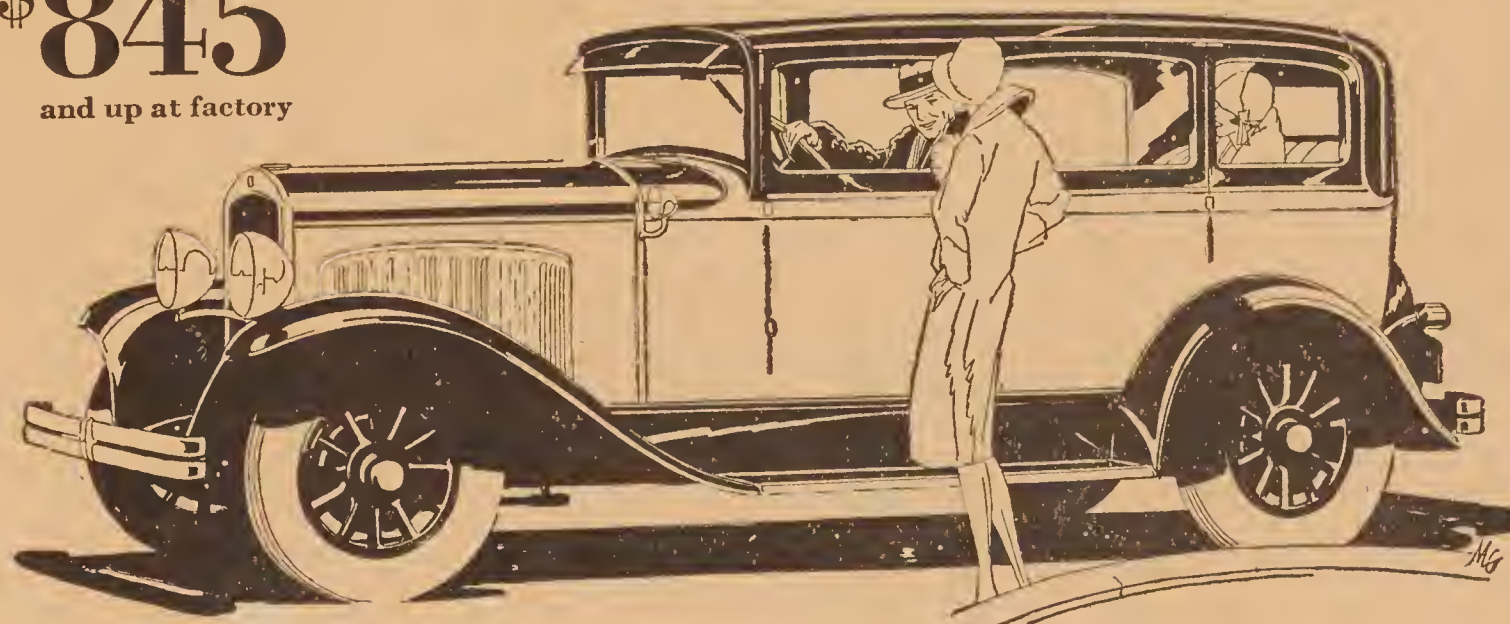
The great group of manufacturing properties under the personal direction of Walter P. Chrysler is hereafter to be known as Chrysler Motors.

In the precise form in which it is operated, Chrysler Motors represents a new economic force in the industry because, while preserving a complete separate identity in the products and their distribution, it welds together the advantages resulting from the common policy of engineering, purchasing, manufacturing and financing under one personal head.

Thus, a quality manufacturing ideal is made practical for the first time in the history of the motor car industry.

Thus, a series of gigantic operations is made absolutely one—in engineering skill, in buying, in basic materials, in time- and money-saving machinery—a principle which inevitably lifts both quality and value—each car contributing and sharing the manufacturing efficiencies of all the rest.

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because of its greater value

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The motoring public has found something in the new De Soto Six that sets it completely apart from others in its field.

It is not surprising that a car so beautiful, so comfortable, so powerful and responsive, and so safe and easy to drive should find a ready market.

But it is significant that even such a car should set a new sales record for the industry during the early months of its existence.

The answer must lie in a widespread public conviction that the genius and resources of Chrysler confer upon De Soto a standard of value that is unmatched by any car of comparable price.

Faeton, \$845; Roadster Espanol, \$845; Sedan Coche, \$845; Cupe Business, \$845; Sedan, \$885; Cupe de Lujo, \$885; Sedan de Lujo, \$995. All prices at factory.

DE SOTO SIX

A CHRYSLER MOTORS PRODUCT

Still Huskier Manures

IN CONFORMITY with the world trend toward still greater concentration of plant food in finished fertilizers, the *Armour Fertilizer Works* is producing a new line of super grades and is prepared to ship a limited tonnage this spring to farmers desiring to carry on a *practical research* on the farm with these *husky manures*. They carry heavy percentages of plant food (45 per cent) and in addition an appreciable quantity of calcium as lime phosphate together with some magnesium, iron and manganese—all desirable crop-producing soil constituents. This we consider sound agricultural practice.

Two grades will be offered for spring shipment:—

I—**9** per cent nitrogen, equivalent to 10.92 per cent ammonia; **27** per cent available phosphoric acid; **9** per cent potash. Three tons of 3-9-3, nitrogen basis, in one ton of **9-27-9**.

II—**9** per cent nitrogen; **18** per cent available phosphoric acid; and **18** per cent potash. Three tons of 3-6-6, nitrogen basis, in one ton of **9-18-18**.

These complete super grades contain the best plant food carriers—enough nitrogen as nitrate and ammoniacal nitrogen to grow a large crop quickly, sufficient phosphoric acid to mature it early, and ample potash to insure a healthy plant growth and development. The goods are in splendid mechanical condition—fine, dry and drillable, an unusual quality in concentrated fertilizers. They will be sold under the mark shown above. (In states where phosphoric acid is stated first, the bag branding will read **27-9-9** or **18-9-18**.)

N, P and K are the chemical symbols for nitrogen, phosphorus and potassium. "TIED TOGETHER—THEY WORK TOGETHER."

We also make a triple super-phosphate analyzing 45 per cent available phosphoric acid, sold under this mark



If you will fill out the coupon below, we will be pleased to name you a price, in 100-pound bags, up to 400 pounds, and will deliver through our nearest merchant dealer, or to your station if we have no representative in your locality.

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bags 45% Multiphos

Name _____
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Town _____ State _____
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With the A.A. Crop Grower



(Continued from Page 6)

cultural Experiment Station has shown that the best plan to follow is to add 3/8 ounce of corrosive sublimate after treating each 4 bushels of potatoes 1 1/2 hours. At the time the chemical is added the solution should be restored to its original volume by the addition of water. If the 1/2-hour treatment is adopted the amount of chemical added should be reduced to 1/8 ounce.

If no chemical is added the solution should be discarded after using three or four times. Where this is done the duration of the treatment for each consecutive lot should be increased 15 minutes. After the potatoes have been treated they should be spread out so as to dry rapidly.

Formaldehyde Treatment

Formaldehyde 1 pint (pound)
Water 30 gal.

Treat uncut seed.

Duration of treatment 1/2 to 1 1/2 hours.

This solution may be used eight or ten times without renewal. The volume should be maintained, however, by the addition of stock solution made up as given above.

The Hot Formaldehyde Treatment.

The Iowa Agricultural Experiment Station has developed an improved method of seed treatment that has proved very satisfactory. The method is as follows:

Formaldehyde 2 pints
Water 30 gallons
Dip 2 minutes at 118 degrees to 122 degrees F. Pile 6 to 8 inches deep and cover with wet sacks for 60 minutes and then allow to dry.

If this method is adopted the solution should not be allowed to get warmer than 122 degrees, since too hot a solution will injure the tubers. A temperature below 118 degrees will not give satisfactory results.—N. J. Circular 140.

When to Cut Hay

Grass cut when it first heads out, when it is real green, yields hay of which more than 8% is protein.

Grass cut just after it heads out is tender and extremely palatable.

Fields cut green yield two crops, usually, of splendid cow hay.

Dairy cows in milk fed early cut stock hay require a lighter grain ration containing far less protein.

To get this good hay, start so as to be through before the last field is ripe.

Grass which has gone to seed yields hay of which less than 4% is protein.

Grass cut after it has gone to seed is woody and not palatable.

Fields cut late yield one crop of wretched cow hay.

Dairy cows in milk fed late cut stock hay require a heavy grain ration high in protein.

Pointers on Weed Control

Sow clean seed. If you are in doubt about the purity of the seed, have a sample analyzed by the Pennsylvania Department of Agriculture.

Allow no weeds to mature seeds.

Starve underground portions of biennial and perennial weeds by keeping all leafy parts cut off closely to the ground.

Rotate crops. Clean cultivation will assist greatly in keeping the farm clean of most weeds.

Follow out a definite method of attack on weeds and do not stop until every evidence of the weed is gone.

Keep weeds out of fence rows and waste places. These are common sources of infestation for adjoining cultivated areas.

Why Crops Should Be Rotated

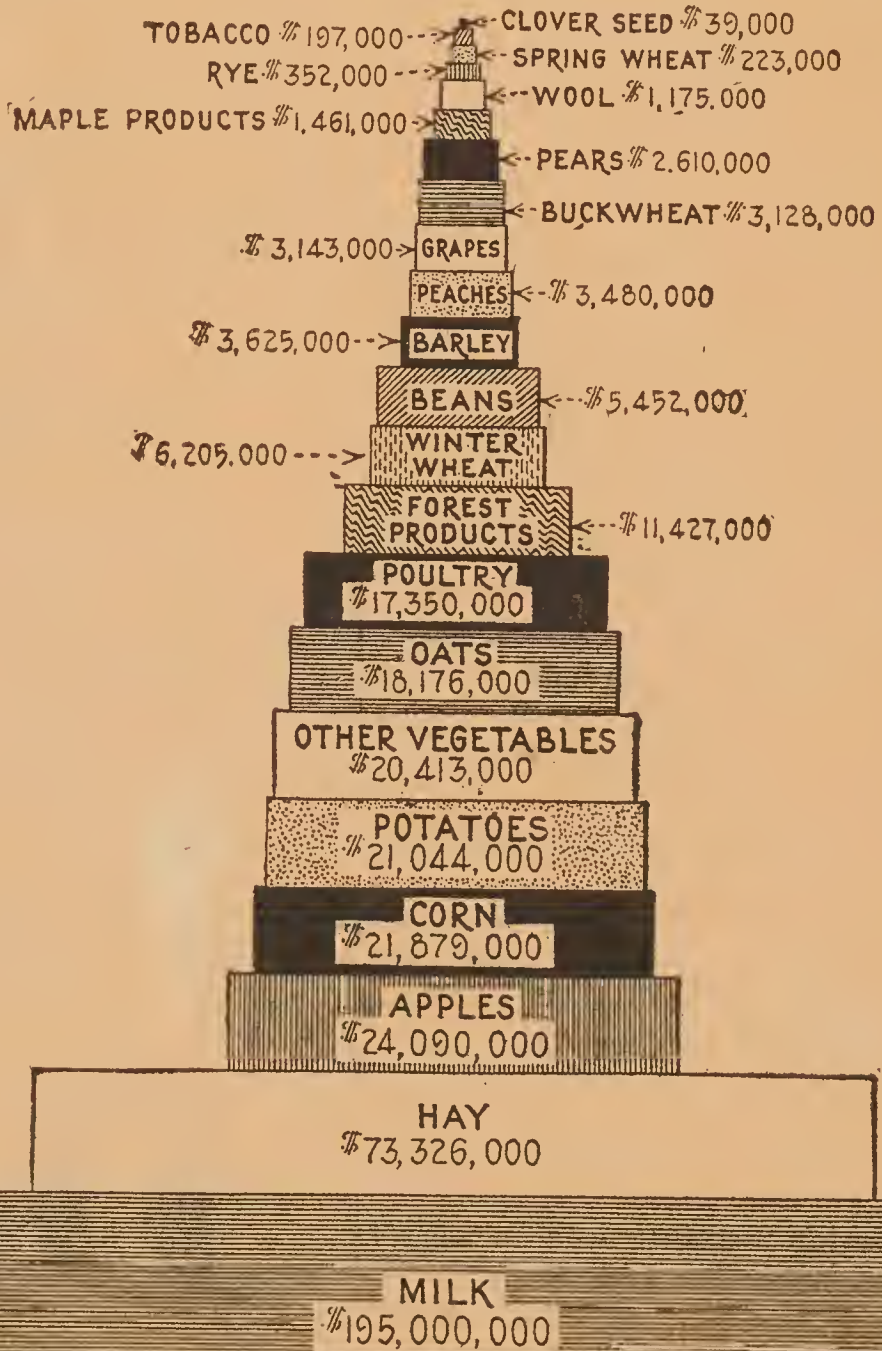
1. Because it is easier to control insects and plant diseases.

2. Because weeds are less troublesome.

3. Because it aids in maintaining the right amount of vegetable matter in the soil.

4. Because it keeps the soil in better tilth and in a more fertile condition.

New York—a Leading Agricultural State



The Outlook for Farming in 1929

(Continued from Page 3)

lower than during the last 10 years, but with the large number of trees now in orchards the possibility of heavy production and low prices will continue.

Apple producers in New York and other northeastern states are faced with heavy competition both from the western boxed apple states and from Virginia. Those who have studied the problem recommend a program of very careful grading and packing in order to increase the demand for eastern grown apples.

While this is not in time to expand production to a marked degree yet it takes a long time for an apple tree to get into bearing and moderate plantings on the part of those who understand the business thoroughly are likely to result profitably.

Peaches and Grapes.

The outlook is for continued heavy production of peaches for the next few seasons, whenever weather conditions are favorable.

Heavy production of grapes in the West is in prospect for several years to come. It appears that any probable immediate increase in consumption will be too limited to aid in marketing the crop unless aided by an immediate reduction in acreage, particularly in California.

The outlook for grape producers in the Chautauqua belt and Finger Lakes region is not especially bright due to extremely heavy competition from the west. It would not seem a favorable time for expansion but rather for close attention to grading and marketing in order to get best possible returns for the acreage already in production.

Potatoes.

Potato growers are now planning to plant an acreage 11 per cent smaller than they planted last year, indicating the probability of a harvested acreage slightly below that of 1927. If average weather conditions are experienced this season, and the yield follows the trend of recent years, a yield of about 117 bushels per acre must be expected. If this yield is secured on an acreage 11 per cent below that available for harvest in 1928, production will be around 400 million bushels. Considering the reduced outlet for early potatoes because of stocks on hand, this would be a sufficient supply.

A year of low prices has frequently been followed by a year of low production and high prices. The ideal, if it could be reached, would be to have a uniform production year after year of about 3½ bushels per capita. In American Agriculturist territory we believe that the safest policy is to plant the usual acreage.

Over a period of years the returns to the man who grows potatoes efficiently have been increasing.

A moderate increase in acreage of sweet potatoes and some increase in yield are to be expected but nothing in the situation indicates the probability of the serious over-planting of sweet potatoes that occurred in 1927.

Beans.

An average yield of beans in 1929 on an acreage 10 per cent greater than that harvested in 1928 would produce about the supply needed, provided such increased acreage is properly apportioned among the different classes, according to demand. A greater acreage increase, or a yield much above average, might put the market on an export basis with drastic price reductions.

Hay.

Hay prices for the 1929 crop may not average as high as for the 1928 crop, but will probably be higher than those for 1927, if yields and quality in 1929 are average and if production is well distributed in the principal surplus producing hay areas. The present high prices for hay were caused principally by a shortage in the important shipping States rather than by a reduction in the crop as a whole. There is ample evidence that pro-

(Continued on Page 42)

Potato Yield Increased 100 Bu. per Acre with "AA QUALITY" Fertilizer

IN a season like last, when potato prices are out of line, it takes a big yield of No. One quality to come out ahead. The experience of Smith-Canastota, Inc., which operates the Sky High Farm, Canastota, Madison Co., N. Y., shows how "AA QUALITY" Fertilizers safeguard profits in an off-price season and ensure extra profits in seasons when potato prices are what they should be. Read the following letter from Mr. J. H. Coulter, Treasurer of Smith-Canastota, Inc.:

This season we grew 5 acres of potatoes, which produced a yield as high as 550 bu. to the acre and on the 5 acres averaged better than 400 bu. to the acre.

In this 5-acre field we set aside an experimental plot of ½ acre. The plot did not receive any fertilizer. The yield and quality on this plot were so poor we did not feel that it would pay for the cost of harvesting, therefore we did not dig the crop. The other 4½ acres received an application of 1,600 lbs. of "AA QUALITY" Fertilizer per acre, which was entirely responsible for the high yield, as the same care was given to both plots.

We have used your Fertilizers for the past 3 years, and during the past season used 87 tons. Previous to that time we used various other makes but discontinued their use in favor of "AA QUALITY."

Comparing the yield of our potatoes with potato crops grown in this section on other makes of fertilizer, we find we have an increase in yield of 100 bu. to the acre.

SMITH-CANASTOTA, INC.,

Oct. 16, 1928.

Per J. H. Coulter, Treas.

Note particularly what Mr. Coulter says about increased yields obtained with "AA QUALITY" Fertilizer. Hundreds of farmers have written similar letters, covering every crop grown in this part of the country. Take beans, for instance. Mr. Edmund Chadwick, of Rock Stream, N. Y., tells of a record crop which was planted, harvested and sold in three months. His letter follows:

My beans were planted July 4, 1928, about five weeks later than beans are usually planted in this section. The crop was planted, harvested and sold within three months, which is a record-breaker. The crop yielded 24 bu. per acre, and sold for \$8.50 per bu.

Your "AA QUALITY" Fertilizer deserves full credit for the phenomenal crop. I am convinced that your fertilizer is the best on the market.

Oct. 26, 1928.

EDMUND CHADWICK.

Every farmer who wants to make the most profit out of his crops should act on these facts. "AA QUALITY" Fertilizers contain the choicest plant-food materials, scientifically blended, mixed and cured to assure perfect mechanical condition.

Larger yields of better-quality crops—and bigger profits—make "AA QUALITY" Fertilizers by all odds the cheapest you can possibly buy.

See the nearest "AA QUALITY" dealer at once or write us for quotations.



Above is Mr. J. H. Coulter, of Smith-Canastota, Inc., Canastota, Madison Co., N. Y., who authorizes the statement that "AA QUALITY" Fertilizer produced 100 bu. more potatoes per acre than were grown with other makes of fertilizer.

Long Island Grower Gets Big Yield. . . Messrs. Andrew Pierson Strong and Stanley Talmage Strong, of Wainscott, Suffolk Co., L. I., write:

We planted about 70 acres in potatoes this season and averaged about 300 bu. per acre of fine-quality Green Mountain Potatoes. We used "AA QUALITY" Fertilizer at the rate of 2,500 lbs. per acre. On one field of 20 acres, which by the way has been planted in potatoes continuously for over twenty years (with exception of one year) we obtained the excellent yield of 350 bu. per acre. Manure has never been used on this field during the entire 20 years. Nothing but "AA QUALITY" Fertilizer. ANDREW PIERSON STRONG, Oct. 11, 1928 STANLEY TALMAGE STRONG

19¼ tons of silage corn per acre, 17 feet high. . . Blair Bros., of Mooers, Clinton Co., N. Y., write:

For 12 years we have used "AA QUALITY" Fertilizer; prior to that date we used other makes of fertilizer. We prefer "AA QUALITY" because it produces better crops. For the past two years we have used AGRICO for Corn ("AA QUALITY") and it sure has produced the best crops of corn we ever raised. This year we raised 19¼ tons of ensilage corn per acre. Some of the corn measured 17 feet in height. Oct. 12, 1928. BLAIR BROS.

Our "Agricultural Service Bureau," under the direction of Dr. H. J. Wheeler, formerly Director of the Rhode Island Agricultural Experiment Station, will be glad to answer inquiries about crops, soil or fertilizers. Send for our Booklets. Please state the crops in which you are interested.

"AA QUALITY" FERTILIZERS



Manufactured only by

The American Agricultural Chemical Company

Executive Offices:

420 Lexington Avenue, New York

Here is a Partner to help you make more MONEY

THIS is a special advertisement to apple farmers who have never used Chilean Nitrate of Soda to fertilize their crops. You may be making good crops...but Chilean Nitrate will help you to make better ones.

You may be making money on your farm, but Chilean Nitrate will help you to make more.

For Example:

"We have used Chilean Nitrate since we planted our trees. They have made wonderful growth, being at least 5 years ahead of their age in size; and we have had heavy yields since the orchards came into bearing. Our McIntosh Red apple trees have not failed to give us a crop every year. Of course, some credit is due to heavy mulch of hay spread under the trees every year; then the Chilean Nitrate is broadcast on the mulch, so the trees get full benefit of the nitrate, instead of growing rank grass."

PARKER BROTHERS, Fiskdale, Mass.

Chilean Nitrate is the best partner a farmer can have. It is the natural nitrogen fertilizer—not synthetic—the good old "Soda" that 800,000 farmers used last year.

Ask your county agent about Chilean Nitrate. He is familiar with many demonstrations conducted here last year. Each demonstration was official and impartial.

Order your supply now. If you don't know where and how to get it, simply write to the address below. Your inquiry will have prompt attention.

Valuable Book—Free

Our new 44-page book, "How to Use Chilean Nitrate of Soda" tells how to fertilize apples and all other crops. It is free. Ask for Book No. 1 or tear out this ad and mail it with your name and address written on the margin.

Chilean Nitrate of Soda

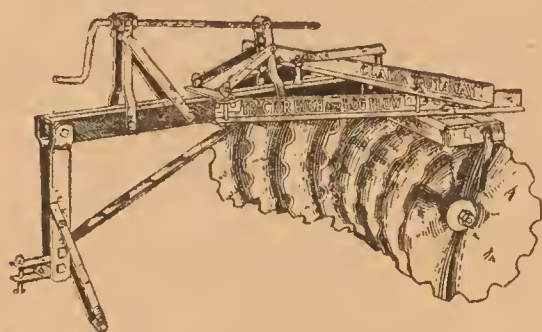
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Address



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FORREST SOY BEANS—The Wilson—a small seeded variety with fine stems, matures late, is excellent for green manure, silage and hay. The Manchu has large seeds and coarse stems; matures early, may be grown for silage, alone, or in mixture with corn.

FORREST GOLD STANDARD SWEET CLOVER—An excellent milk producer and the best pasturage grown. Thrives in almost any climate or soil condition. Its deep tap root stores up reserve food, enabling plant to make rapid and vigorous growth early in the spring. Scarified seed.

Your truck garden can be more profitable if you sow Forrest's Vegetable Seeds. Purity and germinating qualities tested by years of successful crops. We also handle everything recommended by the New York State Department of Agriculture, Cornell University, Ithaca, N. Y.

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Our 31st Seed Annual
Now Ready.

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your copy



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With the A. A. Vegetable Grower



Recommended Varieties for the Home Garden

Asparagus—Palmetto, Washington.
Bean, green snap—Stringless Greenpod, Refugee.

Bean, wax snap—Pencilpod, Brittle Wax, Refugee Wax.

Bean, green shell—Dwarf Horticultural.

Beet—Crosby's Egyptian, Detroit Dark Red.

Brussels sprouts—Long Island Improved.

Cabbage—Early Jersey Wakefield, Copenhagen Market, Danish Ballhead, Savoy Red.

Carrot—Chantenay, Danvers.

Cauliflower—Snowball, Erfurt.

Celery—Golden Self-Blanching, Easy Blanching, Giant Pascal, Emperor.

Chard—Lucullus.

Cucumber—Davis Perfect.

Eggplant—Black Beauty, New York Purple.

Endive—Broad Leaved Batavian, White Curled.

Kale—Dwarf Scotch.

Kohl-rabi—Early White Vienna, Early Purple Vienna.

Lettuce, leaf—Grand Rapids, Prize Head.

Lettuce, crisp-head—New York or Wonderful, Iceberg.

Lettuce, butter-head—May King, Big Boston, Salamander.

Lettuce, romaine or cos—Paris White.

Leek—American Flag.

Muskmelon—Bender's Surprise, Emerald Gem, Hackensack.

Onion, green—Egyptian or Tree, White Set.

Onion, dry bulbs—Yellow Globe Danvers, Southport Red, Yellow and White Globe.

Parsley—Moss Curled.

Parsnip—Guerande or Hollow Crown.

Peas—Alaska, Gradus, Telephone.

Pepper, sweet—Bull Nose, Ruby King.

Potato—Early Rose, Irish Cobbler, Early Ohio, Early Six-Weeks, Green Mountain, Rural New Yorker No. 2.

Radish—Early Scarlet Globe, Hail Stone, Icicle, Long Scarlet Short Top.

Rhubarb—Victoria.

Rutabaga—American Purple Top or Long Island Improved.

Salsify—Sandwich Island.

Spinach—Bloomsdale, Long Standing, King of Denmark, New Zealand (for summer).

Squash, summer—Bush Scallop or Pattypan.

Squash, winter—Hubbard, Delicious.

Sweet Corn—Golden Bantam, Early Crosby, Stowell's Evergreen.

Tomato—Bonny Best, Earliana, Globe, Marglobe.

Turnip—Extra Early Milan, Purple Top, Strap Leaf, Golden Ball.

Watermelon—Kleckley Sweets (late) and Fordhook Early.

hours after transplanting. If the above precautions are heeded no losses should occur.—Pa. Ext. Bulletin 76.

How to Force Rhubarb

To grow rhubarb in winter, dig up a few of the old roots and let them remain out in the open until a freeze or two hits them.

Do not allow them to remain out very long, but dig during cold weather and let them stay out a night or two and freeze. Then put them in the cellar or some other dark place that is cool and plant 5 to 8 inches deep in loose moist soil. If handled this way, shoots will come out in a comparatively short time and will be found as delicious and palatable as the shoots that grow in the open during the spring. These roots will be of no further use after forcing them this way in the winter.

Proper Conditions for Storing Vegetables

Those requiring a temperature range of 30 to 35 degrees F and a fairly moist atmosphere are:

Beets	Horseradish
Brussel Sprouts	Kohlrabi
Cabbage	Leek
Carrots	Parsnip
Cauliflower	Potato
Celeriac	Rutabaga
Celery	Salsify
French Endive	Turnips

Those requiring a temperature range of 32 to 35 degrees F and a dry atmosphere are: Garlic, Onions.

Those requiring a temperature range of 50 to 55 degrees F and a dry atmosphere are:

Sweet Potatoes, Dry
Tomatoes require 60 degrees to 65 degrees F and dry atmosphere.
Peppers—medium to dry
Pumpkins, Dry
Squash, Dry

—Connecticut Bulletin 77.

How to Determine the Number of Plants Per Acre

The question is often asked how many plants are required to set an acre.

It is very simple to figure this for any planting distance. The distance in feet between the rows is multiplied by the distance between the plants. In the case of cabbage where it is set 3 by 3 feet, we would multiply 3 feet between the rows by 3 feet, the space between the plants in the row, giving us 9 square feet.

This figure is divided into 43,560 square feet (the number of square feet in an acre). Cabbage set 3 feet by 3 would give us, 4,800 plants per acre, assuming that the acre is full to the margin. A square acre contains a little less than 209 feet on all sides.

How to Transplant Properly

1. The plants should be well watered before they are disturbed.

2. If possible a ball of earth should be kept about the roots as the plants are lifted, or the roots should be dipped in thick muddy water.

3. A portion of the foliage may be cut or torn from the plant at transplanting time, if the weather is very hot, to reduce the danger from wilting, particularly with late cabbage and late celery.

4. Water should be added to the hole before setting the plant, if the soil is dry.

5. Moist soil should be firmly packed around the roots of the plant and dry soil scattered loosely on the surface of the ground.

6. Protection from direct sunlight, to avoid wilting, may be given by shading the plant for a few days after transplanting.

7. The best time for transplanting is cloudy days or late afternoons. Many plants are lost because they wilt beyond recovery during the first 24

How to Build and Manage a Hotbed

There are two types of hotbeds in use: the surface bed, or one in which the frame is placed on a flat pile of manure; and the pit bed, in which the manure and frame are placed in an excavation. The pit bed is more permanent and satisfactory.

The hotbed is preferably built in a protected place near the house, but well out of the shade of the trees and buildings, near a water supply, and in a well-drained spot facing south.

In constructing the hotbed, it is best to dig the pit in the fall and fill it with mulch to keep it from freezing. The pit should be 18 inches deep and wide enough to take care of the frame, or about 6 feet 4 inches. Drainage may be aided by digging a trench around the pit.

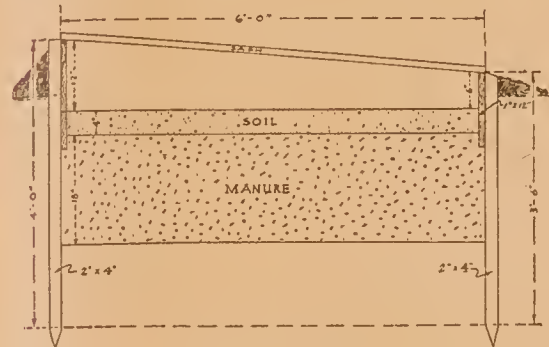
If a permanent bed is desired the walls may be lined with boards, bricks, (Continued On Opposite Page)

or concrete, and built to include the frame, this merely requiring filling with manure and soil to the proper depth each year.

The frame should be made to fit snugly at all edges, so that the heat may be conserved. The front or south side of the bed should be 6 inches lower than the opposite side, permitting a fuller use of the sunlight.

The sash may be of any size, altho if they are to be bought it will be best to buy the standard size, 6 feet by 3 feet. Sash may be obtained with either a single or double glass. The double glass, having a dead air space between them, conserve the heat, and are preferable for early hotbeds, but are harder to clean and heavier to handle than the single-glazed sash.

Fresh horse manure without much straw or litter should be used for heating the bed. Two weeks before time of seeding a sufficient quantity is thrown



Cross section of a hotbed.

up in a pile. This is forked over every few days and the colder manure thrown towards the center, being allowed to heat evenly without burning. After the manure has heated thru, it should be spread evenly in the pit, each forkful being shaken out thoroly until there is sufficient to make a bed 18 inches thick when tramped down. In this tramping careful attention is paid to the corners to prevent uneven settling after the seed has been sown. After all the manure has been tramped fairly solid, it is advisable to shake in from 3 to 4 inches of loose straw, as this gives an equal distribution of heat and does away with "hot spots" in the bed.

After the soil is in and the sash are in place the temperature will run very high. A thermometer should be placed in the bed, and when the temperature recedes to 85 degrees, the seed may be planted.

The U. S. Standard Container Act

The standard container act of 1928 passed by the Federal Congress fixes the standard for hampers, round stave baskets, and splint baskets for fruits and vegetables and for other purposes.

This new legislation defines standard hampers and round stave baskets for fruits and vegetables to be of the following capacity: $\frac{1}{8}$ bushel, $\frac{1}{4}$ bushel, $\frac{1}{2}$ bushel, $\frac{3}{8}$ bushel, $\frac{3}{4}$ bushel, 1 bushel, $1\frac{1}{4}$ bushels, $1\frac{1}{2}$ bushels, and 2 bushels. For the purpose of the act a bushel, standard dry measure, has a capacity of 2,150.42 cubic inches.

This act describes standard splint baskets for fruits and vegetables to be of 4 quart, 8 quart, 12 quart, 24 quart, and 32 quart baskets. The standard quart, dry measure, for the purpose of this act has a capacity of 67.2 cubic inches.

The enforcement of this act is in the Bureau of Agricultural Economics of the United States Department of Agriculture, and on and after November 1, 1929, it will be unlawful for any manufacturer to sell or offer for sale hampers, round-stave baskets, or splint baskets for fruits and vegetables that do not comply with this act. This applies to both intrastate and interstate shipments.

This law was brought about because of the fact that many containers were made which gave to the untrained eye the appearance of having a greater capacity than they actually did. For instance, a $\frac{7}{8}$ -bushel hamper is not readily distinguishable from a bushel hamper to the untrained eye.

Those wishing complete information concerning these regulations may obtain it by writing to the Department of Agriculture, Washington, D. C.

How to Succeed With Your Roadside Market

For a successful roadside market the needs are as follows: A good location, an attractive method of display, carefully graded and well packed products, a fair price, a sufficient number of buyers, an even supply and a sufficient quantity of products so that the volume of business will be large enough to make it pay. A market which has not enough products to sell or a sufficient number of buyers often costs more to run than it is worth. Too many markets along a road tend to cheapen and handicap all. It is better to combine at a few good points and have a larger volume of business at a lower overhead cost, with each farmer paying his share. Consumers often compare the prices of inferior, poorly packed produce in the city with the prices of higher quality, well packed produce in the country and feel that the country prices are unjust. To be fair to the roadside market, care should be taken to consider the quality, grade, pack and freshness of the products offered for sale.—New Jersey Circular 77.

Estimated Garden Seed Requirements of a Family of Five

Crop	No. Feet of Row	Approximate Yield from 100-ft. Row
Asparagus	100 ft.	100 lbs.
Bush beans (4 plantings)	50 ft. each planting	1½ bu. (pods)
Bush limas (1 planting)	400 ft.	15 qts. (shelled)
Beets	75 ft. early, 100 ft. late	2 bu.
Cabbage	50 ft. early, 100 ft. late	50 heads
Carrot	50 ft. early, 100 ft. late	2 bu.
Cauliflower, late	50 ft.	50 heads
Celery	50 ft. early, 100 ft. late	200 stalks
Chard	10 ft.	
Chicory	100 ft.	2 1/2 bu. (roots)
Chinese cabbage	25 ft.	100 heads
Chives	5 ft.	
Corn (6 plantings)	50 hills each	8 doz.
Cucumber	10 hills	1 1/2 bu.
Egg plant	40 ft.	150 fruit
Horseradish	15 ft.	70 lbs.
Kale	20 ft.	3 bu.
Kohl Rabi	25 ft. early, 50 ft. late	
Lettuce	50 ft.	
Muskmelon	10 hills	60 fruits
New Zealand Spinach	10 ft.	
Onion (sets) green	100 ft.	
Onion (sets or seed) mature	100 ft.	1 1/2 bu.
Parsley	5 ft.	
Parsnips	40 ft.	3 bu.
Peas	300 ft. (more for canning)	2 bu. (pods)
Peppers	25 ft.	400 fruit
Potatoes	100 ft. early, 1400 ft. (1/10 A) late	1 1/2 bu.
Radish	150 ft.	
Rhubarb	15 ft.	
Rutabaga	100 ft.	2 bu.
Salsify	100 ft.	2 bu.
Spinach	50 ft. at each of 3 plantings	2 1/2 bu.
Squash	8 hills summer, 10 hills late	
Tomato	50 plants (enough for canning)	10 bu. (staked or 6 bu. not staked)
Turnip	50 ft. early, 100 ft. late	2 bu.

COMPARE

the

Crop QUALITY

THE little additional cost of Mapes Manures is returned to you many times over in crops of better quality which bring better prices.

Since 1847, it has been a guiding principle in the making of Mapes Manures that the crop can tell the value of fertilizing materials better than the chemical laboratory. We go to the crop; we ask it what materials it likes best; we put these materials into Mapes Manures.

Two fertilizers of the same analysis may give widely different results because of the difference in materials from which they are compounded. Mapes results are so remarkable, so outstanding, so evident, that you have only to see them to be convinced. Mapes Manures "cost little more—worth much more." They are first made right, then priced as low as possible.

Try Mapes this year. Compare the results—yield, quality, profits—with the results from any other fertilizer you can buy. Write today for list of crop brands and prices—also for Special Trial Offer.

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270 Madison Ave., New York, N. Y.

Without obligating me in any way, please send me your list of crop brands and prices, and Special Trial Offer.

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Potato Planters

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For all OLD PLANTERS of THESE MAKES

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LE ROY, N. Y.

OATS

SENSATION—One of the most productive oats in cultivation. 75 bu. and upward per acre are frequent, with large, white, meaty grains weighing 44-46 lbs. per measured bu. of the highest quality. We are making an exceptionally low price in quantities. You should by all means try these oats. Also Early Clarage and White Cap Seed Corn, Bearded and Smooth Barley, Soy Beans and Sweet Clover. Write us for samples and prices.

THEO. BURT & SONS Box 85 Melrose, Ohio

Certified Seed Potatoes

Green Mountains, Irish Cobblers, Smooth Rurals and Russet Rurals—College inspected. Satisfaction upon arrival guaranteed. Write for prices. We pay the freight.

New York Co-Op. Seed Potato Ass'n Inc., Utica, N. Y.

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Potatoes - Oats - Barley - Silage Corn
Husking Corn - Cabbage

From HIGH YIELDING, TESTED STRAINS. Inspected for disease-freedom and purity.

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Introductory Offer for Am. Agr. Readers
Gorgeous Roses, field grown.
Los Angeles—F. K. Drauschki—Mrs. J. Laing—3 for \$1.00. These Roses have already bloomed in our Nurseries.
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Catalpa (Umbrella Tree)
5 to 6 ft. Specimens.....\$1.00

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All First class, Dependable and Inspected Trees. Apples, Pears & Plums, 5 to 7 ft. 50 trees for \$15.00. All leading varieties including New Cortland.

Cash Must Accompany Order—Free Catalog

Box 257 Geneva, N. Y.

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Wm. Henry Maule, Box 7, Philadelphia, Pa.

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Full of vigor. Best kinds for home and market. 25 Washington 2-year strong Roots, \$1.00, postpaid. 100 Roots, \$3.00. Write for catalog of Garden Roots, Perennials, Trees, Shrubs, Plants, etc.

L.J. FARMER, Box 241, Pulaski, N.Y.

What the Fruit Grower Wants to Know

Information About Insecticides

Poisons are used to control most insects that have biting mouth parts so they actually eat plant leaves.

Paris Green.

Paris green is technically known as an aceto-arsenate of copper. Arsenic compounds that are soluble in water will burn foliage. The Federal Insecticide Act requires that paris green should contain at least 50% of arsenious oxide and must not contain arsenic compounds that are soluble in water to more than equal 3½% of arsenious oxide.

Paris green may be applied either as a dust or mixed with water. Flour, air slaked lime, road dust or sifted wood ashes are used to dilute paris green when applied as a dust. The amount to use depends on the insect and the plant but usually 1 part of paris green to 50 parts of diluting material is recommended.

When applied as a spray, 1 pound of paris green is recommended to 200-250 gallons of water. Adding 2 pounds of hydrated lime to each pound of paris green will lessen foliage burning. Paris green is not recommended for stone fruits as they are especially subject to foliage burning. Since paris green is not dissolved in water, it is necessary to keep the spray stirred up while applying.

Lead Arsenate.

Lead arsenate can be purchased in two forms—paste and powder. The paste form is made by mixing the powder with an equal amount of water. This means that paste lead arsenate contains about half as much arsenic to the pound as the powder.

The chief advantage of the paste form is that it does not settle out of water so quickly when it is mixed for spraying.

When mixing lead arsenate with

water, the correct way is to mix thoroughly with a small amount of water. This is especially important with the powder form. Lead arsenate does not burn foliage and it sticks to foliage better than paris green.

Other Compounds of Arsenic.

London purple is a by-product in the manufacture of dyes. The composition is variable and the per cent of soluble arsenic is likely to be high. When used, lime is always needed to avoid burning. White arsenic can be used to manufacture an insecticide by combining with sal soda. White arsenic is very poisonous and must be used with care.

Hellebore and Pyrethrum.

Hellebore is a vegetable poison not dangerous to humans and is commonly used on ripening fruits, especially to kill currant worms. It may be applied as a spray, 4 oz. to 3 gallons of water or it can be dusted on without dilution. Hellebore loses strength with age so it should always be purchased fresh.

Pyrethrum is a light brown powder made from the heads of a flower. It is non-poisonous to people. It soon loses its value when exposed to the air.

When used in solution it is dissolved in water—1 oz. to 3 gallons. Used dry, it is dusted on without dilution for plant lice. It is best applied when the leaves are wet with dew. It can be diluted with from 6-30 parts of flour or similar dust for insects easy to poison.

Making Bordeaux Mixture

Despite a too prevalent idea that the home making of bordeaux mixture is a disagreeable and complicated process, it can be shown that neither is true, except that all spraying and dusting are not the most pleasant tasks.

The methods of preparing stock solutions and suspensions of copper and lime are by no means new, having persisted for many years. Two 50-gallon barrels are necessary. Into each is run 40 gallons of water. Into one is dumped 40 pounds of fresh, hydrated lime. This should not have been carried over by the dealer from the previous year. In the other barrel is suspended just below the surface of the water in an old sack 40 pounds of copper sulfate crystals. If the crystals have been pulverized the copper will go into solution much quicker. However, 12 or 15 hours will suffice to bring the crystals into solution. To make the 4-4-50 mixture, the spray barrel or tank is filled to three fourths capacity, when 4 gallons of the copper water is added, after thoroughly stirring. Then the lime and water are well mixed, and 4 gallons are added to the tank as the whole is thoroughly agitated, either by starting the engine or by a hand paddle. If a poison is to be used, it is now added after it has been worked into a thin, smooth paste in a little water. Lastly the

spreader is put in the mixture.—Geneva Experiment Station.

Contact Insecticides

Many insects have sucking mouth parts. These insects do not eat the leaves and so they cannot be poisoned. Some spray material must be used that will kill by contact with their bodies.

Lime Sulphur.

Lime sulphur is used both as an insecticide and is a fungicide to control certain plant diseases. As the name indicates, it is made of lime and sulphur and is manufactured in the following forms:

- 1:—Home-made dilute lime sulphur.
- 2:—Home-made concentrated lime sulphur.
- 3:—Commercial Concentrated lime sulphur.
- 4:—Self boiled lime sulphur.

The home-made dilute can be made by slaking 20 lbs. of quicklime, then boiling it with 15 lbs. of flowers of sulphur and 50 gallons of water for

(Continued On Opposite Page)

Grape Spray Schedule

Chautauqua Region**

Furnished by N. Y. College of Agriculture and approved by N. Y. Agricultural Experiment Station

Time of Application	Materials	Enemy
Just as soon as the fruit has set		
Make special effort to place spray on the clusters	Bordeaux mixture, 4-4-50 Arsenate of lead, 1½ lbs.* Resin fish oil soap, 1½ lbs.	Berry-moth Powdery mildew
This is a special berry-moth spray and can be omitted if the pest is not present		
When the root-worm beetles first appear in numbers	Same as above	Root-worm Berry-moth Powdery mildew
Ten days or two weeks later	Same as above	Root-worm Berry-moth Powdery mildew
When the maximum number of leaf-hopper nymphs are present, usually between July 12 and 20.	Nicotine sulphate, ¾ pint Resin fish oil soap, 3 lbs. or Hydrated lime, 8 lbs. Water to make 100 gallons	Leaf-hopper
During certain seasons this spray can be combined with the preceding		
Special rose chafer spray	Confectioners glucose, 25 lbs. or cheap molasses, 2 gals. Arsenate of lead, 5 lbs. Water to make 100 gallons	Rose chafer
Apply as soon as the beetles appear		

*The amount of arsenate of lead is given for the powdered form; if paste is used, twice the amount is required.

**A spray schedule for the Finger Lakes region may be secured from the New York State College of Agriculture, Ithaca, N. Y.

Peach Spray Schedule

Furnished by N. Y. College of Agriculture and approved by N. Y. Agricultural Experiment Station

Time of Application	Spray Mixtures	Enemy	Dusting Mixtures
Late fall or early spring, before buds swell.	If scale is abundant use Lime-sulfur, 11 gallons Water to make 100 gals. If scale is not important use: Lime-sulfur, 6½ gals. Water to make 100 gals.	San Jose scale Leaf curl	Dust not advised
When blossoms show pink	Wettable sulfur (dry-mix)	Blossom blight Brown-rot	Apply dusting sulfur
When shucks are falling	Wettable sulfur (dry-mix) And arsenate of lead* 2 pounds in 100 gallons	Brown-rot Scab Curculio	Apply 90-10 sulfur-lead arsenate dust
Two or three weeks after shucks fall	Wettable sulfur (dry-mix)	Brown-rot Scab	Apply dusting sulfur
Two to four weeks before fruit ripens	Wettable sulfur (dry-mix)	Brown-rot Scab	Apply dusting sulfur

*The amount of arsenate of lead is given for powder form; if paste form is used, twice as much is required.

Wettable sulfur (dry-mix) is prepared as follows:

- | | |
|-------------------|-------------------------------|
| Superfine sulfur | 16 lbs. |
| Hydrated lime | 8 lbs. for 100 gals. of water |
| Calcium caseinate | 8 oz. |

Mix the materials dry, then add to the water in the spray tank while the agitator is running.

Apple Spray Schedule

Furnished by N. Y. College of Agriculture and approved by N. Y. Agricultural Experiment Station

Time of Application	Spray Mixtures	Enemy	Dusting Mixtures
Delayed Dormant	Lime-sulfur, 2½ gals. Lead arsenate, 2½ lbs.* Nicotine sulfate, ¾ pt. Water to make 100 gals. If scale is present use 11 gals. lime-sulfur	Scab Scale Blister mite Bud moth Leaf-roller Case bearers Aphids	90-10 sulfur-lead arsenate dust. No satisfactory dust for scale or blister mite. For rosy aphid see below
When leaves of blossom buds are out ¼ to ½ inch			
Pre-blossom			
When buds of blossom cluster are separated or earlier if a rainy period threatens.	Lime-sulfur, 2½ gals. Lead arsenate, 2½ lbs.* Water to make 100 gals.	Scab Green fruit worms Bud moth Leaf-roller Case bearers	90-10 sulfur-lead arsenate dust.† If conditions are favorable for a bad outbreak of scab, spray as much as possible, using dust to complete the operation on time. In combating rosy aphid with dust mixtures the most promising means of control is a heavy application of a mixture containing not less than 2 per cent nicotine as blossom buds begin to show pink.
Two pre-blossom applications may be needed.			
Calyx			
When the last of the petals are falling	Lime-sulfur, 2½ gals. Lead arsenate, 2½ lbs.* Nicotine sulfate, 1 pt. Water to make 100 gals. (Omit nicotine unless red bug is present.)	Scab Codling moth Green fruit worms Bud moth Curculio Lesser apple worm Red bugs	90-10 sulfur-lead arsenate dust.‡ For red bugs, use a 2 per cent nicotine dust. If conditions are favorable for a destructive outbreak of scab, spray as much as possible, using dust in a supplementary capacity.
Later sprays			
To be determined by weather conditions affecting the development of scab and codling moth	Lime-sulfur, 2½ gals.** Lead arsenate, 2½ lbs.* Water to make 100 gals.	Codling moth Curculio Lesser apple worm Scab Apple maggot	Later applications with 90-10 sulfur-lead arsenate dust.‡ During prolonged rainy periods it is advisable to make applications of dust at shorter intervals than indicated for spray mixtures.

*Double the amount of lead arsenate if paste is used.

†Copper lime dust may cause russetting especially at the calyx application. At this time use spray or 90-10 sulfur-lead arsenate dust.

**If apprehensive of spray injury to apple foliage the most satisfactory alternative for lime-sulfur solution is wettable sulfur (dry-mix) spray. The formula is as follows:

- | | |
|-------------------|---------------------------------|
| Superfine sulfur | 16 lbs. |
| Hydrated lime | 8 lbs. for 100 gallons of water |
| Calcium caseinate | 8 oz. |

The usual amount of lead arsenate may be added.



With the A. A.
Fruit Grower

(Continued From Opposite Page)
about an hour. This mixture can be applied safely only when the trees are dormant.

The home-made concentrated is made by the same process as the dilute except that 40 lbs. of quicklime are used with 80 lbs. of sulphur and 50 gallons of water. Enough water is added to make up for evaporation during boiling.

Testing Concentrated Lime Sulphur.
After manufacture, the lime sulphur is tested with a Beaume hydrometer and then diluted to a proper strength. (The New York State Experiment Station at Geneva, publishes a bulletin giving a table which shows the proper amount of dilution.)

The commercial concentrated can be purchased and so avoid the trouble of home manufacture.

Self Boiled Lime Sulphur.

Self-boiled lime sulphur is merely a mechanical mixture of the two substances, and the only heat supplied is from the slaking of the lime.

8 lbs. of quicklime are put in a barrel and enough water is added to start slaking.

Add 8 lbs. of flowers of sulphur, stir, and add water as needed. As soon as bubbling has stopped, add water to make 50 gallons.

Tobacco Extracts.

Nicotine sulphate is a commercial product. When used for plant lice it is diluted with from 800-1000 parts of water. (From 1/4 to 1 pt. in 100 gallons of liquid.)

Finely ground tobacco is used as a dust.

Tobacco stems can be steeped at home but the resulting liquid varies in the per cent of nicotine present.

Kerosene Emulsion.

Hard, soft and whale oil soap... 1/2 lbs.
Water 1 gal.
Kerosene 2 gal.

Dissolve soap in hot water, remove

from fire and add kerosene while still hot. Pump the material back into itself for 5 or 10 minutes. If properly made it will not settle out on cooling.

Dilute with from 5-7 parts of water for dormant trees.

Dilute with from 10-15 parts of water for use on foliage.

Bulletins on Insecticides.

Insecticides and Spraying Apparatus—F-908, U. S. D. A., Washington, D. C. The Control of Insect Pests and Plant Diseases—P-283, N. Y. State College of Agriculture, Ithaca, N. Y.

How to Prune Grown Trees

Information—It is impossible to more than give you fundamental principles here. Your college or experiment station have free bulletins on pruning all kinds of fruits, explained in detail or write A. A.

Time—Pruning is best done in the dormant season, preferably late in the winter or early in the spring.

Apple—The principal thing is to get sunlight in the outer thickened parts and the top of a bearing tree should be thinned accordingly. Do not entirely remove the center of the tree as too much exposure may cause sunscald.

Take out some of the limbs about an inch in diameter in order to get better size, quality and less limb rub and to control insects and disease.

Cut out all diseased, dead, and weak branches. Be careful not to leave stubs. Paint wounds larger than three inches.

Peaches—Prune for an open center. Trim the head back each year. The fruit is borne on one-year wood.

Pears—Little pruning is needed.

Cherries—Sour cherry will take a little thinning in the top of the tree to ripen the fruit. The sweet cherry needs little or no pruning.

Pear Spray Schedule

Furnished by N. Y. College of Agriculture and approved by N. Y. Agricultural Experiment Station.

Time of Application	Materials	Enemy
Dormant		
Early in the spring when the adult thrips first appear on the buds, just as the bud scales begin to operate.	Miscible oil, 5 gallons Nicotine sulfate, 1 pint Water to make 100 gallons	Thrips
Cluster Bud		
When cluster buds have separated (Bartlett); when they begin to separate (Kieffer)	Lime sulfur, 11 gallons Water to make 100 gallons	Scale Scab Psylla eggs
Calyx		
Just after petals fall	Lime, 30 to 40 pounds Copper sulfate, 2 pounds Arsenate of lead, 2 1/2 pounds* Nicotine sulfate, 1 pint Water to make 100 gallons See note	Codling Moth psylla nymphs Scab
About two weeks after petals fall	Lime-nicotine dust (2% nicotine) For scab susceptible varieties Bordeaux mixture 3-10-50	Psylla flies Scab
Emergency application in summer when psylla become abundant	Lime, 30 to 40 pounds Copper sulfate, 2 pounds Nicotine sulfate, 1 pint Water to make 100 gallons Lime-nicotine dust (2% nicotine)	Psylla nymphs Scab Psylla flies

*The amount of arsenate of lead is given for powder form; if paste form is used, twice as much is required.

Note: The use of lime-sulphur solution at this time is not advised because of the danger of foliage injury. For those who do not wish to use the lime-copper sulfate mixture the following wettable sulfur (dry mix) spray is suggested:

Hydrated lime 8 lbs.
Superfine sulfur 16 lbs.
Calcium caseinate 8 oz.
For 100 gallons

The material can be mixed dry during the winter or rainy weather and stored for use. It is prepared in the spray tank as follows: Fill the tank half full of water; then, with agitator running, add the dry materials slowly, directing the spray nozzle upon the material until it has disappeared in the water. One pint of nicotine sulfate, 2 1/2 pounds of arsenate of lead and 32 pounds of hydrated lime are then added to each 100 gallons of water.



FERTILIZED PASTURES

cut the feed bill

RECENT investigations of pasture fertilization in this country and abroad show that top-dressing pasture land several times a year with a nitrogen fertilizer results in earlier grass, more luxurious growth, longer grazing periods and grass richer in digestible protein.

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AND



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tried to fool his horse.
He put green goggles on
him and fed him shav-
ings for grass. The horse
died. : : : : :

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Fertilizing the Land

How to Increase the Soil Fertility

1. Control the water supply—drain or irrigate.
2. Give the soil good thorough tillage.
3. Maintain and increase the vegetable matter in the soil.
4. Conserve the manure produced on the farm.
5. Apply lime if the soil needs it.
6. Use commercial fertilizer.

How to Apply Fertilizer to Potatoes

The New Jersey experiment station secured the following results in a test to determine the best method of applying fertilizer to potatoes.

Fertilizer in direct contact with the seed-piece—132 bushels per acre.

Mixed with the soil in the row—152 bushels per acre.

Above the seed with the soil separating—128 bushels per acre.

At sides of seed and on the same plane—173 bushels per acre.

At sides of seed but on lower plane—206 bushels per acre.—N. J. Cir. 140.

Composition of Farm Manure

Barnyard manure is composed of excrements, urine and litter. The amount of plant food in a ton depends upon the amount of water it contains, the kind of litter used, the feed given the animal, and the kind of animal. Average barnyard manure contains per ton:

10 pounds of nitrogen.
6 to 7 pounds of phosphoric acid.
12 to 16 pounds of potash.

To return to the soil all of the plant food removed and some additional, apply five good loads or tons of manure to each acre. By applying more than five tons, the fertility will be increased proportionately.

What Crops Require as to Fertilizers

Root and tuber crops—These crops have a high potash requirement. Turnips respond to liberal applications of phosphorus but carrots show little response. In general roots and tubers respond to phosphorus. As a group, root crops need little nitrogen and too heavy applications will increase top growth at the expense of root development.

Legumes—Due to the ability of legumes, through bacteria associated with them, to obtain nitrogen from the air when properly inoculated, little or no nitrogenous fertilizer is needed. Legumes need plenty of lime, phosphoric acid and potash.

Vegetables—Most vegetables respond well to nitrogen especially leafy vegetables such as spinach and lettuce. Tomatoes and some other fruiting vegetables require less nitrogen.

Cereals and grasses—This group are heavy feeders on all these fertilizer constituents. Where cereals are grown for their seeds phosphoric acid is especially important. Nitrogen gives especially favorable results on grass.

Tree fruits—Orchards respond well to nitrogen. Lime is usually not beneficial. Their deep root system usually makes it possible for them to get plenty of minerals from the soil.

Bush fruits—This group responds to nitrogen but in some cases phosphoric acid and potash also prove profitable.

Losses in Stored Manure

It costs a farmer 53 cents on every ton of manure he lets accumulate in the barnyard, according to the Ohio Agricultural Experiment Station at Wooster.

Crop yields tell the story of the results of manure more clearly than a chemical test. In an experiment at the Ohio station, manure has, for 21

years, been applied to the clover sod in a three-year rotation of corn, wheat and clover.

On one series of plots the manure has been hauled directly from the stall to the field early in winter. For another series of plots an equal weight of manure has been left in a pile in the barnyard for three months before it was spread on the field.

Stable manure produced 23 bushels of corn an acre, 10.5 bushels of wheat, and 1,363 pounds of hay; manure from the barnyard produced an average of 19.5 bushels of corn, 9 bushels of wheat, and 840 pounds of hay. Measured by the average value of crop increase, one ton of yard manure is worth \$2.92, and one ton of stall manure \$3.45.

How Lime Benefits the Soil

1. Lime promotes the growth of beneficial bacteria.
2. It improves the tilth of clay soils.
3. It makes organic matter decay more rapidly.
4. It is used as a plant food.
5. Prevents the action of substances in the soil that act as poisons to plants.
6. Lime makes it easier to grow legumes.

How to Test Soil for Lime Requirements

A number of methods have been worked out by which soil can be tested for lime needs.

1. Weeds indicate need. In a general way it can be suspected that lime is needed where weeds, particularly sorrel and paint brush, flourish and where it is difficult to get a stand of clover.

2. Litmus test. The simplest method of testing soil for acidity is to take a handful of the soil to be tested, moisten it with a solution of potassium nitrate and divide a handful in half and put a piece of sensitive litmus paper between the two portions. Materials for making this test can be secured from the Agronomy Department of the New York State College of Agriculture. The potassium nitrate can be easily purchased from any drug store but the litmus paper usually secured there is not sensitive enough to make a satisfactory test. If the litmus paper turns pink in 30 minutes, indications are that there is a need of lime.

3. Rich-or-poor test. Many of the county farm bureau agents have in their office an apparatus for testing for lime requirements known as the rich or poor test. This, in addition to telling whether the soil needs lime, will indicate roughly the amount of lime required to put it into good condition to grow legumes.

4. Other tests are known as the Veitch test, the Truog test, the Muriatic test and the Ammonia water test.

General Information About Lime

In some sections of the country the underlying rock is pure limestone. This is quarried and ground to a fine powder and sold either in bulk or in sacks. Ground Limestone does not have the high percentage of calcium which some of the forms of lime have but it is the cheapest figured on a ton basis and in a majority of cases is the cheapest after it is applied.

How Fine Should Limestone Be Ground?

It is usually said that 50% of ground limestone should pass through a wire mesh screen which has twenty meshes to the inch. Limestone can be ground finer than this but the extra benefit is not balanced by the additional cost.

Marl

Sometimes a farm will have a swamp which is underlaid with marl. This can be very economically applied to the farm and to nearby farms in

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case the distance of hauling is not too great. The material is practically the same composition as ground limestone except that it has a high water content which adds to its weight.

Quick Lime.

Quick lime, burned lime or stone lime is manufactured by heating ground limestone to a high temperature. This product is used to a considerable extent in making whitewash and mortar and is also used for adding to the soil. One ton of quick lime is as valuable on the soil as two tons of ground limestone. However, it ordinarily costs more than twice as much per ton, due to the additional cost of manufacturing.

Quick lime is difficult to store as it will swell if it becomes moist and is very caustic and unpleasant to use. When used it is sometimes ground and applied directly on the soil and in other cases it is piled up on the ground and allowed to slake before spreading.

Hydrated Lime.

When water is added to quick lime, heat is formed and after some time the lumps of lime fall apart and form a fine white powder which is called hydrated lime. A half a ton of quick lime will make about three-quarters of a ton of hydrated lime and this three-quarters of a ton will contain as much calcium as a half a ton of quick lime or a ton of ground limestone. It is less disagreeable to handle than quick lime but is not as pleasant to handle as ground limestone.

Slag.

Limestone is used in the manufacture of steel. When the iron ore, limestone and coke are melted, the limestone and some impurities rise to the surface and are drawn off. This material is ground and sold as agricultural slag and is a valuable source of lime.

Why Organic Matter is Necessary in the Soil

1. Increases the water holding capacity of the soil.
2. Improves soil tilth.
3. Contains practically all of the nitrogen in the soil.
4. Helps make plant food in soils available.

Ways of Adding Organic Matter to the Soil

1. Plow under green manure crops.
2. Conserve farm manure.
3. Plow under crop residues.
4. Rotate crops with clover in the rotation.
5. Increase fertility by adding lime and fertilizers.

Fertilizer Recommendations for New York

Because of the increase in the use of concentrated fertilizers, the state colleges have found it necessary to state recommendations in terms of ratios rather than in terms of analyses. When the maximum total amount of plant food in fertilizers was about 20 per cent there was very little leeway possible in analyses having the same general ratio. The following are ratios recommended by the New York State College of Agriculture.

For Upland Soils

Ratios	Possible Analyses
1-4 -1	4-16-4, 5-20-5
1-3 -1	4-12-4, 5-15-5
1-2 -1	8-16-8, 10-20-10
	5-10-5, 6-12-6
1-1½-1	6-9-6, 5-8-5
1-1 -1	5-8-7
	7-7-7, 10-10-10

For Muck Soils

0-2 -3	0-12-16
½-2 -3	2-8-12, 3-12-18
1-2 -3	4-8-12
1-2 -1	5-10-5

Superphosphate

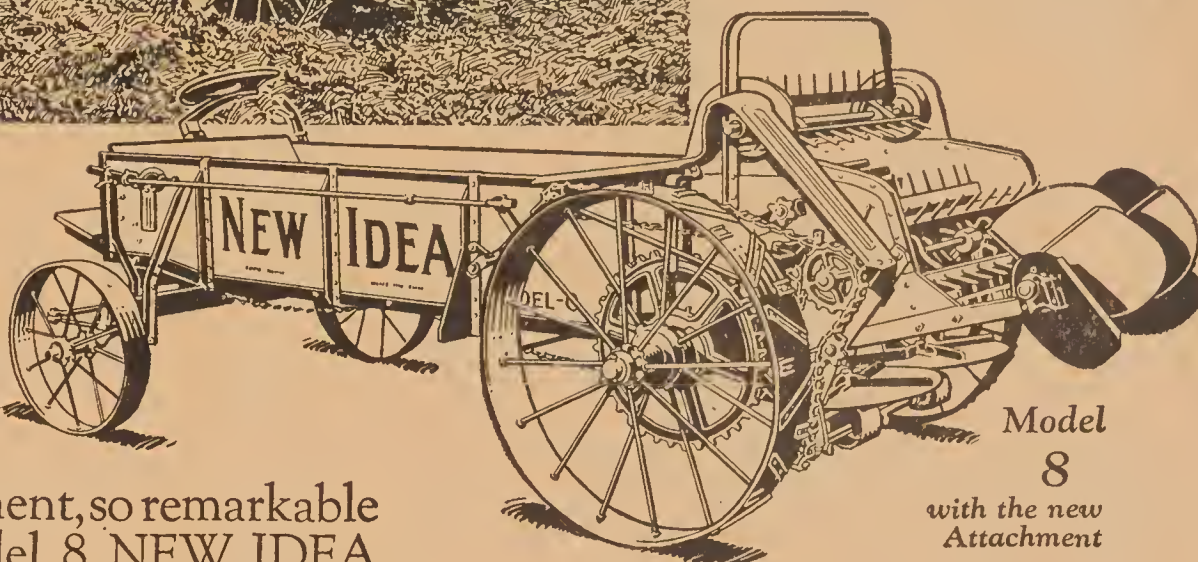
There are three analyses of superphosphate, 16, 18 or 20 per cent and in addition to this there are three analyses of double strength superphos-

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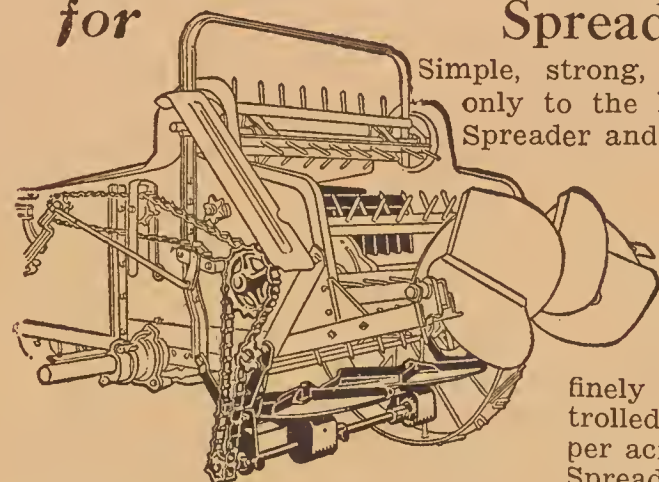


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Model 8
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Remarkable new Attachment for Spreading Lime

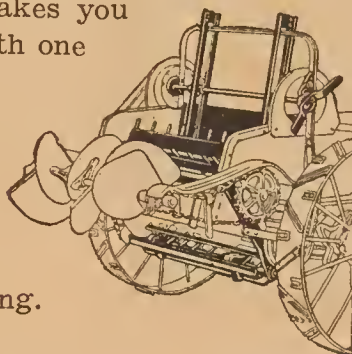


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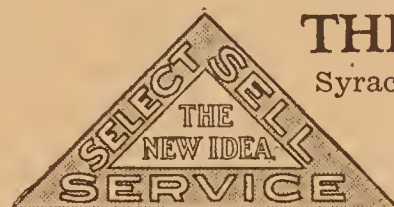
Attached or removed in 30 minutes. Makes you ready for either liming or manuring, with one machine.

Special Tail Board Attachment

Handles the difficult manure resulting where shavings, sand, sawdust or similar materials are used for bedding stock. No loss; perfect spreading. Furnished as an extra.



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phate carrying analyses 40, 44 or 45 per cent. At present prices the cost of a unit of superphosphate is approximately the same in the double strength superphosphate as there are in the lower analyses.

Crops for Emergency or Temporary Pasture

1. Fifty pounds of oats and thirty pounds of amber sorghum per acre. Where the land is rich in lime, add fifty pounds of Canada field peas per acre. Sudan grass may be substituted for the sorghum.
2. At elevations above 1000 feet or on cold wet soil use fifty pounds of oats and sixty pounds of Canada field peas per acre. Thirty pounds of

vetch may be used in place of the peas. The vetch may be all winter vetch or half winter and half spring vetch.

Sweet Clover for Pasture

During the past few years many dairymen have had excellent success with sweet clover pasture. Following are a few points to watch in getting the crop started.

1. Lime the soil.
2. Inoculate the seed.
3. Sweet clover needs a firm seed bed.
4. Use 15-20 pounds of scarified seed per acre and seed with a light nurse crop. (Scarified seed has the hard seed coat scratched so it absorbs moisture quickly and germinates promptly).

5. The crop will provide some pasture that fall and excellent pasture the next summer.

6. Sweet clover is a biennial and lives only two years.

Your Country Farm Bureau Agent will be glad to help you in getting a start with sweet clover.

Why Thorough Tillage is Essential

1. Tillage aerates the soil which helps to make plant food available.
2. It conserves moisture by reducing run off.
3. It improves soil tilth.
4. It kills weeds.
5. It mixes organic matter with the soil.



YOUR COWS—AND THE OTHER FELLOW'S

Ever stop to think that no two herds have just the same requirements, as regards the grain ration? Down the road from you Bill Jenkins is growing alfalfa. Bill's cows produce well on a grain mixture of only 18% or 20% protein. But you've never been able to grow anything better than timothy and a little clover. Your cows need a 22% or 24% mixture. What of it? That's nothing to worry about.

The thing to worry about—the most important question—is to feed the ration that gives your cows all the nutrients they need, as economically as possible. Whether you have to buy a 20% or a 24% mixture, that mixture will be an economical and efficient one if it contains

Diamond Corn Gluten Meal

as a big protein ingredient. Why? Because Diamond is an all-corn feed, containing over 80% of total digestible nutrients, and a minimum of 40% of protein which is of high digestibility and of good quality for milk production... If you buy a ready-mixed ration, look for Corn Gluten Meal in the list of ingredients. If you mix your own, the same principle applies.

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40% Protein



(Continued from Page 5)

this may grow into a habit. Under no circumstances should one strike a cow that kicks. It does no good and always makes them worse.

Gentle measures, however, will not work with all cows, and some old cows that have been taught by mismanagement to kick can not be cured by the best of care. Such animals should always be tied during milking.

One way of doing this is by means of a rather heavy strap with a strong loop. The strap is put around one leg above the hock, and the end drawn

Yield of Cheese from Milk

% fat in milk	Lbs. cheese from 100 lbs. milk	Lbs. cheese per lb. fat
3.0	8.38	2.76
3.5	9.41	2.68
4.0	10.56	2.64
4.8	12.51	2.60

through the loop. The strap is then put around the other leg and buckled so the two legs are held close together. The cow may struggle a little at first but soon learns to stand quietly as long as the strap is in place.

Another method is to tie a rope or strap tightly around the body just back of the hip bones and in front of the udder.

Addresses of Dairy Organizations

Dairymen's League Cooperative Association:
Office: 11 West 42nd Street, New York City.
President: Fred H. Sexauer, Auburn, New York.
Sheffield Producers' Cooperative Association:

Weight of Dairy Products

Article	Weight of gal. pounds	Weight of qt. pounds
Pure water	8.342	2.085
Skimmilk	8.642	2.160
Whole milk	8.609	2.152
20 per cent cream	8.525	2.131
24 per cent cream	8.417	2.104
30 per cent cream	8.350	2.087
40 per cent cream	8.220	2.055
50 per cent cream	8.112	2.028
Pure butterfat	7.591	1.898

Secretary: C. W. Halliday, North Chatham, N. Y.
New England Milk Producers' Association:
Office: 51 Cornhill, Boston, Mass.
President: George R. Little, Schaghticoke, New York.
Inter-State Milk Producers' Association:

Office: 219 North Broad Street, Philadelphia, Pa.
President: H. D. Allebach, Trappe, Pennsylvania.
Connecticut Milk Producers' Association:
Office: 450 Asylum Street, Hartford, Connecticut.
President: Robert C. Mitchell, Southbury, Connecticut.
New York State Dairymen's Association:
President: C. H. Baldwin, Albany, New York.
National Dairy Council:
Office: 307 North Michigan Ave., Chicago.
President: M. D. Munn, Chicago, Ill.
National Dairy Union:
President: N. P. Hull, Lansing, Mich.
Secretary: A. M. Loomis, Washington, D. C.
National Federation of Milk Producers' Associations:
29 South LaSalle St., Chicago.

Yearly Records of Cow Testing Associations in the U. S.

(Bureau of Dairy Industry)

466 associations 1925-6

Number of cow-years	124,337
Average pounds of milk	7,324
Average butter-fat (per cent)	3.9
Average pounds of fat	289
Average price of butter-fat	\$0.50
Average price of product	170.78
Average cost of roughage	38.13
Average cost of grain	31.33
Average total feed cost	69.51
Average income over cost of feed	101.27
Average return for \$1 expended	2.46

De Laval Dairy Handbook

President: J. D. Miller, Susquehanna, Pennsylvania.
Secretary: Chas. W. Holman, Washington, D. C.
National Dairy Association:
Office: 910 South Michigan Avenue, Chicago.
President: Chas. L. Hill, Rosendale, Wisconsin.
General Manager, S. H. Anderson.
American Association Creamery and Butter Manufacturers:
Office: 1005 Continental & Commercial Bank Bldg., Chicago.

Cattle Shipments in New York

Cattle Shipped for Dairy and Breeding Purposes Into New York Out of N. Y.

1928	41,483	7,978
1927	42,318	7,285
1926	16,636	7,545
1925	12,003	12,357
1924	5,587	15,042
1923	5,333	11,464

Cattle Condemned for Tuberculosis

1928*	56,223
1927*	50,884
1926-27**	67,631
1925-26**	62,963
1924-25**	53,431
1923-24*	39,149

* Calendar Year
** Fiscal Year Beginning July 1st.

President, Charles Harding, Omaha, Nebraska.
American Dairy Science Association:
President, O. E. Reed, East Lansing, Michigan.

Average Feed and Labor for 100 lbs. Milk

	Per 100 lbs. of milk produced	Per 100 lbs. of milk produced
Grain (lbs.)	33.89	72.65
Hay (lbs.)	43.3	93.1
Other dry forage (lbs.)	10.8	23.2
Other succulent feed (lbs.)	8.3	17.8
Silage, (lbs.)	92.2	198.2
Labor (hrs.)	3.02	6.49

—New York State College Extension Service Handbook.

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Concrete Stave
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THE communistic, or cooperative principle applies to every business and every person in America. Take your own business as an example.

In sending Poultry and Dairy Products to market you are contributing to the service of millions who need you. You also need them. They must have your products in order to live, and you must have them as customers in order to live.

But you cannot continue to sell Poultry or Dairy Products unless the ultimate consumers of your products make a profit.

Nor can you continue unless you also make a profit.

You must conduct your business on that basis or get out of business.

The profit the consumer makes from your product is the service that product renders, that service must be of more value to the consumer than the money he pays. It must possess that quality which is consistently good.

You must cooperate with the consumer, and the consumer with you.

The life of any manufacturing business is limited to its ability and skill in serving as well as deserving the cooperation of its customers.

The fact that Park & Pollard have been serving its customers on the cooperative principle for years may account for its constantly increasing business which amounts to many millions of dollars yearly.

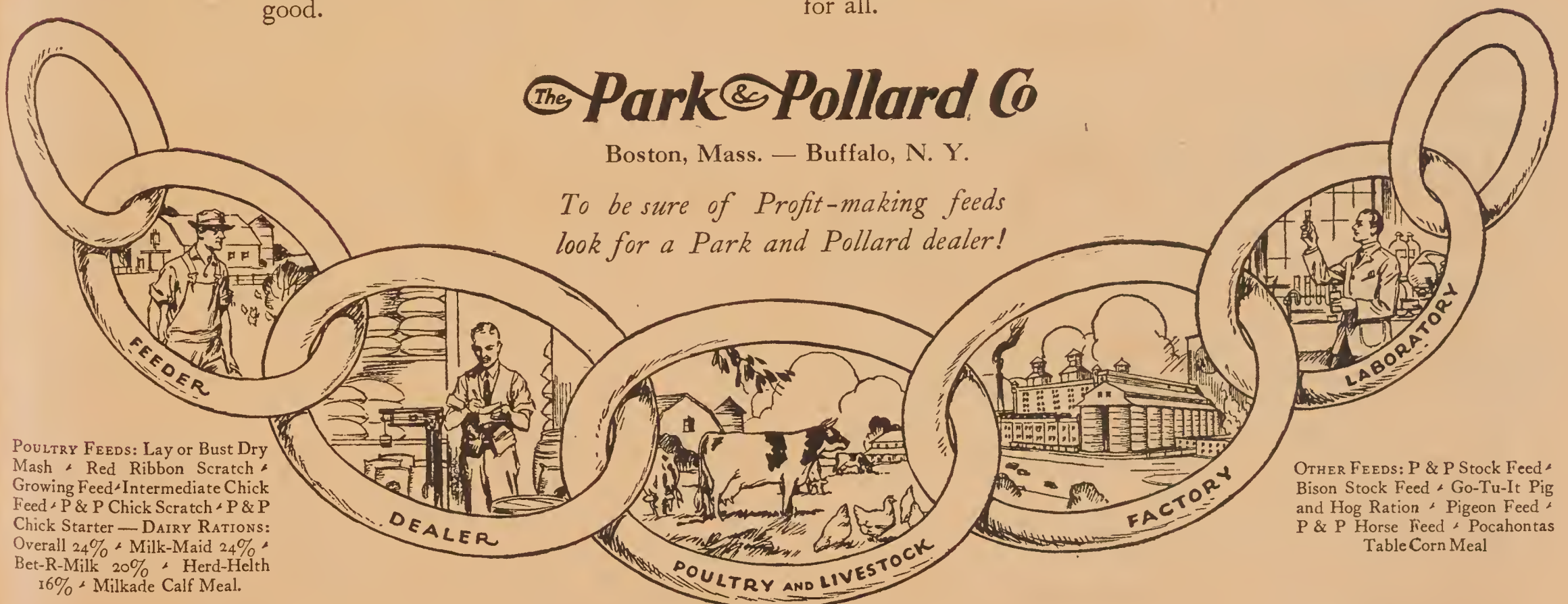
Its conception of the cooperative principle as applied to poultry and dairy feeds is the making of feeds that will show the feeder a larger profit than he expects. Park & Pollard also goes a step further by demonstrating through its Service Department the ways in which its feeds can be made to yield the utmost in profits. Naturally, Park & Pollard customers are loyal. Their support is evidenced in the success of the company.

Every link in the cooperative chain has been firmly forged—and the result is profits for all.

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Boston, Mass. — Buffalo, N. Y.

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OTHER FEEDS: P & P Stock Feed * Bison Stock Feed * Go-Tu-It Pig and Hog Ration * Pigeon Feed * P & P Horse Feed * Pocahontas Table Corn Meal



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With the A. A.
Livestock Man

Treating Sheep for Worms

Copper Sulfate Treatment

Dissolve 2 ounces of copper sulfate in 1 gallon of water. Give to each individual a dose as follows.

For lambs 3 months old—2-3 ounce.
For lambs 6 months old 1 1-3 ounces.
For yearling sheep—2 ounces.
For sheep 2 years old and over—3 ounces.

Nicotine Sulfate Treatment

Mix 2 teaspoons of 40 per cent nicotine sulfate with 1 quart of water. Stir well before and while using.

Give to each individual according to

- (a) Age
Sheep (1 yr. old or over) 2 to 3 oz.
Lambs (5 mo. old or over) 1 to 2 oz.
- (b) Weight
100 pounds and over—3 oz.
Under 100 pounds—1 to 2 oz.
- (c) Condition
- | | Sheep | Lamb |
|--------|-------|-----------|
| Strong | 4 oz. | 2 oz. |
| Medium | 3 oz. | 1 1/2 oz. |
| Weak | 2 oz. | 1 oz. |

Directions for Dosing.

1. The sheep should be kept away from feed and water for 18 hours before and 6 hours after treatment.
2. Keep the solution thoroughly mixed while in use; otherwise that portion in the bottom may become too strong. If copper sulfate is used the solution should be made of dark blue crystals as white or grayish crystals are too strong.
3. Measuring the dose in a glass graduate, an accurately graduated drenching bottle, or a wide-mouth nursing bottle may be used.
4. Be careful in measuring doses as an overdose or over-strength solution will result fatally.
5. The solution should be mixed in

a glass, wooden, or earthenware vessel, as it will corrode a metallic container.

6. The dose may be given either by the use of a dosing syringe, a small-mouthed bottle, or a modified oil can.

A modified oil can is made by cutting off the spout of an ordinary oil can and soldering on a piece of copper tubing about 6 inches long. The gasoline pipeline of an automobile is satisfactory for this purpose. The tube should be bent at a right angle 3 inches above the can and an air hole punched in the side of the can; otherwise the liquid will not run out when the can is inverted.

7. The sheep should be kept in a standing position and never be placed on its rump, or side, when medicine is being given.

8. Back the sheep into a corner and straddle its neck; in this position it can be controlled.

9. Do not raise the head higher than necessary. Keep the nostrils about level with eyes. Since sheep are easily strangled be very careful in giving drenches.

10. Ewes in advanced stages of pregnancy should not be treated unless absolutely necessary.

11. When possible, feed and keep the sheep in a dry lot for at least 3 days after treatment. This will help control the spread of worms on the pasture.—Ohio State College of Agriculture.

How to Catch Sheep

It is wrong to catch a sheep by its wool. Butchers know what it means to the poor animal for it leaves a black or blue mark or bruise on the carcass, which interferes with its sale. Catch a sheep either by the hind leg or by placing the hand underneath the jaw

Duration and Frequency of Heat in Farm Animals

	In heat for
Mares.....	5-7 days*
Cows.....	2-3 days
Ewes.....	2-3 days*
Sows.....	2-4 days

If not impregnated heat will recur in	
Mares	3 to 6 weeks
Cows	3 to 4 weeks
Ewes	17 to 28 days
Sows	21 days

* Subject to variation.

or neck. When using a crook, aim to catch a sheep above the gambrel joint, as there is danger of injuring the leg when catching it below this joint.

How to Tell the Age of Sheep

Sheep have eight incisor teeth in the front of the lower jaw. The milk, or temporary, incisors are replaced by larger permanent teeth according to the following schedule subject to some variation due to type, care, feed and other factors.

12 to 14 months.....	center pair
20 to 24 months.....	second pair
30 to 36 months.....	third pair
40 to 45 months.....	corner pair

Pointers for Slaughtering and Dressing Hogs

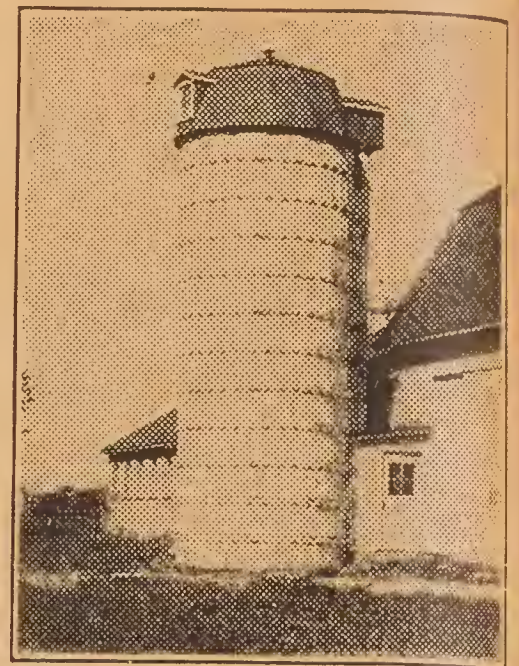
Keep the hogs off feed 18 to 24 hours before they are slaughtered, give them plenty of fresh water.

Handle the hog quietly. The meat of a hog that has been excited before slaughtering has a tendency to sour.

Do not scald the hogs in too hot water. The best scalds are obtained when the water is between 155 and 160 degrees Fahrenheit. Too hot water may "set" the hair. A tablespoonful or two of lye, or a shovelful of hard wood ashes put into the barrel of water will cut the dirt and

(Continued On Opposite Page)

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(Continued From Opposite Page)

scurf and yield a cleaner carcass.

After the hog has been hung up, shave or singe off the remaining hair, rinse the carcass with hot water, and scrape with a scraper or knife. Rinse a second time but use cold water and scrape upward with a knife to squeeze the water out of the pores.

Do not allow the carcass to freeze before it has been thoroughly cooled. If it freezes too rapidly, a crust will form on the outside and not all of the animal heat will escape thus causing the meat to sour when being cured.

The caul fat which surrounds the stomach and the ruffle fat on the small intestines can be used for a cheap grade of lard or for soap. The back fat and kidney fat can be used for the better grade of lard.

When removing ruffle fat from the intestine, begin at the stomach and do not use a knife. The removal of the kidney fat allows the carcass to cool more quickly. It can be removed while the carcass is warm by inserting the hand under the lower part containing the kidney and pulling upward.

How to "Worm" Hogs

Secure in a capsule: Santonin, 3 grains, and Calomel, 3 grains.

Open the pig's mouth and place the capsule well back on the tongue. A dash of water insures the swallowing of the capsule. This dose is sufficient for pigs weighing 40 pounds or more. Pigs under that size should receive not less than 2 grains of each ingredient. Give the above after pigs have missed one meal, and follow with a mild cathartic in the first feed.

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Chester and Yorkshire—Berkshire & Chester
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Satisfaction guaranteed, or money refunded. 10 days trial allowed. Crates supplied free. A. M. LUX, 206 Washington St., Woburn, Mass. Tel. Wob. 1415.

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Heavy legged, square backed, Chester and Yorkshire crossed, Poland China and Chester crossed, Barrows, boars or sows—8 to 10 weeks old, \$4.00 each. Fancy Berkshires, also Chester Whites, 2 months old Sows and unrelated Boars, \$5.00 each. 10 days trial or your money back. Shipped C.O.D. Crating free of charge. Yours for quality hogs.

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of butter and close to 20,000 lbs. of milk in ten months as a four year old. Also his sire is a son of Hengerveld Homestead De Kol 4th who has a splendid list of large producing daughters, he being a son of Jenny Linn Colantha, with a record of over 30 lbs. butter in 7 days.

His Price is Now \$300.

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902 Majestic Bldg., Indianapolis, Ind.

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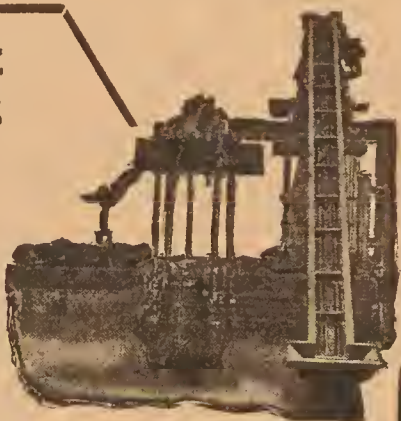
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Marketing, the Individual Orchardist and Custom
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A. B. FARQUHAR COMPANY, Ltd.
Box 166 YORK, Pa.

Reviewing the Markets

How to Prepare Turkeys to Get Top Market Prices

Three important phases to consider in getting turkeys ready for market are that they are—1. Well grown. 2. Well fleshed. 3. Well dressed. It is not wise to confine the turkeys too closely for fattening.

Feed:—Corn is considered the best feed, but much care must be given not to over-feed at first. It is advisable to start feeding with equal parts, by bulk, of wheat, oats and corn or wheat, barley and corn about 6 weeks before market time. Feed twice daily and gradually increase the amount fed and the percentage of corn fed until the last week you can feed clear corn and all they will eat.

What to Market:—All mature birds not to be kept for breeding purposes, and the well-grown, well-fleshed young toms which are not desirable for breeding.

The Market:—In selecting a market for your turkeys it is necessary to consider not only variations in quotations, but also the varying market requirements, transportation cost and any other costs of handling. Select your market early and get directions direct.

Dressing:—The turkeys should be deprived of all feed for 24 hours before dressing, but they may have access to water until the night before they are to be dressed.

If dry picked leave a little ring of feathers around the neck of the head. Also leave the beard and the wing tip feathers to the first joint. Heads should be wrapped in clean paper to avoid soiling the body with blood from the head. Cool 24 hours before packing.—Northwest Poultry Journal.

Egg Market Unchanged

NEARBY WHITE	Feb. 20	Feb. 13	Feb. 21, 1928
Hen's Sel. Extras.....	50-	42 -	37 -38
Hen's Av'ge Extras.....	48-50	41 -	35 -36
Extra Firsts.....	40	40 1/2	34 -34 1/2
Firsts.....	39	-	33 -33 1/2
Undergrades.....			
Pullets.....		37 -	
Pewees.....			
NEARBY BROWNS	Feb. 20	Feb. 13	Feb. 21, 1928
Hennery.....	53-	44 1/2-45	35 -36
Gathered.....	49-52	39 1/2-44	33 -34

Live Fowls Selling Well

FOWLS	Feb. 20	Feb. 13	Feb. 21, 1928
Colored.....	30-31	35-36	28-27
Leghorn.....	30-31	35-36	-27
CHICKENS	Feb. 20	Feb. 13	Feb. 21, 1928
Colored.....	31-35	33-35	30-36
Leghorn.....	31-35	33-35	30-36
BROILERS	Feb. 20	Feb. 13	Feb. 21, 1928
Colored.....		45-50	48-55
Leghorn.....			35-45
CAPONS	Feb. 20	Feb. 13	Feb. 21, 1928
.....	40-45		25-50
TURKEYS	Feb. 20	Feb. 13	Feb. 21, 1928
.....	-40		29-30
DUCKS, Nearby	Feb. 20	Feb. 13	Feb. 21, 1928
.....	20-22	20-22	-30

Potato Market Easier

STATE	Feb. 20	Feb. 13	Feb. 21, 1928
150 lb. sack....	1.75-2.00	1.50-2.00	3.25-3.40
Bulk, 180 lbs.	2.00-2.15	2.00-2.15	
MAINE	Feb. 20	Feb. 13	Feb. 21, 1928
150 lb. sack....	2.00-2.25	2.00-2.25	3.25-3.75
Bulk, 180 lbs.	2.25-2.40	2.25-2.40	4.10-4.50
PENNA.	Feb. 20	Feb. 13	Feb. 21, 1928
150 lb. sack....	2.00-2.15		
No. 1.....		2.00-2.15	
Bulk, 180 lbs.		2.00-2.15	
LONG ISLAND	Feb. 20	Feb. 13	Feb. 21, 1928
150 lb. sack....	2.25-2.50	2.25-2.60	4.25-4.50
No. 1.....	2.25-2.50	2.60-2.90	5.00-5.40
Bulk, 180 lbs.	2.60-2.85		

Feeds and Grains

FUTURES	Feb. 20	Feb. 13	Feb. 21, 1928
(At Chicago)			
Wheat (Mar.).....	1.28 3/4	1.27 1/2	
Corn (Mar.).....	.95 3/4	.96 1/8	
Oats (Mar.).....	.49 1/2	.52 1/4	
CASH GRAINS	Feb. 20	Feb. 13	Feb. 21, 1928
(At New York)			
Wheat, No. 2 Red ..	1.65 3/4	1.66 3/4	1.67 3/4
Corn, No. 2 Yel..	1.14 3/4	1.15 1/4	1.17 3/4
Oats, No. 2.....	.63	.63 1/2	.67 3/4
FEEDS	Feb. 16	Feb. 9	Feb. 18, 1928
(At Buffalo)			
Grade Oats.....	39.00	39.50	36.50
Spring Bran.....	32.00	32.50	37.50
Hard Bran.....	34.50	35.50	40.00
Standard Mids ..	30.50	31.00	37.50
Soft W. Mids ..	39.50	41.00	44.50
Flour Mids ..	36.00	37.00	39.50
Red Dog.....	38.00	40.00	40.50
Wh. Hominy.....	39.50	39.50	40.00
Yel. Hominy.....	39.50	39.50	38.50
Corn Meal.....	41.00	40.50	40.50
Gluten Feed.....			46.00
Gluten Meal.....			54.00
36% C. S. Meal.....	46.00	46.50	47.00
41% C. S. Meal.....	50.50	51.00	51.00
43% C. S. Meal.....	53.00	53.00	54.00
34% O. P. Linseed Meal.....	58.00	57.00	51.00

The above quotations are those of the local Buffalo market and are F. O. B. They are reported in the weekly letter of the N. Y. State Department of Agriculture and Markets.

New York Prices

Butter Higher and Steady

CREAMERY	Feb. 13	Feb. 21, 1928
SALTED		
Higher than extra....	50 -50 1/2	50 1/2-51
Extra (92sc).....	49 1/2-	50 -
84-91 score.....	46 -49	45 1/2-49 1/2
Lower Grades.....	44 1/2-45 1/2	44 -45

Easier Trend to Cheese Market

STATE	Feb. 20	Feb. 13	Feb. 21, 1928
FLATS			
Fresh Fancy.....	24 -25	24 -25	23 1/2-24
Fresh Average.....			
Held Fancy.....	27 1/2-29	27 1/2-29	29 -29 1/2
Held Average.....			

Legal and Hebrew Holidays for the Year 1929

HOLIDAY	DATE	MARKET DAYS	COMMODITIES IN DEMAND
Purim	March 26 Tuesday	March 22-23	Live fowls and hen turkeys.
Passover	April 25 Thursday	April 21-23	Live turkeys, fat fowls, ducks and geese.
Easter	March 31 Sunday	March 28-29	Live fowls, capons, ducks, geese, rabbits, dressed spring lambs, and prime veal calves.
Last Passover	May 1 Wednesday	April 27-29	Prime quality of all kinds of live poultry.
Feast of Weeks	June 14 Friday	June 10-12	Very little extra for this holiday.
Decoration Day	May 30 Thursday	May 26-28-29	Live broilers and prime stock of all kinds, both live and dressed.
Independence Day	July 4 Thursday	July 2-3	Live broilers especially.
Jewish New Year (Rosh Hashonah)	October 5 Saturday	Oct. 1-2	Live fat fowls, turkeys, ducks and geese.
Day of Atonement (Yom Kippur)	October 14 Monday	Oct. 11-12	All prime live poultry, especially white leghorn chickens and roosters.
Feast of Tabernacles (Succoth)	October 19 Saturday	Oct. 15-16	Live ducks, fowls, and fat geese.
Columbus Day	October 12 Saturday	Oct. 10-11	Live chickens, fowls, and rabbits.
Feast of Law	October 26-27 Saturday-Sunday	Oct. 23-24	Prime quality of all kinds of live poultry.
Thanksgiving Day	November 28 Thursday	Nov. 25-26	Live and dressed turkeys, geese, fowls, ducks, young pigs, and rabbits.
Christmas Day	December 25 Wednesday	Dec. 19-23	Live and dressed turkeys, geese, fowls, capons, suckling pigs, and rabbits, and goats.
New Year's Day	Jan. 1, 1930 Wednesday	Dec. 26-29	Live and dressed turkeys, geese, fowls, capons, suckling pigs, and rabbits.

New York Farm News

Newburgh Gets Ready for Public Market

THE city of Newburgh has taken another step forward to be in position legally to cooperate with the State of New York in the establishment of a workable public market. On February 18th, the Newburgh City Council established the Department of Markets and adopted the following ordinance:

"A Department of Markets is hereby established in the City of Newburgh; such department to be under the control and management of the Commissioner of Public Markets who shall be appointed by, and may be removed, at the pleasure of the Mayor and whose compensation should be fixed from time to time by resolutions of the City Council. The Commissioner of Public Markets shall perform all the duties and shall have all the power provided in Article 22 of the Agriculture and Markets Law."

So far as we know, Newburgh is the first city to take advantage of Article 22 of the Agriculture and Markets Law providing for a real farmers' and consumers' market. City Manager McCaw will be named Market Commissioner of Newburgh without salary, and he will arrange for a survey of available lands for the market and have an estimate of the cost of the proposed buildings and other improvements. These plans will be submitted to Albany for approval, and it is expected that the present legislature will vote 50 per cent from the State of the money necessary to establish the market.

Canton Bureau Won State Dramatics Contest

ONE of the chief features of interest at Farm and Home Week was the statewide contest in dramatics, staged at Willard Straight Hall by casts from the five districts of New York State. More details of the plays will be given in next week's issue. Here are the names of the plays and the home bureaus which presented them:

"Cabbages"—by Canton Home Bureau, St. Lawrence County, first prize of fifty

dollars awarded by AMERICAN AGRICULTURIST. All other contesting units received a twenty dollar bonus.

"Between the Soup and the Savoury"—by Williamsville Home Bureau, Erie County, second place.

"Our Minister's Bride"—by Wilton Village Home Bureau, Saratoga County, third place.

"The Teeth of the Gift Horse"—by Prattburg Home Bureau, Steuben County, fourth place.

"Too Busy"—by Elmira Home Bureau, Chemung County.

The judges were Mrs. Grace W. Hackett, Household Editor of AMERICAN AGRICULTURIST, and Professors A. M. Drummond and Bristow Adams of the New York State College of Agriculture.

Governor and Mrs. Roosevelt at Home Bureau Banquet

The annual Farm and Home Week banquet of the New York State Federation of Home Bureaus received special distinction this year because of the presence of Governor Franklin D. Roosevelt and Mrs. Roosevelt. The Governor's discussion of state and local problems, interspersed with intimate, personal experiences and anecdotes, was warmly received by the group of over 350 people present. The banquet was dedicated to Mrs. Anna Botsford Comstock, whose contributions to rural life were considered to fit her for such a tribute from the Federation. Dean A. W. Smith introduced Mrs. Comstock. Miss Martha Van Rensselaer was toastmistress. The A. E. Brigden scholarship of the Federation was presented by Mrs. Brigden to Miss Catherine Buckelew of Holcomb, N. Y., a junior in the College of Home Economics. Mrs. Edward Young, of Milton, State President of the Home Bureau Federation, recounted the milestones in the Federation's history and stressed the benefits to rural women from group study of home making and community problems. The occasion was marked by the presence of many distinguished guests.

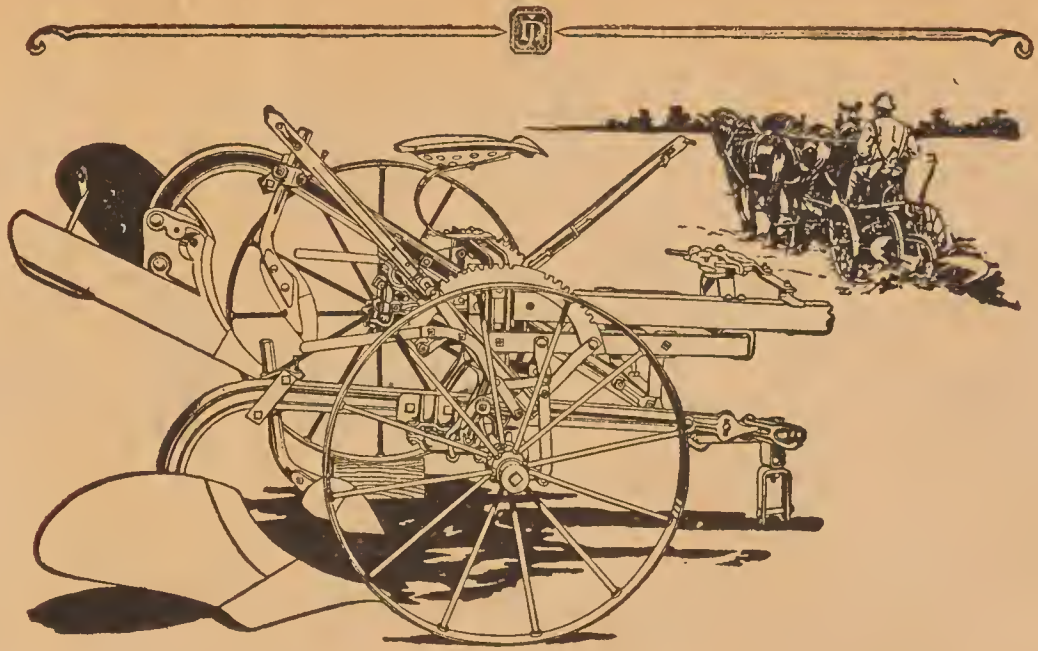
New York County Notes

Dutchess County—It has been an open winter with only 4 inches of snow on the ground at one time. Autos run every day and the roads are good. Eggs sell at 60 cents, farmer's butter 55 cents. Farmers are already hiring help for the season and are planning to put in more corn and potatoes and sell garden truck in Poughkeepsie. City boarders are already being booked for the coming summer. Farmers are prosperous and buying new automobiles.—J. D. H.

Columbia County—Fine weather for ice the past week and ice houses are all filled in this section. Folks at Germantown are enjoying excellent skating on Rockefeller Pond. Whooping cough is prevalent in Kinderhook and 6 cases of scarlet fever in Chatham. Toxin-antitoxin clinics are held in Hudson each Thursday. People in North Claverack saw a flock of wild geese last week. Elizaville hen coop was robbed. Eggs at 40 cents a dozen, butter 45 cents a pound, chickens 37 cents a pound, country dressed calves 20 cents a pound, 100 pound sack yellow onions \$4.25, red onions \$5.00 for 100 pounds and potatoes are \$2.50 for 180 pound sack. Hudson Valley mushrooms, 3 pound basket white, are \$1.00, buttons 65 cents and opens 40 cents, red cabbage \$2.50 for 100 pounds.—Mrs. C. V. H.

Rensselaer County—Ice is being harvested, the weather having been very cold. Potatoes are moving slowly and there is no sale for hay. Cows are being retested for tuberculosis. Much repairing to roofs ahead as recent winds have destroyed many roofs.—Mrs. F. F.

Cattaraugus County—Miss Vera McCrea, director of the home department of the Dairymen's League Co-operative, Inc., will speak on "Women in the Cooperative Movement" at the spring session of the County Pomona Grange in Olean on Thursday, March 7th. John Armstrong, secretary of the Olean Chamber of Commerce, will also address the grangers. Reports of the state session at Rochester will be given by the delegates. February has been a very cold month with much sub-zero weather. The usual fall of snow for good sleighing for hauling log has been had.—M. M. S.



Have You Seen This Improved Two-Way?

BEFORE you start your plowing this spring get acquainted with the improved two-way sulky. Get on the seat and try out the handy lever and pedal controls of the

John Deere-Syracuse No. 4

Try out the Patented Auto Foot Frame Shift which keeps plow cutting full width furrows on curves and sidehills. Notice the handy horse-power foot lift and trip lever. Operate the easy-working leveling and depth control levers.

High-carbon steel frame with rigid riveted construction insures long life.

The No. 4 Two-Way gives you the additional advantage of John Deere-Syracuse chilled or combination bottoms, famous for their good work and long wear.

You will like the noiseless, shockless horse-lift and the way the shifting clevis always moves to point of beam of working plow.

Quick-detachable shares save time. Loosen one nut and share is off; tighten same nut and share is on tight.

See the John Deere-Syracuse at your John Deere dealer's. For free folder, write John Deere, Moline, Illinois, and ask for Booklet 'YD-71

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EDINGTON CHIX BATTERY

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1000 to 2000 chicks can be grown to eight weeks of age with one brooder stove at a saving of 75% over the floor method. Consider these features:

1. Each deck is separate.
2. Adjustable for chicks of any age.
3. Feeding fronts adjustable from 1/4 of an inch to 3 inches.
4. Greatest capacity of any battery on the market.

No crowding—low mortality—100% sanitary.

ELIMINATE COCCIDIOSIS

No. 36 Battery, 1000 Chix Capacity.....\$45.00

No. 37 Battery, 2000 Chix Capacity.....\$82.00

Write for free folder describing Battery Brooders, Mash Hoppers, Traps and Metal Nests.

EDINGTON MACHINE WORKS,

VINELAND, N. J.

BABY



CHICKS

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Quality



Chicks

Leghorns Rocks

Reds Wyandottes

SEND FOR THIS USEFUL CHICK BOOK

You will find it a valuable guide in selecting your chicks for the coming season and a constant help in rearing them. The book which is illustrated in color describes my breeds fully;

tells of my careful methods of matting and rearing; discusses the most profitable sizes for flocks; contains house-plans and construction details and concise feeding and rearing charts. Write for your copy today.

W. F. HILLPOT, Dept. 129, FRENCHTOWN, NEW JERSEY

WYCKOFF

White Leghorns.....	\$11	\$52.50	\$100
Barred Rocks.....	12	57.50	110
Mixed Chicks.....	8	40.00	80

CHICKS

S.C.W. & Brown Legh'ns.....	\$11 per 100
S.C.W. Leg. Tan. Strain.....	12 per 100
S.C. Barred Rocks.....	13 per 100
(Tested Flocks) Assorted Chicks.....	9 per 100

Special price on large lots, 100% live delivery. P. O. Paid. Circular Free. CHESTER VALLEY HATCHERY, Box 51, McAlisterville, Pa.

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You Get the Chicks—We the Advertising. Fair?

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This catalog, the prettiest and most elaborate we have ever seen, gives you some new, cashable ideas on raising pure-bred poultry—actually shows you how to set-r-e-t-c-h poultry profits—complete history of 17 different breeds—famous strains. . . Shall we mail your copy tomorrow?—and send your FREE CHICKS in a week or two?

COCKO THE ROOST AND HOW TO GET THEM FREE

Yes Sir! FREE BABY CHICKS

—and so easy to get them. Merely do a little advertising in your community for us and we will ship you some of the finest baby chicks you ever saw. FREE. Large, peppy, and fluffy. Leghorns, Anconas, Rocks, Reds, Minorcas, Wyandottes, Orpingtons and others—take your choice. Many are taking advantage of this liberal offer and you must hurry before the advertising has been finished in your community. You Must Act at Once!

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ULSTER POULTRY FARMS, Box 40, WALDEN, N. Y.

Two Free Books

Breed squabs and make money. Sold by millions at higher prices than chickens. Write at once for two free books telling how to do it. One is 48 pages printed in colors, other 32 pages. Ask for Books 3 and 4. You will be surprised. **Plymouth Rock Squab Company, 334 H Street, Melrose Highlands, Massachusetts. Established 23 years. Reference, any bank.**

SPECIAL FALL prices for breeding Turkeys, Geese, Ducks, and Guineas.

Write your wants and for mailing list. **PIONEER STOCK FARM, TELFORD, PA.**

The Common Sense Way to Buy

How you are saved one-third to one-half the ordinary price of merchandise by the famous Ward plan of distributing from manufacturer direct to you. One-third of all the families in America now take advantage of it.

ON this page are pictured a few of over 35,000 items of merchandise stocked by Montgomery Ward & Co. They are shown here for the sole purpose of proving by definite examples how large a part of ordinary prices may be saved by this direct way of buying.

A charming, modern bungalow

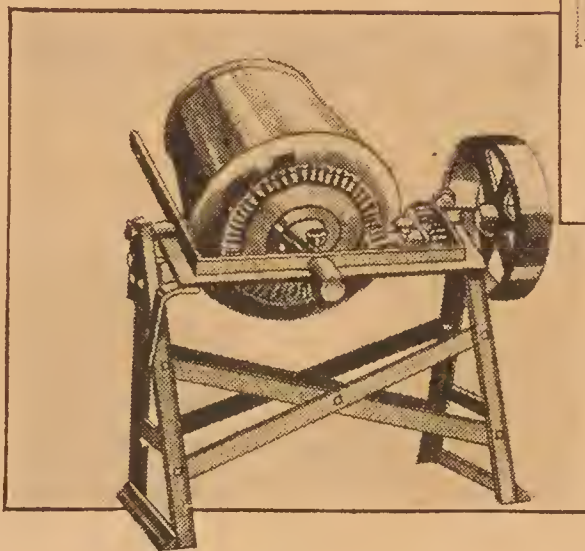
Take the home illustrated here for instance. It is one of the smartest and most charming of thousands of designs submitted by

talented architects this season. Its construction embodies the latest engineering principles to keep it warm in winter and cool in summer. The lumber is ready cut to fit, thus eliminating waste and reducing your lumber bill by several hundred dollars.



The paint in this pail is identical in spreading, covering, and wearing qualities to the highest-priced house paint made by any manufacturer. It costs \$1 to \$1.25 less per gallon.

Our own architects and engineers give you free counsel and advice as work progresses. And while receiving these advantages you are able to cut building costs \$1500

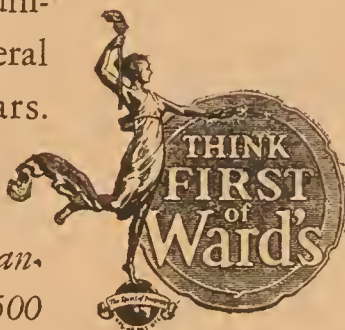


Concrete Mixer

New improvements in design. Pays for itself on first job. See catalogue. Easy payments. Ordinary prices reduced \$10 to \$20.

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Perhaps you are painting your present house. Montgomery Ward & Co. calls your attention to its Master Painter formula that matches by actual laboratory test a nationally known manufacturer's first quality paint—yet its price is 25% a gallon lower. Money cannot buy better paint, so when you pay more than Ward's low price the difference represents a loss to you.



Mechanical excellence

Take the Royal Blue Separator and the Sattley Gas Engine. Both represent



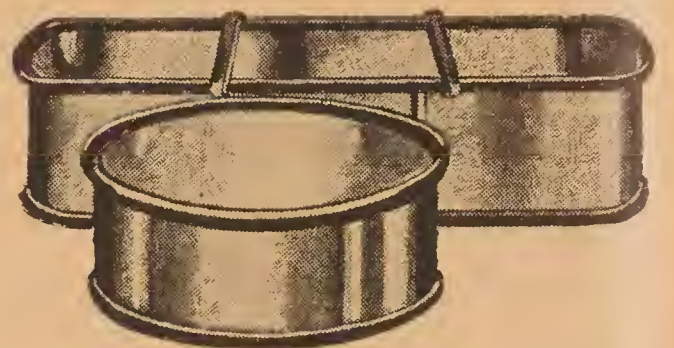
The Newport home—one of our modern and charming designs. We sell all Ready-cut Homes on the easy monthly payment plan. Savings are \$500 to \$2000 under ordinary ways. Write for special catalogue and ask about Ward's new 15-year loan.

two of the finest, mechanically excellent pieces of machinery that you can find in either line. We ask men who pride themselves on judging farm equipment values to compare them with the highest priced products on the market... these cost one-third to one-half less.

Families by the thousands today buy important items only from Ward's and no other way.

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As you look through Ward's catalogue or as you walk through the aisles of a Ward store, of which there are hundreds located through-

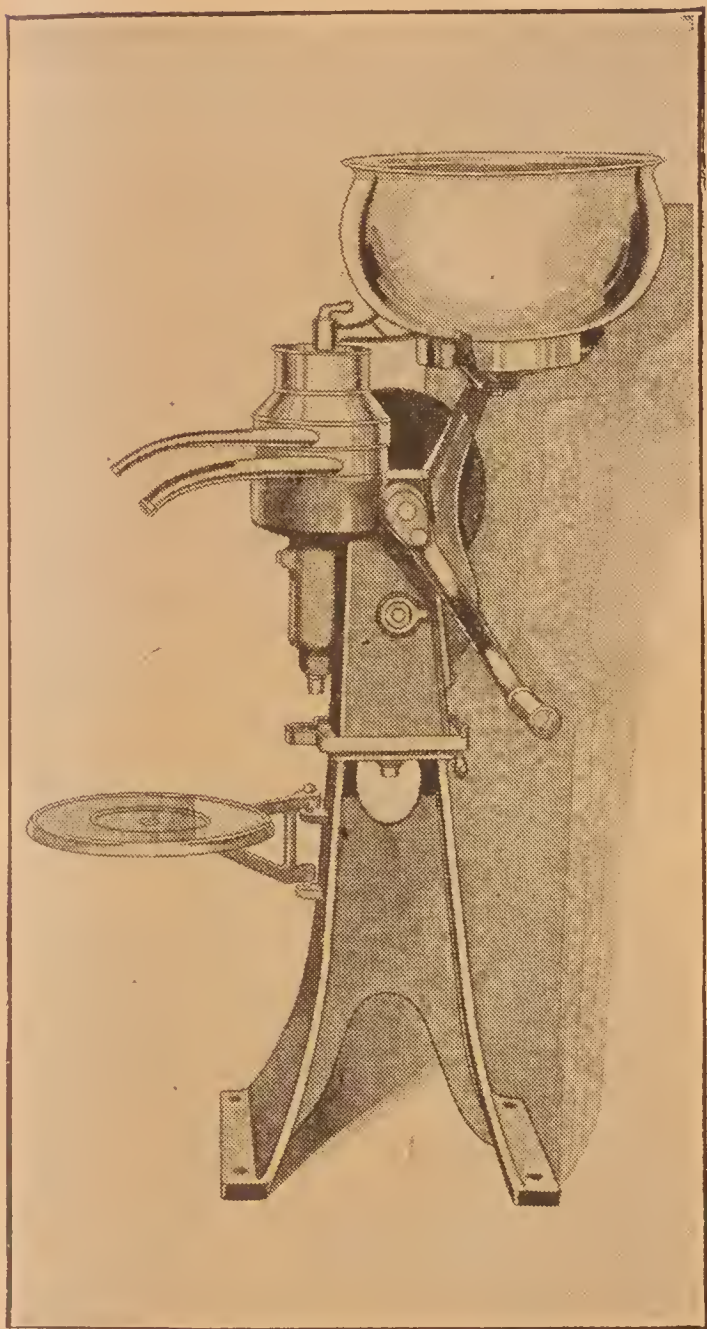


Galvanized Steel Tanks

Sturdiest type of construction known. 20-gauge rust resisting galvanized steel. Will not warp or crack from frost. Priced at one-half ordinary cost.

MONTGOMERY

Farm Equipment

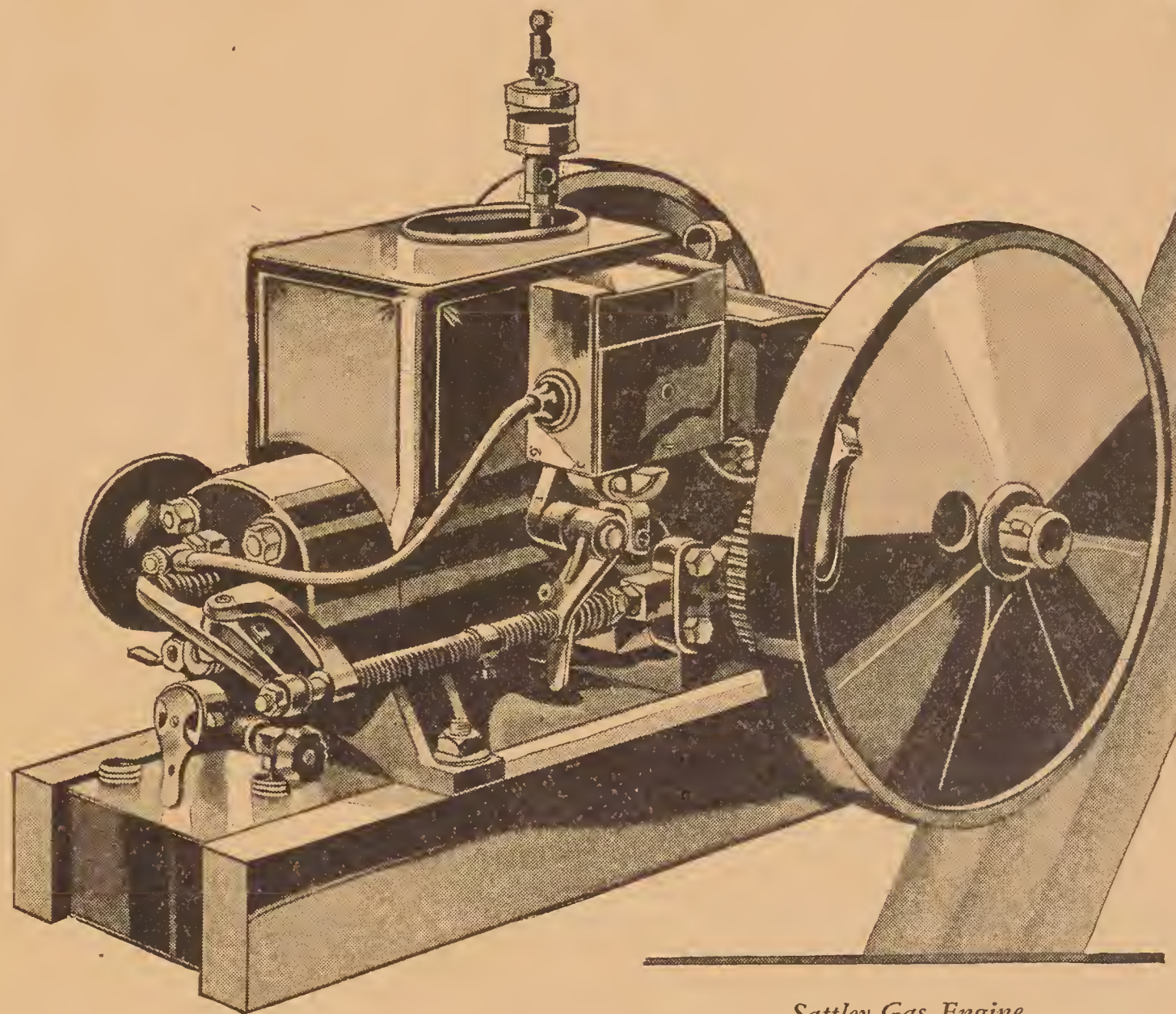


Test Proves Excellence

Running for 5500 continuous hours, a Royal Blue Separator proved conclusively its unparalleled durability. After this test, equal to 15 years of daily use, not a single part was worn enough to require replacement or repair and the bowl was still in perfect balance!

out the United States, you are astonished at the low prices on the fine merchandise of every description. The reasons for these low prices are easy to understand.

In the first place, there is but one step between you and the factory that makes the merchandise—that is Ward's only method of selling. In the second place, the huge volume of 250,000,000 dollars annually enables Ward's to get the world's lowest prices on any kind of merchandise.



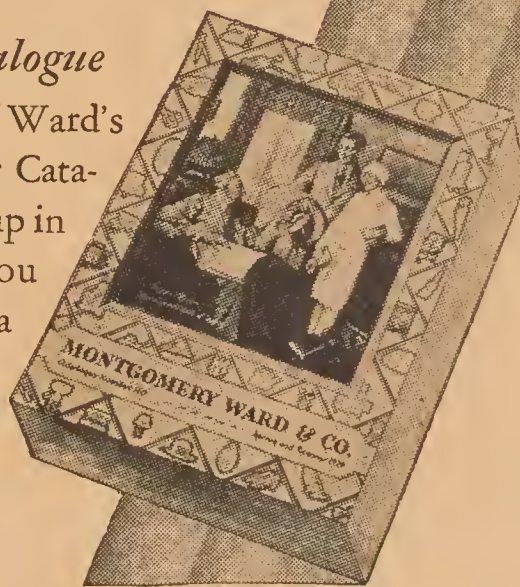
Sattley Gas Engine

One of the finest jobs known to modern engineering science and embodying the newest principles of construction. 1½ horsepower and actually develops 2¼ horsepower. Has 40 less parts than any other engine. Ten parts interchangeable with Ford Model T. Try for 60 days.

When you buy from Montgomery Ward & Co. you receive only laboratory tested merchandise, and purchase is guaranteed to satisfy you in every way or your money will be returned. Even with our enormous volume of business, Ward's offers you mail order's swiftest service—In Today—Out Today. That means your order will be on its way to you the same day it is received.

Look it up in Ward's catalogue

There is a free copy for you of Ward's new 1929 Spring and Summer Catalogue if you have none. Look up in this great book whatever you want to buy—it will give you a complete description of first quality and it will show you the prices that you should pay.



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WARD & CO

Helps for the Man Who Keeps Hens

The Cornell Ration for Laying Hens

Scratch Grain

200 pounds cracked yellow corn
200 pounds wheat
100 pounds heavy oats
(If heavy oats, 40 pounds or better, cannot be obtained, omit the oats from the scratch grain.)

Mash Mixture

100 pounds wheat bran
100 pounds flour wheat middlings
100 pounds yellow cornmeal
100 pounds ground heavy oats or ground barley
100 pounds meat scrap (50-55 per cent protein)
3 pounds salt

Equally as important as the mixtures themselves are the use of the feeds and the management of the flock. Write to the State College of Agriculture at Ithaca and ask for bulletin 45. This will give complete directions for feeding this ration, including the feeding of green feed, cod liver oil, grit and oyster shell and water.—Cornell Bulletin 45.

The Cornell Ration for Chick Feeding

This ration will not give the best results unless the chicks are given range

on fresh sod and shade is provided.

Grain Mixture No. 1

6 pounds cracked corn (fine)
4 pounds cracked wheat

Grain Mixture No. 2

6 pounds cracked yellow corn (medium)
4 pounds wheat

Grain Mixture No. 3

200 pounds cracked yellow corn
200 pounds barley
100 pounds heavy oats
(If heavy oats, 40 pounds or better, cannot be obtained, omit the oats)

Mash Mixture

30 pounds yellow cornmeal
20 pounds wheat bran
15 pounds flour wheat middlings
10 pounds fine ground heavy oats
(If reground heavy oats cannot be obtained, omit them and increase the cornmeal from 30 to 40 pounds)
10 pounds fine ground meat scrap (50-55 per cent protein)
5 pounds bone meal
10 pounds dried milk products
½ pound fine salt

Chicks should not be fed until about forty-eight hours after the hatch is completed.

Period 1 (Up to three months)

The mash mixture should be fed dry in shallow boxes in the morning (from

8 to 10 a. m.) giving about what they will clean up by afternoon. The grain mixture should be fed in shallow boxes in the afternoon (from 3 to 5 p. m.) and allowed to remain before the birds until replaced by mash in the morning. Begin with grain mixture No. 1 and gradually change to grain mixture No. 2 when the birds are large enough to handle it. This will usually be when they are from four to six weeks of age.

Period 2 (Three months to maturity)

Hopper or trough feed grain mixture No. 3 and mash mixture. If the pullets are developing too rapidly, reduce the amount of meat scrap and milk. This will help to give them a reserve of fat which is essential. If more rapid development is necessary, feed one meal of moist mash in the late afternoon.—Cornell Bulletin 45.

Ration for Fattening Poultry

Ration with liquid milk

50 pounds cornmeal
20 pounds white wheat middlings
10 pounds ground heavy oats
10 pounds dried milk
10 pounds meat scrap

Mixed to a batter, fresh at each feeding, with buttermilk, or skim-milk. Will require approximately 2 pounds (1 quart) of milk to 1 pound (1 quart) of mash.

Ration without liquid milk

50 pound cornmeal
20 pounds white wheat middlings
10 pounds ground heavy oats
10 pounds dried milk
10 pounds meat scrap

Mixed to a batter, fresh at each feeding, with water. Will require approximately 3 pounds (1½ quarts) of water to 2 pounds (2 quarts) of mash.

Pennsylvania Poultry Ration

Laying Mash

200 lbs. yellow corn meal
100 lbs. wheat bran
200 lbs. flour or Standard wheat middlings
150 lbs. ground oats
100 lbs. alfalfa leaf meal
75 lbs. meat scrap—50-55% protein
50 lbs. dried buttermilk or dried skim-milk
75 lbs. fishmeal
20 lbs. oyster shell
10 lbs. refined cod liver oil
10 lbs. salt
10 lbs. steamed bonemeal

Scratch

500 lbs. wheat
500 lbs. cracked corn

Pennsylvania Chick Ration

Chick Mash for 1st 8 weeks

*700 lbs. ground yellow corn
100 lbs. ground wheat
200 lbs. wheat bran

250 lbs. local flour midds
*200 lbs. dried milk
200 lbs. fishmeal or meat scrap
200 lbs. alfalfa leaf meal
50 lbs. bone meal
20 lbs. limestone grit
20 lbs. cod liver oil
30 lbs. charcoal
20 lbs. salt

*From 8 weeks to maturity the ground yellow corn is increased to 800 lbs. and the dried milk reduced to 100 lbs. The scratch grain ration remains the same except that whole wheat and cracked corn are used.

Chick Scratch

1333 lbs. fine cracked corn
667 lbs. fine cracked wheat

New Jersey Poultry Rations

Laying Mash:

100 pounds ground yellow corn
100 pounds wheat bran
100 pounds pinhead oats
100 pounds red dog flour
100 pounds meat scrap (50% protein)

Moist Mash:

(Daily requirement for one thousand birds)
10 pounds ground yellow corn
10 pounds rolled oats

Approximate Daily Amounts of Grain to Feed 100 Laying Hens

(Average weight of hens 4 pounds)

Month	Morning feeding (pounds)	Night feeding (pounds)
November	3	10
December	3	10
January	3	10
February	3	10
March	2	10
April	2	10
May	2	10
June	2	10
July	No	11
August	morning	10
September	feed	9
October		9

—Cornell Bulletin 45

10 pounds semi-solid buttermilk
1 quart cod-liver oil

Grain Ration:

100 pounds yellow corn
100 pounds wheat

Chick and Growing Mash:

20 pounds wheat bran
20 pounds standard middlings
20 pounds ground yellow corn
20 pounds pinhead oats
10 pounds meat scrap (55% protein)
5 pounds dried buttermilk or skim-milk
2 pounds oyster shell or limestone meal

1 pound salt
1 quart cod-liver oil

Grain Mixture for Chicks:

100 pounds cracked wheat
100 pounds fine cracked corn

Controlling Diseases and Parasites

1. Keep houses, yards and equipment clean and as free from droppings as possible. Clean the laying house once each month. Clean the brooder house once a week.

2. Disinfect all shipping crates.

3. After land has been used as a growing range, keep chickens off from it for the next two years.

4. Grow some crop on idle ranges; wheat, rye and oats require the least attention and the crop can be harvested and used for litter without threshing. A cultivated crop is preferable because the soil is stirred several times during the summer and exposed to the sunshine.

5. "Worm" pullets as they go into the laying house. Use tobacco dust treatment once every three months, if troubled with worms.

6. Paint roosts and nests once or twice a year to prevent mites.

7. Breed only good, healthy, vigorous stock.

8. Buy only from a farm that tests for bacillary white diarrhea, preferably certified stock.

9. Burn or bury deeply all dead birds.

10. Make all possible use of direct sunlight.

11. Keep flies away from manure of all kinds.

12. Breed from old hens or pullets that have been through a moult.

13. Dispose of all litter and droppings so birds cannot come in contact with them.

14. Destroy or isolate all sick birds.—Farmingdale State School.

How to Treat for Lice

Blue ointment is a poisonous salve. It can be purchased at any drug store. It is easier to apply, if mixed 50-50 with vaseline. A small amount about the size of a pea, should be well rubbed into the skin just below the vent. If not well rubbed into the skin, a hen might get enough of it, when preening her feathers, to result fatally. One treatment is effective for from six to seven months.

Sodium fluoride comes in powdered form. One pound treats 100 hens. It can be used as a powder or as a dip. Using it as powder is rather hard on the folks who have to apply it; using it as a dip is rather hard on the hens.

Avoid lice on chicks by killing the lice on the broody hens and thoroughly cleaning and disinfecting the brood coops.

Do not use blue ointment on a hen just before setting her. The grease might spoil the hatch. If the blue oint-

ment treatment is used, treat the hens early before the hatching season is on.

If a hen is lousy at time of setting, use sodium fluoride powder, putting it under the vent and under the wings.

To treat chicks for lice use either the sodium fluoride powder or blue ointment. For small chicks mix the ointment with 75 per cent vaseline.—Farm Poultry Pays.

Poultry Remedies

Epsom Salts.

Give epsom salts to the flock in a wet mash or in the drinking water once a month, at the rate of one pound to one hundred birds. If the salts are given in the drinking water, later give fresh water before they go to roost. For the treatment of sick birds the dose should be one and one-half pounds to the hundred.

Tonic.

Pulverized Gentian 1 pound
Pulverized Ginger ¼ pound
Pulverized Saltpeter . . . ¼ pound
Pulverized Iron Sulphate ½ pound

Two or three tablespoonfuls of the tonic to 10 quarts of dry mash. When birds are in poor condition this tonic may be used to help bring them back to proper vigor.

Ointment.

5 tablespoons of vaseline
2 tablespoons of glycerine
1 tablespoon of turpentine

Used for frozen combs, etc.

Cotton Seed Oil.

Used for prolapse of the oviduct, crop bound condition, etc.

Tincture of Iodine.

To apply in case of chicken pox, also to disinfect wounds. — Pennsylvania State College of Agriculture.

How to Cull Hens

Culling for Present Production

Character Laying Hen

Non-Laying Hen

Vent Large, dilated, oblong, moist. Small, contracted, round, dry.
Pelvic Bones Flexible and wide apart. Rigid, close together.
Comb Large, red, full, glossy. Small, pale, scaly.
Wattles and Ear Lobes Prominent, soft, smooth. Inconspicuous, rough and dry

Judging Past Production

Long Laying Period

Short Laying Period

Vent Bluish white. Flesh colored.
Eyelids Thin and edges white. Thick, yellow tinted.
Eye Prominent, keen, sparkling. Listless, sunken.
Ear Lobes Enamel white. Yellow tinted.
Beak Pearly white. Yellow tinted.
Face Clean cut, sunken. Full, well-fleshed, yellowish.
Shanks White, flat, thin, crased. Yellow, round, smooth.
Plumage Worn, soiled, lifeless, close-feathered. Signs of molting, loose feathered.

Hints on Hatching

Factors That Affect Hatchability

1. The ration fed to the breeders. Cod liver oil and green feed are important.
2. Cleanliness of Eggs. Washing eggs reduces hatchability but clean eggs hatch best.
3. Length of time eggs are held before hatching. The fresher the eggs the better they will hatch.
4. Temperature at which eggs are held.

Keep below 60 degrees F. if possible.
5. Health and condition of hens.
6. Season of the year. Eggs produced early in the spring do not hatch as well as those produced later.

Holding Eggs for Hatching

The fresher the egg the better the hatch. The Maryland Experiment Station made some tests which conclusively proved that the length of time which the eggs are kept previous to hatching has a most direct and important relation to the hatch.

Age of Eggs Hatch of Eggs

0-10 days 55.14 per cent
11-20 days 41.77 per cent
21-28 days 17.94 per cent

It is not advisable to hold eggs longer than ten days.—Larrowe Milling Co.

How to Operate an Incubator

1. Procure a standard incubator that has been successful in the neighborhood, or have your eggs hatched at some reliable hatchery.
2. Disinfect the incubator with a solution of stock dip, using one quart of dip to twenty-four quarts of water. (Continued on Page 26)

After exposure, gargle with LISTERINE



JOINED YET?
Get in the circle of men
who've found the per-
fect shave—the cool
shave with
LISTERINE SHAVING CREAM

Checks Sore Throat because powerful against germs

COUNTLESS colds and sore throat start as a result of being overheated, then chilled, exposed to drafts or getting your feet wet. Body resistance becomes low, thus permitting germs in the nose and throat to get the upper hand.

FOR SORE THROAT



If, however, you can combat the disease producing germs at the first sign of

trouble, you can often escape the usual prolonged siege of cold or sore throat.

Therefore, when you feel a cold coming on, or your throat is irritated, gargle with Listerine, full strength, several times a day. You will be delighted to see how quickly you improve unless the trouble has made too much headway, in which case consult your physician.

It is not difficult to understand Listerine's effectiveness against infection.

Used full strength, it's entirely harm-

less, yet so powerful it kills even such vigorous germs as the B. Typhosus (typhoid) and S. Aureus (pus) within 15 seconds. Naturally, it is effective against less powerful germs.

Keep Listerine handy and use it at the first sign of trouble. Lambert Pharmacal Company, St. Louis, Mo., U.S.A.

TO AVOID COLDS



The safe antiseptic—kills 200,000,000 germs in 15 seconds

16 times hatching weight at 8 weeks

Mr. W. C. Angle, Columbus, N. J., has fed G. L. F. poultry feeds for three years. He has no difficulty in securing 2 lb. White Leghorn broilers at nine weeks with G. L. F. **STARTING AND GROWING MASH**. His mortality both on chicks and layers has been exceedingly low.

★



THE baby chick has a long way to go to reach even broiler size. Yet properly fed, the young chick will increase its weight sixteen times during the first eight weeks. Chicks need more than a starter, they need a feed that stays right with them and pushes them over the top in record time, healthy, and with good weight.

G.L.F. STARTING AND GROWING MASH contains in recommended* amounts the proteins, minerals, and other digestible nutrients that are essential for satisfactory growth. For best results feed it without Scratch Grains until the chicks are six to eight weeks of age. Then supply Scratch Grains in increasing amounts to provide for the growing energy requirements.

The tag on each bag tells just how much of each ingredient the feed contains. When you feed your chicks a bag of **G. L. F. STARTING AND GROWING MASH** you feed, along with all the other good feeds, the equivalent of 100 lbs. of liquid buttermilk, and the dry form is most convenient for feeding.

*The formula for **G. L. F. STARTING AND GROWING MASH** is recommended by the poultry feeding experts of three leading agricultural colleges.

COOPERATIVE G. L. F. EXCHANGE, INC.

The G.L.F.
COOPERATIVE G. L. F. EXCHANGE, INC.
ITHACA, NEW YORK



With the A. A.
Poultry Farmer



(Continued from Page 24)

3. Level incubator.
4. Incubation room should be well ventilated, of even temperature and free from drafts.
5. Study carefully the manufacturers directions and follow them as near as possible.
6. Operate incubator two days at constant temperature, (101 to 103° F.) before eggs are placed in machine.

How Many Eggs Your Hens Should Lay

The following is the monthly egg-laying standard of the New Jersey State College of Agriculture and shows what your hens should be producing to be up to standard and on a paying basis. Count your hens and keep records.

Month	Eggs per hen	Month	Eggs per hen
January	10	July	16
February	12	August	13
March	19	September	7
April	21	October	6
May	20	November	8
June	18	December	10

7. Turn eggs twice daily and three times if possible.
8. Always turn eggs before filling lamp in order to avoid getting oil on the eggs.
9. Candle eggs on seventh and fourteenth days.
10. Keep incubator closed after 18th day unless manufacturer advises otherwise.
11. Darken door of incubator to prevent the crowding and development of vicious habits among the chicks.

—Conn. Bulletin 114.

The Tobacco Treatment for Intestinal Worms

To each 50 pounds of dry mash add 1 pound of tobacco dust, containing 1½ to 2 per cent nicotine and mix thoroughly. Not over one week's supply should be mixed at one time. Feed this mixture to the birds in place of the regular mash. No other change of feeding is necessary, provided the method used has proved satisfactory. Feed the tobacco dust daily for three or four weeks. Since there is no practical method of destroying worm-eggs in the soil, birds, especially young stock, should be placed on new range. The contaminated runs or range should be plowed and poultry kept away from

Incubating Periods

	Days	Variation
Hen	21	19-23
Goose	32	29-34
Duck	28	27-32
Turkey	28	25-30
Guinea	28	26-31
Pigeon	17	16-19
Pheasant	24	23-25

it for at least one year. It is often advisable to feed tobacco dust daily to young chicks for periods of three or four weeks, with three or four weeks in between during which time no tobacco dust is fed. The chicks may be fed in this manner from two or three months of age until they reach maturity.—Practical Poultry Management by Rice and Botsford.

Time Required for Fertilization of Eggs

From a large number of tests it was found that the shortest time required to fertilize an egg after mating was 42 hours. Tests at the Dominion Experimental Farms indicate that hens require a longer time for fertilization after mating than pullets. The bulk of

evidence shows that satisfactory fertility should be established within seven to ten days after the male has been allowed to run with the flock.

How Long Eggs Remain Fertile After

Removal of Male

The Ontario Agricultural College reports the following fertility after removal of the male:

After	4 days	70% fertile
"	5	61%
"	6	60%
"	7	49%
"	8	12%
"	9	2%
"	10	0%

Use of Lights on Poultry

1. Lights should be used for the purpose of causing hens to eat more. The country where hens originated had days and nights of approximately equal length. Long nights cut down egg production because the hens cannot eat enough to last until morning.

2. How long to use lights? Best results are secured by using lights enough to give the hens a twelve to fourteen hour working day. This can be done by giving lights in the morning, at night, or both. A third system is to turn on the lights for about an hour late in the evening for the purpose of feeding the hens. The time of day the lights are given seems to have little effect on results.

3. Cautions to observe. Lights

Relationship Between Winter Body Weight and Winter Egg Production Observed for Leghorn Pullets.

Wt. of Fowl lbs.	No. of Eggs
2.5	28
3.0	34
3.5	40
4.0	43
4.5	45
5.0	46
5.5	45

should not be put on suddenly, neither should they be discontinued abruptly. Lights should either be used as soon as the days become short in the fall or the length of time the lights are used should be increased about fifteen minutes every day. Sudden changes are likely to throw the hen out of production and cause a molt.

4. When lights are properly managed they are an important method of helping production during the winter. However, benefits come only in case they are properly managed.

How Cod Liver Oil Increases Profits

1. Increases Egg Production.
2. Eliminates Soft Shelled Eggs.
3. Helps to Eliminate Blood Spots.
4. Improves Hatchability.
5. Produces Stronger Chicks.
6. Builds Rugged Bone Structures.
7. Promotes Growth.
8. Reduces Mortality.
9. Gives a Better Molt.
10. Conditions and Protects Against Disease.

—Nopco Bulletin.

How to Mix Cod Liver Oil

Mash—Mix the Cod Liver Oil with a small proportion of mash, and then add to the rest of the feed, mixing thoroughly.

Grains—Simply pour Cod Liver Oil over the grain. Stir well and let stand over night. Stir thoroughly again before feeding. To prevent waste, the grain should be fed in a hopper, rather than be scattered on the ground or litter.

Caution—Be sure that the Oil is thoroughly mixed in the feed. Other—

(Continued on Page 27)

Baby Chicks

WENE CHICKS Blood-Tested

WENE S.C. White Leghorn Chicks will earn you those EXTRA profits which make poultrykeeping worth while. They are hatched from chalk-white eggs averaging at least 24 ounces to the dozen, laid by mature hens weighing 4 lbs. or more each. All our Leghorn breeders are blood-tested and State-supervised. Prices: \$21.00 per 100; \$102.50 per 500; \$200. per 1,000.

S.C. White Leghorn Pullets, 8-10 weeks; 12 for \$13.80; 25 for \$27.50; 50 for \$53.75; 100 for \$105. For Broilers and Roasters order Wene White Wyandotte-White Rock Cross Bred Chicks. They make the finest market birds we have ever seen. Prices: \$19 per 100; \$92.50 per 500; \$180 per 1,000. Deliveries

Straight Heavy Breeds—Barred Rocks, White Rocks, White Wyandottes and R. I. Reds—all blood-tested. Prices: \$25.00 per 100; \$122.50 per 500; \$240.00 per 1,000.

All Chicks shipped postpaid; All Pullets by express collect.

WENE CHICK FARMS, Dept. D, Vineland, N. J.

18 YEARS BABY CHICKS

REDBIRD FARM

Hatched from our own 260 egg strain of S. C. R. I. Reds, famous thruout the country for high production, vigor and size. Our 4000 breeders averaged 60% for December and 65% for January. Largest Red Farm in New England. Each year our entire stock is state tested for B. W. D.—trapnested, bloodline, disease free. 100% live delivery guaranteed.

Catalogue free.

REDBIRD FARM, WRENTHAM, MASS.

BABY CHICKS

	25	50	100	500	1000
S.C.W. Leghorns.....	\$3.25	\$6.50	\$12	\$57.50	\$110
Bd.Rocks & S.C. Reds	3.75	7.25	14	67.50	130
Heavy Mixed.....	3.25	6.50	12	57.50	110
Light Mixed.....	2.50	4.75	9	42.50	80

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BABY CHICKS 100% Live Delivery. Postage Prepaid

	50	100	500
Wh. and Br. Leghorns.....	\$6.00	\$11.00	\$52.50
Buff and Bl. Leghorns.....	6.00	11.00	52.50
Anconas.....	6.00	11.00	52.50
Barred Rocks.....	6.50	12.50	60.00
Wh. and Buff Rocks.....	6.50	12.50	60.00
SC and RC Reds.....	6.50	12.50	60.00
SC Bl. Minorcas.....	6.50	12.50	60.00
Wh. and SL Wyandottes.....	7.50	14.00	67.50
Buff Orpingtons.....	7.50	14.00	67.50

All absolutely first class purebred stock from culled flocks. Prompt shipments.

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	25	50	100	25	50	100
Barred Rocks.....	4.00	7.50	14	S.C.W. Leg.....	3.50	6.50
S.C.R.I. Reds.....	4.00	7.50	14	Heavy Mixed.....	3.50	6.50
500 Lots 1/2c less.				1000 Lots 1/2c less.		

Free Range Flocks. Live Delivery.

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BABY CHICKS

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Barred Rocks.....	\$4.00	\$7.50	\$14	\$67.50	\$130
S.C.W. Leghorns.....	3.50	6.50	12	57.50	110
Heavy Mixed.....			11	52.50	
Light Mixed.....			10	47.50	

These chicks are from free range and heavy egg producing flock. 100% live delivery guaranteed to your door. Write for Special Mating prices.

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CHICKS

Pure bred. Blood tested free range breeders. Leghorns, Anconas, 12c. Rocks, Reds, 14c. Wyandottes, Orpingtons, Minorcas, 15c. Black Giants, 20c. 100% live delivery. Valuable Chick Manual Free.

Seidleton Farms, Washingtonville, Pa.

When writing advertisers be sure to mention the American Agriculturist.

(Continued from Page 26)

wise, a few birds will get more than they need while others will get little or none.

How Much to Use

The usual recommendations for feeding Cod Liver Oil are 2 pounds for every 100 pounds of mash. This is necessary when using an untested oil, and even then you may not feed enough of the necessary Vitamins.

Use a Cod Liver Oil chemically tested for purity and biologically tested for Vitamins A and D and proved by feeding to baby chicks.

For Breeders, Layers, Cocks and Baby Chicks

Total Feed	Oil Required
100 pounds	1 pound
75 pounds	12 ounces
50 pounds	8 ounces
25 pounds	4 ounces
10 pounds	1 1/2 ounces
5 pounds	3/4 ounces

One pint equals about one pound.
Two tablespoonsful equal about one ounce.

House Cleaning Hints for the Poultryman

For the best results a poultry house should receive one thorough cleaning each year before the pullets are housed. The following outline suggests points to be followed.

1. Take all removable fixtures out-doors.
2. Clean same thoroughly and leave in the sun.
3. Remove all litter, dirt and dust from every crack and corner.
4. With a hand wall scraper, clean all roosts, nests and floors.
5. Sweep out all dust.
6. Spray house and equipment, soaking every square inch with a good coal tar disinfectant, using about a 5 per cent solution.
7. Scrub floors, dropping boards, roosts, nests and lower part of walls with a solution of commercial lye, one thirteen-ounce can to twenty-five gallons of water. Do not allow lye to come in contact with the skin.
8. Paint roosts and nests with creosote, carbolineum or undiluted coal tar spray.
9. Put equipment back when house is dry.—Farmingdale State School.

A Few Poultry House Pointers

Don't waste a good hen house by building it in an unsanitary, muddy, poorly-kept yard.

Be sure there is good drainage, even if you have to put in some tile.

Don't build close to granaries, cribs, or barns.

Face the house to the south; make the north, east and west sides wind-proof.

Concrete foundations and floors are rat-proof and easy to keep clean.

Use a filler of crushed stone, coarse gravel, or cinders to prevent moisture from coming up from below and keeping the floor damp.

Have the top of the floor from six to eight inches higher than the outside ground. This insures good drainage.

Use plenty of litter; litter is cheaper than sick hens.

Make a wide door so that litter and grain can be wheeled in and the old litter wheeled out.

The severity of the winter determines the type of house needed. The house should provide enough protection to keep the combs and wattles of the chickens from freezing.

For small flocks, figure on four or five square feet of floor space per hen; for large flocks figure on three or four square feet per hen. Good dimensions are:

For 25 hens—12 feet deep by 10 feet long.

For 75 hens—16 feet deep by 10 feet long.

For larger flocks build a house 20 to 24 feet deep.

The size of the front opening of the poultry house will depend upon the size

(Continued on Page 28)

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for Burning Either Coal or Oil



BETTER BROODERS for Less Money

It makes no difference what kind of a Brooder you want—coal burning or oil burning—the Drew Line Dealer in your locality will show you the most practical, convenient, economical and accurately controlled Brooder for either coal or oil at prices that will save you money.

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BEACON STARTING MASH saves more chicks—the only starter with the all-milk base. No meat scraps. No fish meal. Better growth, plus insurance against coccidiosis without feeding a special mixture.

BEACON CHICK FEED with pure oatmeal base, starts chicks right. No weed seed or filler. No dust or waste. Contains most liberal percentage of cracked New York State white wheat (finest milling wheat) best cracked yellow corn and plenty of steel-cut oatmeal.

BEACON GROWING MASH with dried buttermilk, alfalfa LEAF meal, complete minerals, and Protozyme, develops big, rugged pullets for heavy cold weather laying.

There's nothing better made than BEACON Feed, With Science, Truth and Purity as creed. Just TEST it—it will fill your every need.

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Giant Magic unequalled for raising broilers.

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CHICKS

20TH CENTURY "MARVEL" CHICKS



Special Mating Imported Barron S. C. White Leghorns

Our flocks for this very Special Mating consist of 350 YEARLING hens carefully selected by an Expert Poultryman. These hens weigh not less than 4½ pounds, and up to 6 pounds. They produce better than 250 eggs per year, per hen, imported from TOM BARRON, of England.

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THOUSANDS OF PLEASED CUSTOMERS can tell you about the splendid chicks and wonderful profits made by our Marvelous High Class, Heavy Laying, Standard Bred, American Cert-O-Cult Matings for 29 years; Pure-Bred, carefully culled for size, type, color, vigor and egg laying ability. Look at the low prices—100% Live Delivery Guaranteed—you can safely order from this advertisement. References: Commercial Bank, Dun or Bradstreet.

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S. C. Wh., Br., Buff, Blk. Leghorns, Anconas.....	\$7.00	\$13.00	\$60.00	\$115.00
Barred and Wh. Rox, R. C. and S. C. Reds, Blk. Minorcas.....	8.00	15.00	70.00	135.00
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Heavy Mixed, \$12.50 per 100; Light Mixed, \$9.00 per 100. Wh. Pekin Ducklings, 25c each. C. O. D. Shipments: We will ship 20th Century Chicks C. O. D. (pay postman on delivery) if you prefer. Get our FREE illustrated catalog. Tells all about our money-making chicks. C. O. D. plan, imported matings, etc. 20th CENTURY HATCHERY Box R NEW WASHINGTON, OHIO

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Our birds have ample range which insures large, hardy chicks. They are carefully selected and mated. They mature early. Our fine quality chicks can be had at a price that will surprise you. Get our low prices. They will interest you. Write today for FREE catalogue. C. M. Longenecker, Box 40, Elizabethtown, Pa.

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BABY CHICKS C. O. D. Send only \$1

Don't miss this chance to get a start with Wolf's extra quality pure-bred high producing stock. Every breeder produced on free range and health of chicks is safeguarded. Get Our Catalog and Price List

Tells about prizes won by our birds. Read about Mary Heneel who made over \$1000 profit in one year with birds of our breeding. All leading breeds—prices very attractive. Write today. Chicks shipped C.O.D. Toe picking stopped instantly with Wolf's "No-Pick." Order box today. \$1.00 postpaid. Satisfaction guaranteed or money refunded.

WOLF HATCHING & BREEDING COMPANY, BOX 1, GIBSONBURG, OHIO

HUBER'S RELIABLE CHICKS

10 FREE CHICKS—ON orders booked before March 15th, we give 10 Chicks free with each 100 ordered. When we say RELIABLE—we mean RELIABLE in every way. Breeding stock of highest quality of 19 years of careful development. Special attention paid to health of flocks and records kept.

CATALOG FREE—CHICKS SENT C. O. D. IF YOU WISH Write for details—get our illustrated catalog which tells all the story. Our prices reasonable. A book on Raising Chicks worth many dollars given free with each order of \$10.00 or more. Big discount for early orders.

HUBER'S RELIABLE HATCHERY, No. High St., Fostoria, Ohio

New York State Certification Pays

The Key to Success and Greater Profits with Production Bred Poultry Today is Through the Purchase of High Grade Stock, Eggs or Chicks from Members of the

New York State Co-operative Official Poultry Breeders, Inc. Formerly New York Co-operative Poultry Certification Association, Inc.

The Big 1929 Catalogue is off the press, and will be mailed Free to All Requests. Write.

M. M. Griffiths, Sec'y. Box Y New Hartford, N. Y.

QUALITY BABY CHICKS

Five extra given free with every box of one hundred ordered. April hatched chicks. Leghorns, White, Brown, Buff, Black—\$14.00 per 100; Barred Rocks, Reds, Minorcas, Anconas, \$16.00 per 100; White Rocks, Wyandottes, Buff Orpingtons, \$18.00 per 100. March, \$2 more; May, \$2 less; June \$4 less. Custom hatching. Eggs for hatching. Odds and Ends, Left Overs, Mixed broiler chicks, Light, 10c; Light and Heavy, 12c; All Heavy, 14c; Better order now. Will send C.O.D. Thousands hatching daily all year around. Active, husky, chicks hatched from healthy free range breeders that will live, grow and lay. Prompt shipments. Postage prepaid. Live delivery. Send for folder. SCHOENBORN'S HATCHERY, 335 Main St., Hackensack, N. J. Phone 1603 or 1604.

200,000 CHICKS 1929

Goodling's Super Quality. Healthy, Strong and Vigorous
50 100 500 1000
Single Comb, White Leghorns.....\$6.50 \$12.00 \$57.50 \$110
Barred Plymouth Rocks.....7.00 13.00 62.50 120
S.C. Rhode Island Reds.....8.00 15.00 75.00
Broiler Chicks, Heavy Breed.....5.50 11.00 52.50 100
Broiler Chicks, Light Breed.....5.00 10.00 47.50 90
Order direct. Prepaid 100% live delivery guaranteed. Circular Free.

THE VALLEY HATCHERY Box A, R. No. 1, RICHFIELD, PA.

LANCASTER QUALITY CHICKS

Our chicks come from flocks culled for Egg Production and Standard Quality by poultrymen trained at Ohio State University. OUR CATALOG is chicken from cover to cover. Write for it. Lancaster Farms Hatchery R.26 Lancaster, O.

CLEAR SPRING QUALITY CHICKS

S.C. White Leghorns.....per 100 500 1000
Barron and Wyckoff Leghorns.....\$11.00 52.50 \$100.00
Barred Rocks and R.I. Reds.....12.00 57.50 110.00
Light Mixed, \$9.00 per 100; Heavy Mixed, \$12.00 per 100, for March and April. 100% live delivery. Postpaid. New circular free giving full details of all breeds. CLEAR SPRING HATCHERY, McAlisterville, Pa. Box 49

RHODE ISLAND REDS Single Comb. Vt. Certified. Acc. free from white diarrhea; vigorous. Males from 200-300 egg hens. Early pullets: Started chicks, 3000 Baby chicks weekly. Circular. ASCUTNEY FARMS, A10, HARTLAND, VT.

BABY CHICKS

hatched by the best system of incubators from high class bred-to-lay stock. White, Brown, Buff Leghorns, Anconas \$14.00 per 100; Barred, White Rocks, Minorcas, Reds \$16.00 per 100; White Wyandottes, Buff Orpingtons \$17.00 per 100; Giants \$20.00 per 100; Heavy Broilers \$12.00 per 100; Light Broilers \$10.00 per 100; Pekin Ducklings \$30.00 per 100. Add 25c on orders for less than 100. Safe delivery guaranteed by parcel post.

Nunda Poultry Farm, Desk H, Nunda, N. Y. Member of the International Baby Chick Ass'n. and the N. Y. State Co-operative Chick Producers Ass'n.

BABY CHICKS Delivery After February 15th.

Full count and quality guaranteed
Free Range Bred 25 50 100 500 1000
White and Brown Leghorns.....\$3.25 \$6.25 \$12 \$58.75 \$115
Anconas and Black Leghorns.....3.25 6.25 12 58.75 115
White and Barred Rocks.....3.75 7.25 14 68.75 135
Rhode Island Reds.....3.75 7.25 14 68.75 135
Mixed chicks all breeds.....2.75 5.25 10 48.50 95
Write for catalog and special discount on early orders

Hatchery Chicks for Greater Profit

Uish Poultry Farm and Hatchery

Port Trevorton, Pa. Box 12

CHICKS

Will ship C. O. D. 25 50 100
S. C. Reds.....\$4.00 \$7.50 14.00
Barred Rocks.....4.00 7.50 14.00
White Leghorns.....3.50 6.50 12.00
Heavy Mixed.....3.50 6.50 12.00
Light Mixed.....2.75 5.00 9.00
500 lots ½c less, 1000 lots 1c less.
Free range. 100% delivery. Circular.

W. A. LAUVER, McAlisterville, Pa.

BABY CHICKS

Tancred Strain W. Leg. \$12 per 100
Wh. Leghorns.....11 per 100
Barred Rocks.....14 per 100
S. C. Red.....14 per 100
Heavy Mixed.....12 per 100
Light Mixed.....9 per 100
500 lots ½c less; 1000 lots 1c less.
100% live delivery guaranteed. Order from this ad. or write for free C. P. Leister, McAlisterville, Pa. circular.

CHICKS

S.C. Barred Rocks \$12 for 100; \$55.00 for 500. Tancred S.C.W. Leghorns \$11 for 100; \$50 for 500. Heavy Mixed 10c; Light 8c. 100% Guaranteed. Free circular. TWIN HATCHERY, McALISTERVILLE, PA.

(Continued from Page 27)

and depth of the house and upon climatic conditions.

A deep house can have more open front than a narrow house under similar weather conditions.

Doors and windows should be arranged to admit as much sunshine as possible.

Long, narrow windows are better than square ones.

Use thin unbleached muslin for curtains. Bleached cotton contains so much sizing it keeps out the air.

Sweep the curtains occasionally to remove dust; otherwise the air spaces become clogged.

The perches should be at least 14 inches apart.

Allow from 10 to 15 inches of roosting space for each hen.

A dropping board below the roosts helps to keep the hens warm by preventing air from coming up from below. The dropping board should be about eight inches below the perches.

Have one nest to every four or five hens.

Keep the dropping boards clean—nothing spreads disease more quickly than filthy floors and dropping boards.

Don't have any dirty, muddy, wet places in the chicken yard—they are disease spreaders.—Farm Poultry Pays.

Normal Chick Growth

The following data make it possible to check up on the growth of the young stock during the growing season:

White Leghorns		
Week	Weight lbs.	Feed Consumed lbs.
4	0.28	0.79
8	1.09	3.11
12	1.80	6.86
16	2.36	11.21
20	2.90	16.64
24	3.28	22.13

Rhode Island Reds		
Week	Weight lbs.	Feed Consumed lbs.
4	0.36	0.81
8	1.23	3.42
12	2.30	7.63
16	2.91	12.56
20	3.68	18.91
24	4.30	25.77

—Conn. Agr. Exp. Sta. Bul. 96.

Essentials for Brooding Chicks

1. Good chicks well hatched from healthy, vigorous parent stock.
 2. A perfect feed properly fed.
 3. Even temperature.
 4. A good brooderhouse, protecting the chicks from weather extremes.
 5. Abundance of direct sunlight.
 6. Ventilation without draft.
 7. Sufficient space.
 8. Absolute dryness.
 9. Opportunity for out-door exercise and "hardening off".
 10. Shade.
 11. Protection against fire and enemies.
 12. Clean soil and generally sanitary conditions.
- Check the above list over and see whether you have failed in one or more of these fundamental principles.—Larowe Research Bulletin.

Wyckoff Tancred White Leghorns CHIX

Book your order now for March and April Chicks. \$12.00 per 100 \$57.50, 500 \$110, 1000 100% prepaid safe delivery guaranteed. J. N. NACE POULTRY FARM, Box No. 50, Richfield, Pa.

KERLIN BARGAINS in White Leghorn Chicks

"Kerlin Quality" Money-Making Leghorns. Beautiful, Great Winter Layers, White Diarrhea Free, Egg Contest Winners. Over 50,000 Delighted Customers. BIG DISCOUNT on Chicks ordered Now, Delivery When Wanted. Free Starting Feed! Big Catalog FREE! Kerlin's Grand View Poultry Farm, Box 35, Centre Hall, Pa.

BIG CHICKS from High Record Matings



300-326 eggs S.C. White Leghorns. Also Special Tancred Matings and 15 other varieties. Buff, Brown, Black Leghorns; Anconas; White, Buff, Black Minorcas; Barred, White, Buff Rocks; White Wyandottes; S.C. and R.C. Reds; Buff Orpingtons; Jersey Black Giants. Write today for free catalog before you buy. Prices Low and good genuine personal service to each customer. Satisfaction Guaranteed. 25 years shipping chicks to satisfied customers. FREE! 1000 CHICKS in prizes for best photos of Pioneer Chicks or Flocks.

1900-1929 First to ship Chicks in U. S. UHL PIONEER HATCHERY & EGG FARMS New Washington, Ohio Dept. A

CHICKS with vim and vigor

Hatched by men with 19 years experience, from culled flocks. 100 per cent live delivery guaranteed by Prepaid Parcel Post at the following prices:
S. C. White Leghorns.....11c each—\$100.00 per 1000
S. C. Brown Leghorns.....11c " 100.00 " 1000
Barred Rocks.....12c " 110.00 " 1000
S. C. R. I. Reds.....14c " 130.00 " 1000
S. C. Black Minorcas.....14c " 130.00 " 1000
Mixed Broilers.....9c " 80.00 " 1000
Order now for spring delivery. Capacity 60,000 eggs. \$1.00 will book your order. Catalogue free.

The Pennsylvania Hatchery, Liverpool, Pa. Our Slogan "Service After Delivery"

100% Live Arrival

	100	500	1000
Ferris Strain White Leghorns.....	\$12	\$57.50	\$110
Everlay Brown Leghorns.....	12	57.50	110
Basom's Barred Rocks.....	14	67.50	130
White Rocks.....	14	67.50	130
Owens' R. I. Reds.....	14	67.50	130
Black Minorcas.....	14	67.50	130
Mixed Chicks.....	9	42.50	80

JUNIATA POULTRY FARM Box A Richfield, Pa.

PENNA. "State Supervised" CHICKS

Flocks inspected by officials from the Penna. Dept. of Agriculture. Our 19th year. Get our low prices on Reds, Rocks, Leghorns and Minorcas. Member I.B.C.A. Catalogue free.

THE KEYSTONE HATCHERY, (The old reliable plant) RICHFIELD, PA.

BABY CHICKS

From Heavy Laying Free Range Flocks

	25	50	100	500	1000
S.C.W. & Br. Leghorns.....	\$3.50	\$6.00	\$12	\$57.50	\$110
S.C.B. and Wh. Rocks.....	4.00	7.50	14	67.50	130
Buff Orpingtons & Reds.....	4.00	7.50	14	67.50	130
White Wyandottes.....	4.00	7.50	14	67.50	130
Assorted Chicks.....	3.00	5.00	9	42.50	80

100% prepaid safe delivery guaranteed.

Order from this ad. or write for circular

J. N. Nace Poultry Farm RICHFIELD, Pa. Box 161

White Leghorn Baby Chicks a Specialty

	Per 50	100	500	1000
S. C. W. Leghorns.....	\$6.50	\$12.00	\$57.00	\$110.00
Barred Rocks.....	7.50	14.00	67.50	130.00
R. I. Reds.....	7.50	14.00	67.50	130.00
Heavy Mixed.....	6.50	12.00	57.50	110.00
Light Mixed.....	5.00	9.00	42.00	80.00

Our White Leghorn Cockerels: Sire—from hen that laid 312 eggs per year. Hens—254-290 eggs. Actual 365 day trap nest record. All chicks Postpaid to your door. 100% live delivery guaranteed. Order direct or write for free circular. SUNSHINE HATCHERY, Dalmatia, Pa.

HIGH GRADE CHICKS

Blood Tested and Utility Stock

Leghorns, Rocks, Reds, Wyandottes, Anconas, Black Minorcas and Mixed. Also two and six weeks old chicks. Pekin Ducklings.

Write for circular and prices.

TAYLOR'S HATCHERY, BOX 12, LIBERTY, N. Y.

Ruehle's Sunnyside Farm

PLEASANT VALLEY, N. Y.

Single Comb White Leghorns trapnested and pedigreed since 1904. Orders for chicks and eggs booked now. Catalogue on request.

DUCKLINGS \$33; EGGS \$14-100

"Duck News" Free. ROY PAROE, Islip, L. I., N. Y.

Hampton's Black Leghorn

Day Old Chicks. Circular free. A. E. HAMPTON, Box A, Pittstown, N. J.

BABY

CHICKS

5 Lb. Leghorns

The old reliable Heavyweight stock. Produced High Up on Pennsylvania's healthy mountain top. Get your chicks from certified record strains above 300 eggs. R.O.P. Hollywood, Tancred, Barron Matings. Hatch weekly pure white eggs up to 24 ounces per dozen. Beautiful Color Plate Leghorn Catalogue Free.

FARM SERVICE
ROUTE A10 TYRONE, PENNA.

**KERR'S
1929
CHICKS**

Baby chicks that are close up to the winners for heavy production

In the notable 1927-28 egg-laying contests, Kerr's five high ten-bird pens stood 9th of all breeders in the world, with an average lay per bird of 221.9 eggs. The leading specialty breeders of the whole country competed.

In the contests now going on, a Kerr Barred Rock pullet was high bird of the breed in November at New Jersey; Kerr B. R. pen and individual bird were high at New York; Kerr White Leghorns were 1st or 2nd high pens for five successive weeks at West Virginia.

Kerr's 1929 Chicks have several crosses of the same blood that is winning in national competition against leading specialty breeders of the United States.

Write for booklet showing how Kerr produces such strong, livable chicks from prize-winning stock at reasonable prices.

KERR CHICKERIES, Inc.

Department 10

Frenchtown, N. J.
Trenton, N. J.
Camden, N. J.

Paterson, N. J.
Binghamton, N. Y.
E. Syracuse, N. Y.

Lancaster, Pa.
Danbury, Conn.
W. Springfield, Mass.



FINGER LAKE REGION BABY CHICKS



22 years' progressive success with Cornell's advice in culling, grading, and feeding in operating a 71 acre Poultry Farm. Strong, Liveable, Productive and Profitable Baby Chicks. Leghorns, Rocks, Reds, Wyandottes and Giants. Ask for price and mating lists. Custom Hatching.

THE DERORY TAYLOR CO.,
NEWARK, NEW YORK



S.C. WH. LEGHORNS BARRED ROCKS R.I. REDS

Send for low price list and booklet, describing our farm, stock, etc. Our Tancred Strain Leghorns are as good as the best. Eighteen years in the Chick and Chicken business.

Brookside Poultry Farms,

Dept. A. E. C. Brown, Prop., Sergeantsville, N. J.

EIGENRAUCH FARMS

RED BANK,

NEW JERSEY

18TH YEAR

breeding White Leghorns for size, vigor and heavy production of large White EGGS. 8,000 LAYERS are housed on our farm.

Our Chick Guarantee

100% satisfactory arrival on the exact date we promise shipment. Every chick sold by us is hatched from eggs laid by breeders on our own farm.

Write for Free Folder and Prices on Pullets and Chicks

EIGENRAUCH FARMS Dept. G, Red Bank, N. J.

Hall's Chicks

Leghorns-Reds-Rocks-Wyandottes

"WELL BRED FROM WELL BREEDERS"

You can't fool the neighbors, and most of our output is sold to our neighbors. If you want really "better chicks" with some real breeding behind them, to make MORE MONEY for you, take advantage of our years of breeding. New England Accredited Stock. All breeders. 100% White Diarrhea free. Official Contest records. Circular.

Hall Bros. Poplar Hill Farm, Box 59 Wallingford, Conn.

300,000 White-Brown Buff Leghorn CHICKS

Shipped C.O.D. Send No Money
PURE STRAINS—Tancred—Hollywood—Barron—American S. C. White Leghorns—Brown and Buff Leghorns—Eggs and Chicks Produced from some of the finest matings in Pennsylvania. Breeders Specializing in High Egg Production—Dependable Chicks for Commercial Poultrymen—100% Live Arrival—Send No Money—Chicks Shipped C.O.D.—Catalogue.

Pennsylvania Co-Operative Leghorn Farms,
Box 314 Grampian, Pa.

HERE: NEARLY EVERYONE RAISES FULL BLOODED "AMERICAN" QUALITY CHICKS



	50	100	500	1000
American or Eng. SC. Wh. Leghorns.....	\$6.75	\$13.00	\$62.00	\$120.00
Hollywood Wh. or Brown or Buff Legs.....	7.25	14.00	67.00	130.00
Tancred Wh. Leg. Anconas—Barred Rocks.....	7.75	15.00	72.00	140.00
RC or SC Reds. Wh. Rocks. Parks Rocks.....	8.25	16.00	77.00	150.00
Wh. Wyandottes. Buff Orp. Blk. Minorcas.....	9.25	18.00	87.00	170.00
Brahmas. Col. Rocks. Blue Andalusians.....	11.25	22.00	105.00	200.00
Light Mixed \$9.00 a hundred. Mixed any breeds our selection \$10.00. Heavy Mixed \$12.00 a hundred.				

Get our NEW CATALOGUE—It proves to you the SUCCESS our Customers have with our chicks—Breeders culled and Bred for High EGG PRODUCTION in Winter when eggs are demanding large premiums. Reference, Curwensville National Bank—100% Live Arrival—Dependable Service. Order Early.

AMERICAN CHICKERIES, BOX 214, GRAMPIAN, PA.

CHERRY HILL CHICKS

S.C.W. Leghorns—Wyckoff Strain.....	100	\$12.00
S.C. Everlay Brown Leghorns.....	100	12.00
Barred Rocks—Wm. Nace's select.....	100	14.00
S.C. Rhode Island Reds.....	100	15.00
Mixed or Broiler Chicks.....	100	9.00

1/2c less in 500 lots. 1c less in 1,000 lots.
25 chicks add 2c, 50 chicks add 1c. Full count.
100% live arrival guaranteed. Parcel Post prepaid.
Bank reference. Order direct from this ad or write for free circular.

CHERRY HILL POULTRY FARM,
WM. NACE, Prop. MCALISTERVILLE, PA.

Special Offer on Sunshine Chicks

Sunshine Chicks will be better than ever this season, blood tested for 5 years, selected for high egg production, bred for vigor and vitality. In fact, Sunshine Chicks are of such high quality that we not only back them with a guarantee of live delivery but we are going still further.

We Guarantee Them To Live

over the first critical 10 days of their life. We will replace loss up to 90% free of charge. Play safe and send for our folder and price list now.

WRITE TODAY!

Sunnycrest Hatcheries, 1925 Charleston Avenue, Huntington, W. Va.

BABY CHICKS

13 Leading Varieties—White Leghorns, Black Minorcas, Rocks, Reds, Wyandottes, Hamburgs, Speckled Sussex, Buff Orpingtons.

\$9.00 per hundred and up.

Free Catalog and Price List

Lantz Hatchery, Tiffin, Ohio



National "Superbred" Chicks

500,000 SUPER-QUALITY CHICKS FOR 1929

Insure next winter's poultry profits by ordering NATIONAL "SUPERBRED" CHICKS NOW

We breed and hatch 13 of the leading Breeds. Send for our FREE illustrated catalog with prices on our utility and special mated chicks. All chicks sent prepaid. We guarantee 100% delivery of good lively chicks. Member of International Baby Chick Ass'n. You will save money by writing us now. National Chick Farms, Box 408, Mifflintown, Penna.



Lone Oak Poultry Farm

A breeding farm where nothing but our own production and rearing is sold.

Chicks of Known Ability

Breeders used this season were sired by males whose dams' production records ranged from 200-278 eggs. This same blood is being intensified still more in the present flock matings. Make sure of the production ability of your future flock by securing chicks from these choice matings.

Choice breeding cockerels, priced right.

LONE OAK POULTRY FARM, Box 661, BABYLON, N. Y.

CHICKS! Breeders on Our Farm

WYCKOFF LEGHORNS
5000 Chicks Weekly
Bargain price \$18.00 per hundred. Ten per cent with order, balance C.O.D. Refund if ordering dates are filled. SPECIAL—200 chicks weekly from pedigreed matings, price on request.

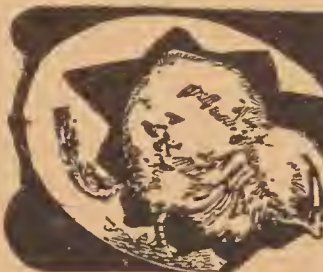
Hatchery Chicks For Greater Profits
MAPLEWOOD POULTRY FARM,
OFFICE 196 LARK STREET, ALBANY, N. Y.



Fairport Quality Chicks

are bred to make money for you. Strong, healthy, vigorous from the world's best and heaviest laying strains such as—Tancred, Ferris, Owen Farms, Daniels, Thompson, Martin, Shepard, Fishel and others. Free range flocks, scientifically culled and supervised, Smith Hatched. 100% live delivery guaranteed. 16 breeds 9c and up. Postpaid. Members International Baby Chick Association. Send now for free poultry book and prices. Buy Hatchery Chicks for Greater Profits.

FAIRPORT HATCHERIES Box 44 Fairport, N. Y.



Schwegler's "THOR-O-BRED" BABY CHICKS

THEY LIVE because they are bred from healthy, free range breeders that have thrived and gained in vigor for generations. They LAY because they are 90% selected and tested high egg power stock. White, Brown and Buff Leghorns, Barred and White Rocks, R. I. Reds, Anconas, Black Minorcas, Buff Orpingtons, White Wyandottes. \$2c and up. 100% live delivery guaranteed. Postpaid. Member International Chick Ass'n. Write today for FREE Chick Book.

SCHWEGLER'S HATCHERY, 204 Northampton, BUFFALO, N. Y.



BOS QUALITY CLASS A CHICKS

From healthy heavy layers. Several varieties. Low prices. Special discounts. No money down. Pay 10 days before shipment or C.O.D. 100% live delivery postpaid. Catalogue free.
Bos Hatchery, Zeeland, Mich. R. 2A

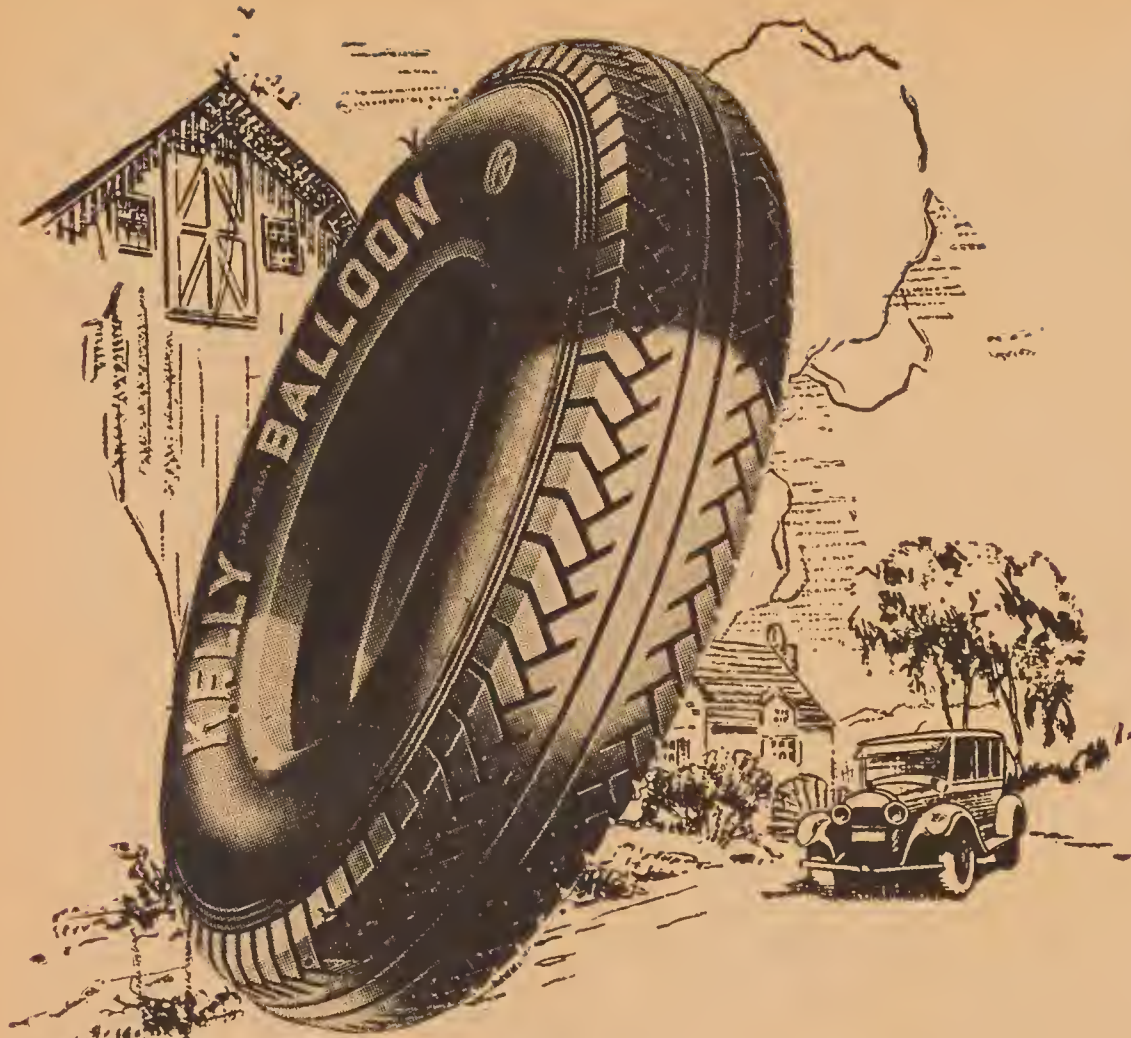
WYCKOFF AND TANCRED STRAIN

100% Arrival Prepaid to your office.

White Leghorns.....	100	500	1000
	\$12.00	\$57.50	\$110

THE RICHFIELD HATCHERY, Box E, RICHFIELD, PA.

When writing advertisers be sure to say that you saw it in
AMERICAN AGRICULTURIST



A tire for car-owners who want their money's worth

THE outside of a tire doesn't tell you how much mileage has been built into the carcass.

As the old saying goes, "Handsome is as handsome does."

There's only one safe way to buy tires, and that is to buy a well-known reputable make.

If you want to be SURE of getting all the ruggedness and long life that can be built into a tire, buy Kelly-Springfields.

For 34 years Kelly has been building the quality product of the tire industry. Since this quality product sells for the same price as most other tires, why be satisfied with less?

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SAVE HALF Your Paint Bills

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PROVED BEST by 87 years' use.

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WHOLESALE FACTORY PRICES

INGERSOLL PAINT BOOK tells all about Paint and Painting for Durability. FREE TO YOU with Sample Cards and our PREPAID FREIGHT OFFER. WRITE US. DO IT NOW and SAVE MONEY.

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Oldest Ready-Mixed Paint Factory in America. Est. 1842
252 Plymouth Street, Brooklyn, N. Y.

Make Lumber With an IRELAND SAW MILL

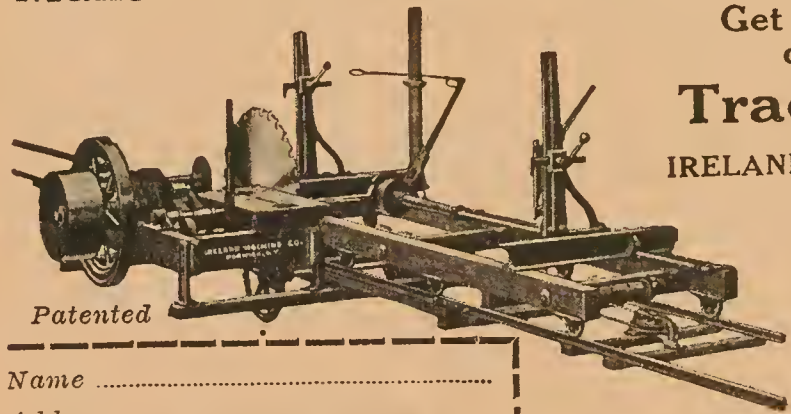
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Wood Saw Machines
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To benefit by our guarantee of ads, say
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With the A. A. Farm Mechanic



How to Figure Pulley Sizes

To find size of driven pulley—Multiply size and speed of driving pulley together and divide by speed of driven pulley.

To find speed of driven pulley—Multiply size and speed of driving pulley together and divide by speed of driven pulley.

To find size of driving pulley—Multiply size and speed of driven pulley together and divide by speed of driving pulley.

To find speed of driven pulley—Multiply size and speed of driven pulley together and divide by size of driving pulley. Pulley sizes should be inches.

Note—Extension Bulletin 72 published by Cornell University gives detailed information about pulleys, belts and shafts.

Cost of Operating Tractors on New York State Farms

A study by C. W. Gilbert of the costs of operating tractors on 175 New York farms for the crop year 1926 showed the cost per hour of operating a tractor without operator to be 85.7 cents. This cost was made up of depreciation 36.18 per cent., fuel 32.90 per cent., interest 9.62 per cent., lubrication 9.43 per cent., repairs and mechanic's labor 6.04 per cent., and other costs 5.83 per cent.

The most important factor affecting costs of operation is the amount of work done. On farms where the tractor was busy less than 200 hours per year, the cost of operation without operator was \$1.37 per hour. Where the tractor was busy over 600 hours per year, the cost of operation was \$.638.

Records at the College on 181 tractors show that the average consumption in 1926 was 338.5 gallons of kerosene and 199.9 gallons of gasoline.

Creosoting Fence Posts

The only equipment needed for the open tank method of creosoting fence posts is a tank which can be heated. A good outfit is a galvanized iron tank three feet in diameter and four feet high. The creosote may be heated over an open fire with the tank on a temporary foundation. The posts should be thoroughly seasoned before treatment.

The lower half of the post should remain in hot creosote (190 degrees F.) for a period of two to four hours. The posts should then be allowed to remain in the creosote as it cools. The tops of the posts such as cotton wood and willow should be dipped in the creosote for a few minutes. A penetration of one-half inch in the portion of the post coming in contact with the ground will give good protection.—Farm Hand Book, Iowa State College.

Farm Lighting Systems

1. Kerosene lamps:

- a. Wick: A wick lamp gives a small amount of yellow light for the fuel burned.
- b. Mantle: This type of lamp has a mantle which is heated by the flame. It gives a good amount of white light and is far superior to the wick lamp. They will smoke if turned too high.

2. Gasoline lamps:

- a. Individual pressure gasoline lamps with mantle. (This type of lamp gives good satisfaction but requires some attention.)
- b. Pressure tank with pipes to light fixtures. (We do not feel that this type of lighting system is a good buy.)

3. Acetylene lights:

- a. An acetylene generator in the cellar, outbuildings or underground with pipes to light fixtures.

tures. An acetylene system gives a fine white light at a reasonable cost. The gas can also be used for cooking.

4. Electric lights:

- a. Farm electric plants (1) Storage battery type (2) Automatic type without storage batteries. Farm electric light plants give excellent service but are not usually advised for use with heating appliances. Aside from the first cost, the principal cost comes from the necessity of replacing the batteries within a relatively few years depending upon the care and wear given them.

- b. High tension transmission lines. Where high tension power line is available, it is recognized as the best farm lighting system. In addition to lights, it will also furnish heat and power.

Capacity of Cisterns

For each foot in depth, a circular cistern

5 feet in diameter holds..	4.66 bbls.
6 feet in diameter holds..	6.71 bbls.
7 feet in diameter holds..	9.14 bbls.
8 feet in diameter holds..	11.94 bbls.
9 feet in diameter holds..	15.11 bbls.
10 feet in diameter holds..	18.65 bbls.

For each foot in depth, a square cistern

5 ft. x 5 ft. holds.....	5.92 bbls.
6 ft. x 6 ft. holds.....	8.54 bbls.
7 ft. x 7 ft. holds.....	11.63 bbls.
8 ft. x 8 ft. holds.....	15.19 bbls.
9 ft. x 9 ft. holds.....	19.39 bbls.
10 ft. x 10 ft. holds.....	23.74 bbls.

How to Clean Auto and Tractor Radiators

Grease, oil, honey, and other gummy deposits are best removed by using washing soda, concentrated lye and other caustic solutions strictly according to the manufacturers' directions.

Use one pint of washing soda to two gallons of water or—

Use one-fourth can of lye to two gallons of water or,

Run the car with retarded spark until solution is hot, let stand half an hour, drain, then flush out with a hose under pressure.

The foregoing solutions may loosen soft scale so that it can be washed out, but has no effect on hard scale. For this use one quart commercial muriatic acid (hydrochloric is another name) to two and one-half gallons of water; run until boiling and let remain for 30 minutes, then flush with a hose under pressure.

Rules for Laying Tile Drains

Water enters a tile through the joints and not through the walls of the tile as many suppose. As there is a joint every foot, the water comes in along the tile line in very small quantities with no perceptible current, so that under normal conditions no mud or sand will enter the tile that will not pass out with the water if the tile is properly laid.

The following rules for tile drainage should be observed:

- (1) Use dense, hard-burned tile. Round tile is best.
- (2) Do not use tile smaller than 4 inches in diameter.
- (3) Time and labor will be saved by use of the proper tools.
- (4) An even grade is essential. Sags or "humps" in the line must be avoided.
- (5) The bottom of the trench should be rounded to fit the tile.
- (6) Lay the tile as close together as it is possible to fit them. Cover

(Continued on Page 32)

Now in March

Men's Suits

in a new style group

A REGULAR part of our store service is to bring to your attention some one department each month. In this way you get a better idea of the outstanding values that are typical of the whole store.

This month you are especially invited to look over our newest Men's Suits.

You will see from this group of suits that what men are looking for this season is *style*. More than ever the lines of the coat, the set of the collar, the roll of the lapel *must be correct*. In your local J. C. Penney store you will find style that is new. You can count on the up-to-date modeling of our suits, direct from our buying office in New York.

You need not be an expert on fabrics in a J. C. Penney store. We serve as experts for you and we sell you only reputable, worthy fabrics. We work with some of the best-known mills. Our thousands of men customers trust us absolutely for fabric and tailoring. You make the choice; we take the responsibility.

Go into your local J. C. Penney store and let us show you a new style suit, in a becoming fabric pattern. You will like our service—always sincerely helpful. Our people know what smart style is and can aid you to select a suit that is good looking and right for you. Also, we see that it fits you correctly.

IF YOU ARE A YOUNG MAN who can set the pace as well as follow it, here is the "Avenue" model. Its snappy character is backed up by high-grade tailoring. You can have this style in any one of several modish fabric patterns. Beginning in March we are making a feature of the "Avenue" at \$24.75, with extra pants at \$5.90. This suit is a real leader in style and will be carefully fitted to suit you.



THIS IS OUR "DORSET" MODEL. It comes in a variety of fabrics, from which you can certainly make a pleasing choice. You can have it with peak or notch lapels. It is cut and made to our own specifications. Priced \$24.75; extra pants \$5.90. Dorset is styled for the man who wants to be well-dressed.

Here you can buy a better suit

You could probably afford to spend more for your suits than we charge. But why should you? Everyone respects thrift. You would have to pay substantially more for these

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FOR THE MAN OF CONSERVATIVE TASTES, this style is fashionable and suitable. It is tailored for us by a maker who adheres strictly to our own specifications. J. C. Penney Co. stores last year sold over \$12,500,000 worth of men's clothing. Such quantities obtain lower prices, which we pass on to you. Come in and examine for yourself the high quality of this suit.

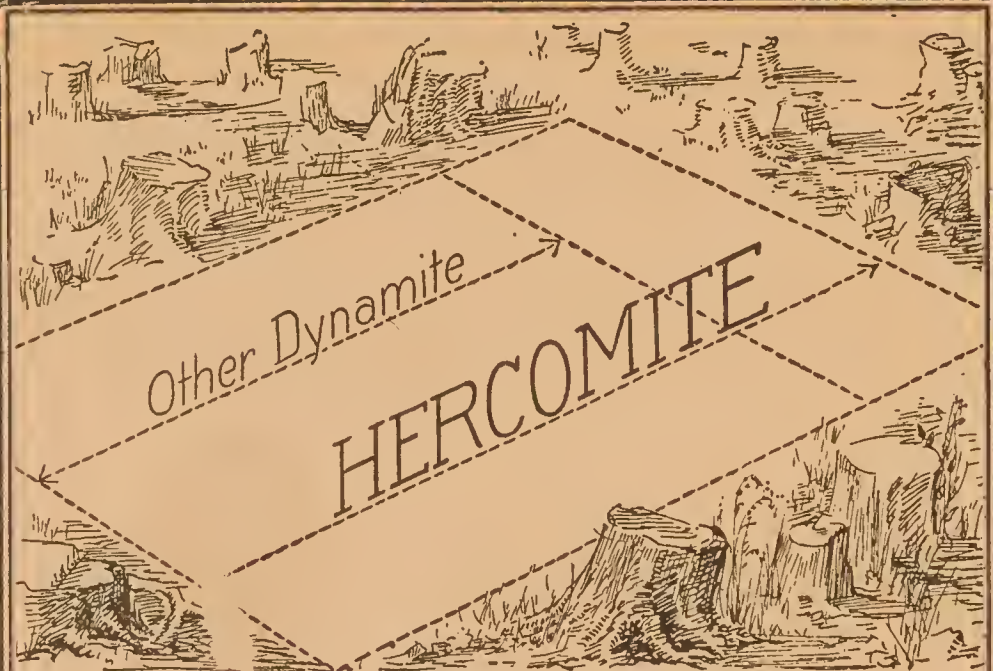
suits if another store sold them, we sincerely believe. Only because we buy for men in 1088 cities can we offer you so much greater values at \$19.75, \$24.75 and up. Our big purchases enable us to obtain very low prices for you in the highest grades of clothing.

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Elmira	Clarion	Pittston
Geneva	Coatesville	Pottstown
Hornell	Donora	Punxsutawney
Ithaca	Du Bois	Shamokin
Kingston	Ephrata	Sharon
Little Falls	Franklin	Shenandoah
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Newark	Grove City	Stroudsburg
Newburgh	Hanover	Titusville
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Hercomite may cost more per 100 pounds than 20% Extra but the cost of a cartridge is less and the strength is the same.

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INSIST UPON GENUINE
ALLIGATOR
TRADE MARK REG. U.S. PAT. OFFICE
STEEL BELT LACING

With the A. A.
Farm Mechanic



(Continued from Page 30)
all cracks of more than one-eighth inch with pieces of broken tile.

(7) The tile should at all times be laid as far as the trench bottom has been prepared. If a trench is allowed to stand open for a considerable length of time, the bottom is liable to become soft and the sides may cave in.

(8) At the close of each day's work the upper end of the tile line should be closed by the placing of a board or flat stone securely against the end tile to prevent entrance of dirt; the line should be "blinded" by careful covering of the tile with 4 to 6 inches of dirt, and care taken that none of the tile is displaced during the operation.

(9) Carefully construct and protect the outlet.

(10) Make a permanent record of the location of each tile line so that it can be found again in an emergency.—U. S. D. A. Extension Service Hand Book.

Farm Heating Systems

1. Stoves:

Stoves keep a small area too hot and the remainder of the house too cold. Several fires must be kept instead of one and the fuel and the ashes must be carried through the living rooms.

2. Hot air systems:

(a). Pipeless furnace. A pipeless furnace is the easiest type of furnace to install but this type will not work well in all buildings. All doors must be kept open to allow the air to circulate.

(b). Piped furnace. A hot air piped furnace must be low enough so that the pipes to the most distant rooms have a good slope.

3. Hot water systems:

A hot water system, due to the difference in temperature of hot water and steam, requires 50 per cent more radiation space than a steam system. There is also a hot water system so arranged that the boiler is on the same floor as the radiators.

4. Steam systems:

Steam boilers are less likely to freeze and require less radiator space than hot water systems.

Many furnaces are automatic in that they keep the rooms at a constant temperature so long as sufficient fuel is supplied.

Wood, coal, oil or gas may be used as fuel with any of the above systems. Wood has the advantage of cheapness if produced on the farm but the fire needs more attention than where coal is used.

Natural gas is used for heating in a very limited section of the country.

Fuel oil is used in connection with an automatic burner that keeps the temperature of the rooms constant. The fire needs no attention and there are no ashes to carry out.

Water Systems for Farm Homes

1. Common pumps:

(a). Kitchen sink with two pumps, one from the well and one from the cistern. (A common suction pump will raise water a distance of approximately 25 feet. However, such a pump will draw water horizontally from a much greater distance. For depths greater than 25 feet, a deep well pump must be used.)

2. Gravity system:

(a). Water piped from spring located higher than building.

(b). Storage tank filled from spring by gravity.

(c). Water siphoned from a well that is higher than the buildings.

3. Rams:

(a). Water forced from a point lower than the buildings by the force of

falling water. Where conditions are right, the ram is one of the cheapest of power sources. The water supply must be fairly abundant as a large part of it must be used as power. (Cornell bulletin 145 gives complete directions for installing rams.)

4. Pressure systems with hot water heater and bathroom:

(a). Overhead tank filled from: (1) gravity from roof of house or spring, (2) hand force pump, (3) power force pump (windmill, gas engine or electric motor). An overhead tank must be located where it will not freeze. There is also some danger from damage in case it springs a leak. (Cornell Extension Bulletin 50 gives complete directions for installing a farm water supply.)

(b). Underground tank located in ground higher than building. This method does away with the damage of freezing and damage from leaking.

Average Water and Ice Requirements

For each person in household (water in kitchen only) 12 gal. per day.

Kitchen and bathroom

(per person) 25 gal. per day.

Horses (each) 10 gal. per day.

Cattle (each) 12 gal. per day.

* Few cattle that must go outside for drinking water seldom drink enough to maintain heavy milk production.

Hogs (each) 2 gal. per day.

Sheep (each) 1½ gal. per day.

Poultry (per 100) 4 gal. per day.

Ice.

For each dairy cow . . 1.25 to 1.50 tons.

For household 5 tons.

(To total requirements, add 50 per cent for waste in storage.)

(c). Pressure tank located in cellar or underground.

5. Automatic pressure tank system operated by:

(a). Electric Motor.

(b). Gas Engine.

(c). Ram.

Some automatic systems have a small pressure tank so that fresh water may be secured by allowing the water to run for a short time. There is also an automatic electric system with the pump located in the well. When the faucet is opened, the pump starts and delivers fresh water to the faucet.

What is Portland Cement?

Portland cement is manufactured by mixing limestone or blast furnace slag with clay or shale and heating until they melt. The resulting clinker is ground to a fine powder and a certain amount of gypsum is added to control the rate of hardening.

Concrete is an artificial stone made up of Portland cement, sand and gravel or crushed stone.

Proper Proportions for Concrete

	Cement	Sand	Gravel or Crashed Rock
Foundations	1	2	4
Floors (Poultry House)	1	2½	5
Floors (Feeding)	1	2	4
Walks	1	2	4
Water Troughs	1	2	4
Fence Posts	1	2	3

Note—Sand and gravel should be clean. Dirt reduces the strength of concrete. Crushed rock for fence posts should not be over ¾ in. in diameter.

How to Make Good Concrete

In order to make good concrete observe the following rules:

1. Buy a recognized brand of Portland cement.

2. Use clean sand and crushed rock or gravel.

3. Use cement and aggregate in the proper proportion.

(Continued on Page 33)

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Managing Director

4. Mix thoroughly.
5. Do not use too much water as it weakens the concrete.
6. Build and brace forms properly.
7. Tamp the concrete in the forms and spade it away from the sides of the forms to eliminate air pockets.
8. Allow the concrete to cure thoroughly before using. It helps to keep it wet.
9. Write to your State College or to the Portland Cement Association at 33 W. Grand Avenue, Chicago for bulletins on concrete construction.

Weights of Materials for Making Concrete

- 1 bag of Portland cement weighs 94 pounds and is considered in practice as containing 1 cubic foot.
- 1 barrel of Portland cement weighs 376 pounds and is considered, in practice, as containing 4 cubic feet.
- 1 cubic foot of loose, moist sand weighs 90-95 pounds.
- 1 cubic foot of packed, moist sand

How Chains Should Drive Machinery



Chains should be run as loose as possible, with the hooks out and leading as the chain passes over the driving sprocket.

- weighs 105-115 pounds.
- 1 cubic foot of gravel weighs 100 pounds.
- 1 cubic foot of concrete weighs 145 pounds.
- 1 bushel of lime weighs 70 pounds.
- 1 cubic foot of lime weighs 45 pounds.

Paint Required

Ready-mixed paint will cover about 250 square feet of surface two coats. One gallon of trim is required to each 5 gallons of body paint on average buildings. Creosote shingle stain will cover about 150 feet one coat if brushed on.

How to Figure Barbed Wire for Fences

Estimated number of pounds of barbed wire required to fence space or distances mentioned, with one, two or three lines of wire, based upon each pound of wire measuring one rod (16½ feet).

	One Line Lbs.	Two Lines Lbs.	Three Lines Lbs.
1 square acre.....	50 2/3	101 1/3	152
1 side of a square acre. 12 2/3	12 2/3	25 1/3	38
1 square half-acre.....	36	72	108
1 square mile.....	1280	2560	3840
1 side of a square mile. 320	320	640	960
1 rod in length.....	1	2	3
100 rods in length.....	100	200	300

Dipping requires 3 gallons of stain for each 1000 shingles treated.

Flat paint on plaster walls will cover 200 sq. ft. per gallon one coat.

One pound calcimine wall finish will cover 50 or more sq. ft., depending on the condition of the wall.

How to Apply Paint

How to get the best results from paint:

1. Buy high grade paint from a reliable source.
 2. Use paint that is suited for the purpose for which it is to be used.
 3. Mix thoroughly before using.
 4. Have surfaces dry and clean before the paint is applied.
 5. Brush paint out thoroughly. Three thin coats are better than two thick ones.
 6. Allow each coat plenty of time to dry before the next coat is applied.
 7. More and more paint is being applied with a compressed air spray-gun. This method is economical of labor but more paint is required. The cost of a machine for applying is too high to make it practical for the individual.
- H. L. C.

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—Reports W. H. Fox

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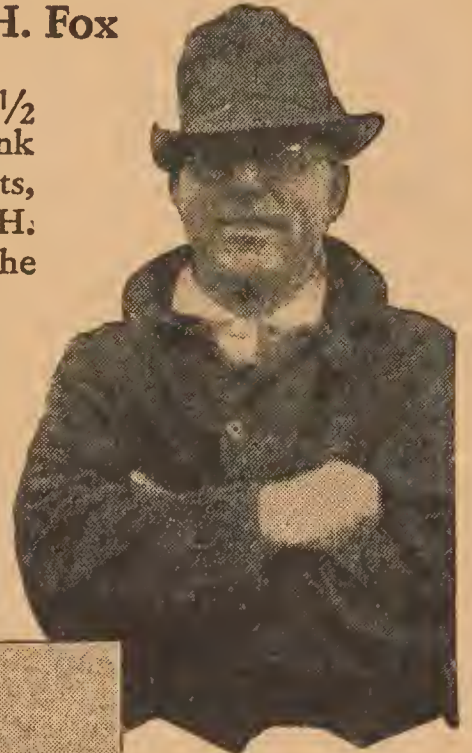
From thousands of farmers come stories of time and labor saved

... bigger earnings. All because Delco-Light does hard work better and cheaper. By actual figures it pays a profit. "Saves \$876 a year on milking labor cost" :: W. E. Miller, Kentucky. "Earns \$3.00 a day by increasing egg production" :: Mrs. Gibson. "Saves pigs at farrowing time" :: Mr. Rupert, Minnesota: These farmers know that Delco-Light is a time, labor and money saver:

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Mrs. Fox says: "The new Delco-Light 1500-watt plant saves me 10 hours a week."

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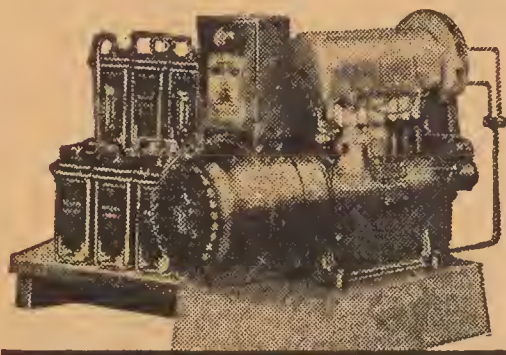
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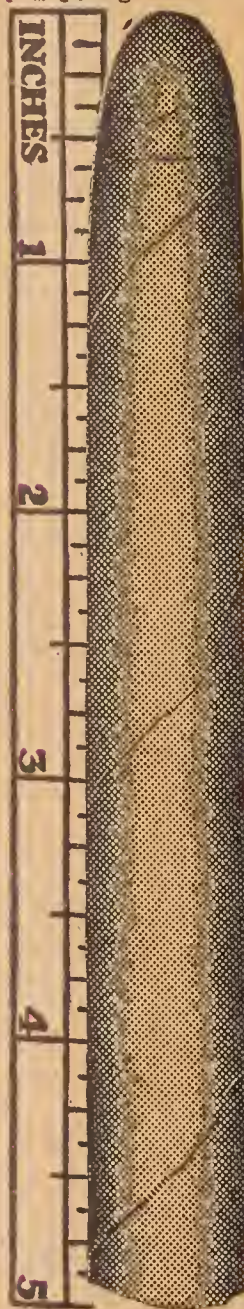
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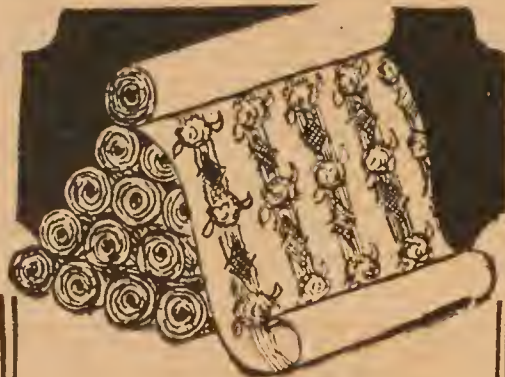
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Vest Pocket Rules for Radio Upkeep

By Brainard Foote

YOUR radio set certainly deserves good care. With good care, and intelligent attention, it will serve you longer, more efficiently, and with less cost for the running expenses. Of course, I can't hope to suggest or even think of everything worth knowing about in caring for your set, but I can offer a few brief hints to help you in taking care of your radio outfit, whether it be powered by batteries, or the lighting current.

General Suggestions

Daily. Clean the cabinet with oiled cloth to remove dirt and dust before it becomes "set". Wipe panel, dial window with clean cloth.

Monthly. Remove each tube carefully and clean contact prongs by wrapping each prong with small strip of very fine sandpaper and twisting back and forth lightly. Replace tube in proper socket. Inspect wire connections to aerial, ground, loud speaker, etc., to be sure they are all tight. Examine outdoor aerial and keep it taut. Clean dirt from insulators with clean cloth if these can be reached.

Electric Sets Only

Monthly. Test voltages carefully with accurate, high-resistance voltmeter. If volume seems reduced, try new tube in place of each old tube in turn. Keep one new tube of each type on hand. If you keep voltmeter, not necessary to keep extra rectifier tube, as reduced voltage indicates weakened and worn-out rectifier tube. Examine socket plug connections, especially where they are handled frequently. Remove plug and tighten its screws.

Monthly. If cone type speaker is used, loosen set screw at tip of cone to allow slight shrinkage, etc., to become equalized, then re-tighten.

Suggestions. Replace frayed and damaged electric cords to prevent short-circuit and possible fire or damage. Always disconnect from socket before making such repairs. Do not turn dial so hard at 0 and 100 ends of scale so that it "bangs" against the stops. This may damage the bearings and get condensers out of alignment. Keep direction sheets or booklets furnished with the set in a safe place—preferably attached to the lid of set. Read them over now and then to see if you have overlooked something. Handle A. C. tubes extremely carefully. Do not jar tubes or the set. In moving the set, take out the tubes, and put them in the boxes for safe-keeping.

Battery Sets Only

Weekly. Test storage battery with hydrometer and place on charge before it gets too low. Remove positive connecting wire and clean wire and battery terminal with sandpaper and cloths to remove greenish corrosion. Replace wire, tighten connection, and coat entire positive battery terminal and wire near battery with auto grease or vaseline. Add water to battery before charging.

Monthly. Test "B" batteries with voltmeter. Replace "B" batteries of 45 volts that fall below 40. If a 2 mfd. 200 volt paper fixed condenser is connected between B minus and B plus 90, "B" batteries can often be used down to 35 volts, as the condenser overcomes to some extent the bad effects of increasing resistance and fluctuating current. Test "C" battery with voltmeter. Replace when slight drop is noticed. Test "B" eliminator, if used, with high resistance type voltmeter. If voltage drops badly, new rectifier tube or element is required, generally. Examine aerial and connections, clean aerial insulators if possible, for better "DX" reception.

Suggestions. Keep storage battery charged, if possible, with trickle (Continued On Opposite Page)

\$300 extra money Every Month



for showing your
neighbors how to
Prevent

FARM FIRES

The appalling loss of life and property in farm fires makes it necessary that we at once appoint a representative in every farming locality to act as our especially trained Fire Prevention Expert. A responsible man who can handle this interesting work can earn \$300 a month and up.

ACT AS OUR APPOINTED REPRESENTATIVE

All we ask is that you inspect homes, farm buildings, warehouses, schools, etc., in your locality and recommend the proper Fire Prevention devices needed to give complete protection. You will act as our personally appointed representative. We will train you FREE to be a Fire Prevention Expert—show you how to take orders that will pay you big money every month.

ONE OF THE WORLD'S LARGEST ORGANIZATIONS

The Fyr-Fyter Company is one of the largest manufacturers of extinguishers in the world. We manufacture every kind of portable extinguisher from the quart size gun to the huge chemical engines on wheels. This allows you to offer protection against every possible fire hazard.

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Hundreds of our men prove the money-making possibilities of Fyr-Fyter. Depries, Ohio, earns \$8,000 a year; L. D. Payne, Iowa, made over \$4,500 his first 200 days with Fyr-Fyter and is still representing our company in the same district; Gill, Alabama, averages over \$600 every month as our representative. We will show you how to make money and build up a steady business of your own.



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The man we appoint in your locality will be given a complete training in Fire Prevention. The training will make you an expert in handling every kind of Farm fire. A complete Fire Prevention Expert's Working Outfit will be furnished to producers.

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We want a man who will be able to hold the appointment permanently—here is an opportunity for a life time employment that can bring you \$300 a month EXTRA MONEY DURING SPARE TIME OR \$600.00 to \$600.00 A MONTH FOR YOUR FULL TIME.

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We desire to select men for every territory to act as our representatives and we must make our selections at once—send the coupon today for full details of the amazing plan.

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INFORMATION COUPON

FYR-FYTER COMPANY
64-P Fyr-Fyter Bldg., Dayton, Ohio

Please send information regarding the position in this territory for Fire Prevention Expert.

Name

Address

City State

(Continued From Opposite Page)

charger, working from automatic set switch. Wash storage battery once in a while, using hose if available. Wipe dry with rags. Keep battery off wet floor. Battery and charger most conveniently kept in cellar or closet out of living-room. Nothing is lost by using old tubes with new tubes, so long as you can test each tube in the set as compared to a new tube once in a while to find out which tubes have outlived their usefulness and require replacing. Neither does it do harm to use an old "B" battery with a new one. Sometimes one battery gives out before the other one. Keep "B" batteries in a cool place. Dampness does not harm them except to spoil the cardboard covers, although they should not stand on a damp floor because of a possible "short-circuit". Heat causes "B" batteries to dry too fast.

Keep one new tube of each type on hand, and substitute this for the old ones now and then to note whether the old ones are still O. K. Try each tube in turn.

Gravity of Storage Batteries

Automobile starting batteries, no matter what make or type usually should read from 1.280 to 1.300 when fully charged; 1.260, one-fourth discharged; 1.210, one-half discharged; 1.160, completely discharged. If possible the gravity should never be allowed to fall below 1.150.

Radio A-batteries usually run about 1.280 when fully charged, and can not be used for automobile starting batteries because the light connectors are likely to melt from the heavy currents. Radio B-batteries often do not run over 1.250 when fully charged.

Specific gravities of farm lighting batteries when fully charged usually run lower. For batteries with sealed glass jars, fully charged this is about 1.250; open glass jars about 1.250; sealed rubber jars about 1.260 to 1.280. Manufacturers' directions should be followed closely.

Preventing Fires

A valuable book of warnings in regard to safeguarding farm houses against fire has been issued by the National Board of Fire Underwriters.

From the many valuable suggestions made we give below some of the most helpful.

Lightning causes most fires. One safeguard is properly installed lightning rods.

Chimneys should be thick, built solidly, and lined with flue tile, fire clay or mortar.

Smoking in barns is risky.

Matches should be kept in metal boxes, bottles or earthenware jars where rats and children cannot get to them.

Trash, leaves, and anything of the sort that will burn should be hauled away from all buildings, or at least burned on a day when there is little wind.

Spontaneous combustion may be caused by improper cured hay or by oil-soaked rags lying in a pile.

Gasoline and Kerosene should be kept in tight metal containers stored in a safe place. Neither should ever be used on a lighted fire.

Use no open lanterns or kerosene lamps that can be easily turned over.

Metal protectors should be used under stoves, and all woodwork should be protected from stoves, stove pipes, etc., by metal, bricks or cement. Stove pipes passing through walls, ceilings, etc., should be guarded by metal thimbles.

Never empty ashes containing live coals near anything that will burn.

Provide fire-fighting equipment, such as a water tank to supply running water in the home with hose connections; keep fire buckets filled with water, also ladders, ropes, and chemical fire extinguishers always ready for instant use.

Never leave a building with fire burning in it. Put it out with water or cover well with ashes.

Make precaution a habit.

How to Make Whitewash

Government Formula:—Slake one-half bushel of quick lime or lump lime with boiling water, keeping it covered during the process; strain and add 1 peck of salt dissolved in warm water. Boil 3 pounds of ground rice in water

to a thin paste; dissolve in warm water one-half pound of Spanish whiting and 1 pound of clear glue; mix these well together and let the mixture stand for several days. Keep the wash thus prepared in a kettle or portable furnace, and when used put it on as hot as possible with a brush.

Light House Whitewash.

- (1) 62 pounds (1 bushel) of quicklime; slake with 12 gallons of hot water.
- (2) 12 pounds of rock salt; dissolve in 6 gallons of water.
- (3) 6 pounds of Portland cement.
- (4) Pour (2) into (1) and then add (3).

Improving Whitewash.

One ounce of alum to each gallon of whitewash increases its adhesion. One pint of molasses added to 5

gallons of whitewash increases the penetration on wood and plaster.

Whitewash may be made fire resistant by adding 1 part of water glass (35 degrees Baume) to 10 parts of whitewash.

A gloss similar to that of oil paint may be obtained by adding 1 pound of cheap bar soap dissolved in 1 gallon of boiling water to every 5 gallons of whitewash.

Add 4 to 6 pounds of ochre to each bushel of lime to get a cream color.

Add 6 to 8 pounds of raw umber and 3 or 4 pounds of lampblack to produce a buff.

Add 6 to 8 pounds of umber, 2 pounds of lampblack and 2 pounds of Indian red for fawn.

Waterproof Calcimine:—Heat one pound of casein and 1 pint of cold water and dilute the mixture with 3

quarts of cold water and 8 fluid ounces of ammonia. Stir the whole solution until a smooth jelly is formed, then add one-fourth ounce of formaldehyde. Add hydrated lime until a fairly thick paste is formed. Dilute with water, alcohol, turpentine or linseed oil to consistency of paint. Calcimine can be colored with pigments used for whitewash.

(U. S. D. A. Extension Service Handbook).

How to Apply Whitewash

By making whitewash that has the consistency of paint, it can be applied with a brush. However, it can be applied more rapidly, especially for interior work, by using a sprayer. Care should be taken that there are no lumps to clog the sprayer.

THE STYLE AUTHORITY IN ITS CLASS! NEW SUPERIOR Whippet



**GREATER BEAUTY, LARGER BODIES WIN
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WILLYS-OVERLAND, INC., Toledo, Ohio

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WHIPPET 4-COACH

\$535

Coupe \$535; Sedan \$595; Roadster \$485; Touring \$475; Commercial Chassis \$365.

WHIPPET 6-COACH

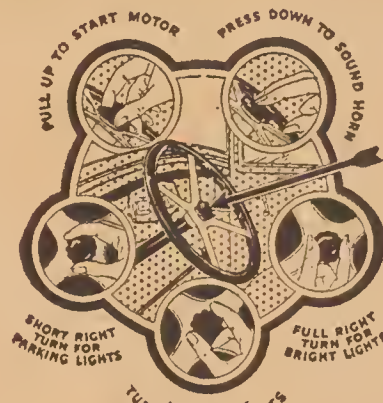
7-BEARING
CRANKSHAFT

\$695

Coupe \$695; Coupe (with rumble seat) \$725; Sedan \$760; Sport DeLuxe Roadster \$850 (including rumble seat and extras). All Willys-Overland prices f. o. b. Toledo, Ohio, and specifications subject to change without notice.

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A single button, in the center of the steering wheel, starts the motor, operates the lights and sounds the horn. You can keep your foot always on the brake when starting or re-starting on a hill.

Hints For the A. A. Homemakers

Domestic Emergencies

The suggestions which follow are confined to simple measures which do not require the use of drugs. They mainly touch upon emergencies which arise in the household when medical assistance cannot be immediately procured. In all emergencies the first thing to do is to send for a physician.

Fever—Undress the patient and put him to bed. Do not cover up too warm. Give cooling drinks; no food except milk; bathe with moderately cool water.

Colic or Cholera Morbus—Apply heat in the form of hot-water bags, bottles or hot plates and mustard plaster over the seat of pain. Hot baths are sometimes useful.

Diarrhoea-Dysentery—For simple diarrhoea, ginger tea, peppermint or other warm drink will usually bring relief. A tablespoonful of sweet oil for an adult, or teaspoonful for a child will relieve irritation. For dysentery, which follows diarrhoea, rest in bed, apply hot compresses, or mustard plasters to abdomen or soles of feet.

Vomiting—Patient should always lie down. Give large amounts of hot water, as hot as can be taken. Small bits of ice held in the mouth or swallowed or a lump of ice held against the pit of the stomach, will sometimes bring relief. When other means fail, apply a mustard plaster to the pit of the stomach.

Hiccough—In severe attacks apply mustard plasters over the stomach.

Hot vinegar applied in the same manner will sometimes bring relief. Let the patient draw a deep breath and hold it as long as possible.

Croup—In sudden attacks playing with a toy or listening to a story may cause symptoms to disappear. Keep the room warm and have water boiling in such a way that the steam will reach the sufferer. Apply flannels wrung out in hot water to the throat and cover with some waterproof material. Use mustard plaster on the soles of the feet and chest (for a few moments only). Give hot foot baths; if no relief, try cold. In membranous croup, slack lime in the room, allowing the patient to inhale. Never neglect to summon a physician.

Hernia Strangulation—Place the patient on his back in bed; elevate the foot of the bed about twelve inches; bend the legs back towards the abdomen. Apply to the hernia towels or cloths wrung out of hot water; if these do not bring relief, apply cold. Get a physician immediately.

Cramps—Bathe the part in water as hot as can be borne; apply mustard plaster to the part affected, and to the extremities.

Suppression of Urine—Apply hot cloths over bladder; give a warm sitz bath. Walking over a cold, wet floor or dashing cold water on the legs and thighs will often bring relief.

Nervousness—Put the patient to bed; give hot drinks, especially coffee; apply heat or mustard to soles of feet, back, and chest.

Neuralgia—Apply a mustard plaster

or hot cloths over the seat of pain. If hot applications fail to relieve apply cold.

Earache—Apply cloths wrung out of hot water to the head or near the seat of pain. A hot poultice is useful. Give hot drinks. Moisten a bit of cotton with sweet oil and laudanum and put in the ear.

Removal of Stains

After removing a stain you will sometimes find the color of the fabric has faded. Colors may often be revived by sponging lightly with pure acetic acid or the proper dye color dissolved in benzine.

Blood and Meat Juice:

1. Never put into hot water as that "sets" the stain. Soak at once in cold or lukewarm water, rub with soap and wash.
2. A paste of raw starch mixed with cold water will remove these stains on flannel, blankets and heavy goods. Repeat until stain disappears.

Bluing:

Boil the stained material twenty minutes. Add vinegar, if a bleach is necessary.

Chocolate, Cocoa, Tea and Coffee:

1. If cream has been added to coffee, first apply a grease solvent. Wet spot with cold water, cover with borax paste and wash with cold water.
2. Pour on boiling water from a height. If necessary, bleach with potassium permanganate or Javelle water. (White goods only).

Fruit and Fruit Juices:

Treat same as coffee stains.

Grass Stains:

1. Wash at once with cold water and soap.
2. Wet the spot, add dry cream of tartar (and an equal amount of salt, if goods are colored), keeping spot over a basin of steaming water (or teakettle spout).
3. For colored materials, dissolve spot by sponging with alcohol or ether or apply molasses or a

paste of soap and cooking soda and let stand over night.

Grease, Oil, Cream:

1. Wash at once with cold water and soap.
2. If material would be spotted by water, use an absorbent such as alcohol, benzine, carbon tetrachloride, chloroform, ether, gasoline or turpentine. Place stain over a pad of cloth, apply the solvent, and work from the edge of the stain to the center.
3. Use dry absorbents, such as Fuller's earth.

Ink:

1. Moisten with salt and lemon juice and lay in bright sunlight. Repeat.
2. Soak fresh stains in sour milk or buttermilk.
3. Use an absorbent with a warm iron.
4. Soak stain with weak solution of oxalic acid, rinse in water to which a few drops of ammonia have been added.
5. Apply a few drops of oxalic acid, then a few drops of Javelle water and rinse at once in clear, boiling water.

Iron Rust:

1. Use salt, lemon juice and sunlight.
2. Boil stain in cream of tartar (4 teaspoons cream of tartar to one pint of water).
3. Place spot over a bowl of boiling water and treat with or dilute by hydrochloric acid and dip instantly into hot water. Borax or a few drops of ammonia in the water are desirable.

Perspiration:

1. Use warm water, ammonia, and soap; bleach.
2. Soak stain in cold water, wash with borax and expose to sunshine. Remove odor with chloroform.

Tobacco:

1. Water and soap, followed by lemon juice bleach.
2. Use Javelle water on white cottons and linens.
3. Sponge wool with alcohol.

Time Tables for Canning

FRUITS

NAME	TIME FOR COOKING IN JARS		
	In Boiling Water 212°F.	Water Seal 214°F.	Pressure Cooker at 5 lbs.
Apples	20 minutes	15 minutes	10 minutes
Apricots	16 "	12 "	8 "
Blackberries	12 "	10 "	6 "
Blueberries	12 "	10 "	6 "
Cherries and Currants	12 "	10 "	6 "
Gooseberries	16 "	12 "	8 "
Grapes	16 "	12 "	8 "
Peaches and Plums	16 "	12 "	8 "
Pears	20 "	15 "	10 "
Pineapple	30 "	25 "	15 "
Quince	30 "	25 "	15 "
Raspberries	8-10 "	8 "	4 "
Rhubarb	12 "	10 "	8 "
Strawberries	10-12 "	8 "	6 "

VEGETABLES

Vegetables That Do Not Need Blanching

NAME	TIME FOR COOKING IN JARS		
	In Boiling Water	In Water Seal Canner	Steam Pressure (5-10 lbs.)
Asparagus	1 3/4 hours	1 hour	45 minutes
Beans, Lima	1 3/4 "	1-1 1/2 hours	45-60 "
Beans, string	1 3/4 "	1 hour	45 minutes
Cauliflower	1 3/4 "	1 "	45 "
Celery	1 3/4 "	1 "	45 "
Corn	3 "	1 1/2-2 hrs.	1-1 1/2 hours
Kohl Rabi	1 3/4 "	1 hour	45 minutes
Mushrooms	1 3/4 "	1 "	45 "
Onions	1 3/4 "	1 "	45 "
Peas	1 3/4-2 1/4 hrs.	1-1 1/2 hours	45 min. to 1 hr.
Pumpkin	1 3/4 "	1 hour	45 minutes
Salsify	1 3/4 "	1 hour	45 "
Squash	1 3/4 "	1 "	45 "
Sweet Potato	1 3/4 "	1 "	45 "
Turnip	1 3/4 "	1 "	45 "

Vegetables That Need Blanching in Boiling Water

NAME	TIME FOR COOKING IN JARS			
	For Blanching	In Boiling Water	In Water Seal Canner	Steam Pressure (5-10 lbs.)
Beets	Until skins are loose	1-1 1/2 hours	1 hour	45 minutes
Brussels Sprouts	5-8 minutes	1 1/2 "	1 "	45 "
Cabbage	5-8 minutes	1 1/2 "	1 "	45 "
Carrots	Until skins are loose	1 1/2 "	1 "	45 "
Parsnips	Until skins are loose	1 1/2 "	1 "	45 "
Peppers	3-5 minutes	1 1/2 "	1 "	45 "
Tomatoes	Until skins are loose	12-15 min.	10 minutes	8 "

Vegetables That Are Better Blanched in Steam

NAME	TIME FOR COOKING IN JARS			
	For Blanching	In Boiling Water	In Water Seal Canner	Steam Pressure (5-10 lbs.)
Dandelion	Until soft—15 minutes	1 1/2 hours	1 hour	1 "
Spinach	Until soft—15 minutes	1 1/2 "	1 "	45 minutes
Swiss Chard	Until soft—15 minutes	1 1/2 "	1 "	45 "
All other greens	Until soft—15 minutes	1 1/2 "	1 "	45 "

—New Jersey Bulletin.

Proportions for Quick Breads and Cakes

	Liquid (usually milk)	Flour (sifted soft wheat)	Fat*	Eggs	Baking powder	Sugar	Salt	Flavoring
Pop-Overs	1 cup	1 cup	1 to 2 tea-spoons	1 to 1 1/2			1/3 tea-spoon	
Waffles	1 cup	1 1/3 cups	2 table-spoons	1 to 2	2 tea-spoons	1 table-spoon	1/2 tea-spoon	
Griddle cakes	1 cup	1 1/2 cups	1 to 2 table-spoons		2 tea-spoons	0 to 1 table-spoon	1/2 tea-spoon	
Fritter batter:								
No. 1 cover	1 cup	1 1/4 cups	1 tea-spoon	1	1 tea-spoon		1/3 tea-spoon	
No. 2 binding	1 cup	1 3/4 cups	1 table-spoon	1	2 tea-spoons		1/2 tea-spoon	
Muffins	1 cup	2 cups	2 to 4 table-spoons	1	2 tea-spoons	1 to 2 table-spoons	1/2 tea-spoon	
Cottage pudding	1 cup	2 1/3 cups	1/2 to 1/3 cup	1	3 tea-spoons	2/3 cup	1/4 tea-spoon	1/2 tea-spoon P. C.
Foundation cake	1 cup	3 cups	1/2 cup	2 to 3	4 tea-spoons	1 1/2 cups	1/4 tea-spoon	
Baking-powder biscuit	1 cup	3 cups	4 to 6 table-spoons		4 tea-spoons		1 tea-spoon	
Pastry	about 2 1/2 table spoons water		5 1/2 to 7 table spoons				1 tea-spoon	

Proportions for three types of butter cakes

Ingredients	Plain cake	Foundation cake	Rich cake
Milk	1 1/4 cups	1 cup	1 cup
Flour (soft wheat)	3 cups	3 cups	3 cups
Fat*	1/3 cup	1/2 cup	1 cup
Eggs	1	2 to 3	4
Baking Powder	5 tea-spoons	4 tea-spoons	4 tea-spoons
Sugar	1 1/4 cups	1 1/2 cups	2 cups
Salt	1/4 tea-spoon	1/4 tea-spoon	1/4 tea-spoon
Flavoring	1/2 tea-spoon	1/2 tea-spoon	1/2 tea-spoon

*These proportions are for fat containing no water. If butter or other fat containing water is used, about 3 tablespoons more for each cup of fat should be allowed.

Proportions for sponge cakes

Ingredients	Sponge cake	Sunshine cake	Angel food
Flour (soft wheat)	1 cup	1 cup	1 cup
Eggs	1 cup	1 cup	1 cup
Sugar	4 or 5 eggs	(6 whites and 3 yolks)	(8 fairly large)
Salt	1 cup	1 to 1 1/4 cups	1 to 1 1/2 cups
Flavoring and acid	1/2 tea-spoon	1/2 tea-spoon	1/2 tea-spoon
	3 tea-spoons	1 tea-spoon	1 tea-spoon
	lemon juice	lemon juice	lemon juice
	1/2 lemon rind	1/2 lemon rind	1/2 lemon rind
	grated	of tartar	of tartar

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Curtain Value Ever Offered!**



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an Amazingly Low Price to In-
troduce CHARLES WILLIAMS
Wonderful Values to You...**

38C 7320—Thrifty housewives—just see what you get—beautiful three-piece curtains that will cost you only 50 cents for stylish drapery for an entire window. Two complete sets for only a little more than you would pay elsewhere for one set. These curtains are made of cream color Voile and have popular colored scalloped valance and tie backs. Rayon stitching to match valance finishes all ruffles. Each curtain is about 20 in. x 2 1/6 yds., separate valance 50 in. wide.

Cream color with rose, blue, gold or green trimming. Order by No. 38C 7320. Send in your order for these curtains and get our big new Style Book Free. It is filled with other big bargains.

2 complete sets for \$1.00—and we pay postage.



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JAPANESE ALL-SILK PONGEE
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**Guaranteed Red Label
Government Stamped FUKUI-KEN**

6C C3066—Here's the biggest Silk Pongee bargain to be found anywhere! Only 35 cents a yard for this genuine government-stamped Fukui-Ken Red Label Japanese 12-Momme weight all Silk Pongee—the very best of the six different grades of Japanese Silk Pongee. Why buy an inferior grade when you can buy this—the best, for only 35 cents a yard? It comes in the Natural Tan shade and washes beautifully. About 33 inches wide. Order this superior pongee by No. 6C C3066—and get our big, new, 2 lb. Style Book. It's filled with equally big bargains that will save you money. A yard

—and we pay postage **35c**



**The Charles William Stores
NEW YORK CITY**

Thoughts for Mothers



For the New Baby

Blanket: Old, soft and clean; or shawl to receive the baby at birth.

Diapers: Two dozen, cotton birdseye, 18 or 20 inches square.

Bands: Two to four flannel, 6 inches wide and 24 inches long, torn not hemmed, for use until the navel heals. Three knitted bands with shoulder straps to use later in place of the flannel band.

Slips: Four to six, white nainsook, 23 inches long, perfectly plain, finished at

Towels: Four old, soft towels best; two turkish.

Washcloths: Two, old pieces of linen.

Toothpicks to make cotton swabs.

Safety pins: Assorted size, two to four dozen.

Bathtub: Tin, galvanized iron or rubber.

Scales: Beam and scoop type.

Hot water bag with cover.

Medicine dropper.

Bottle and nipple for giving baby water.

Tape for typing cord; narrow, two yards.

Covered pan of borax water for soiled diapers.

Tray with four jars—properly cleaned and prepared, one for boiled water, one for nipple swabs, one for oil and one for small toothpick swabs. (Jelly, candy or other jars may be used if carefully cleaned and boiled.) A dish for soap, a cake of soap in which to stick pins, a hair receiver for absorbent cotton. One bottle for boiled water for the baby to drink, nursing bottles. Use cornucopias for waste.—N. Y. Health Bulletin.

Health Bulletin

Pennsylvania Health Pamphlets (free to Pennsylvania residents).

Pennsylvania Baby Book.

Breast Feeding.

Birth Registration.

The Care of the Mother.

Bottle Feeding.

The Care of the Baby.

What Growing Children Need.

How Shall we Feed the Children.

Diet During Pregnancy.

Diet for Child (from 9 to 18 months of age).

Diet for Child (from 18 to 24 months of age).

Diet for Child (from two to three years).

Diet for Child (from 4 to 6 years of age).

The Control of summer diarrhoea.

Scarlet Fever.

Measles.

Whooping Cough.

Diphtheria Control.

The Why—How and When of Tooth-brush.

A Manual for Expectant Mothers.

Health Rules

1. Brush the teeth every day.
2. Eat fruit every day.
3. Drink at least four glasses of water every day.
4. Eat some vegetables besides potato every day.
5. Use at least four glasses of milk every day.
6. Play part of every day out of doors.
7. Take a bath oftener than once a week.
8. Sleep many hours with the windows open.

neck and wrists with plain band and tied with tape.

Nightgowns: Four, flannel or flannel-ette.

Petticoats: Two, flannel (mixed cotton and wool), and two cotton (nainsook, lawn or longcloth), 23 inches long from shoulder to hem; Gertrude pattern.

Shirts: Four, cotton and wool, size No. 2, high neck and long sleeves, buttoned all way down front.

Stockings: Four pairs, woolen; to be pinned to diapers.

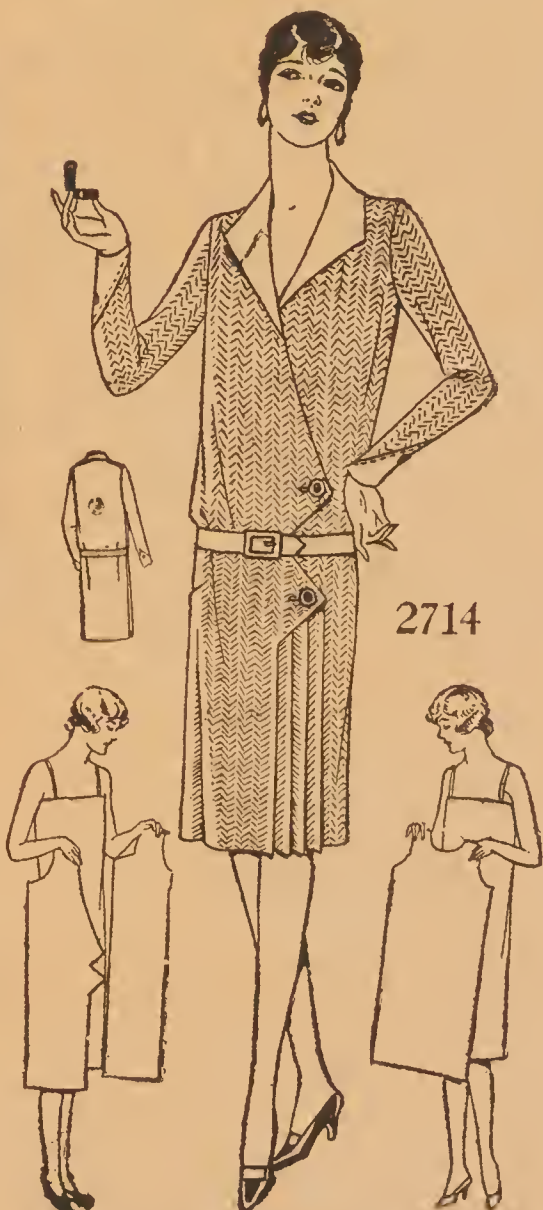
Bed: Separate crib; bureau drawer, or basket or box, 15 by 30 inches, padded, may be used.

Mattress or pillow: Hair, or may use felt pad or folded blankets; rubber sheet and muslin pillow cases (2) for mattress.

Olive oil or mineral oil.

Castile soap.

One Piece Sports Dress



Sports dress pattern 2714 with its zig-zag closing is decidedly smart and effective. For cool days of spring the new light-weight tweeds are most comfortable and attractive and this design is just right for such use. Faille silk crepe or other heavy silk would also be very handsome. The pattern cuts in sizes 16, 18 years, 36, 38, 40, 42 and 44 inches bust. Size 36 requires 3 3/8 yards of 40-inch material with 7/8 yard of 36-inch contrasting. PRICE 13c.

For Wee Moderns

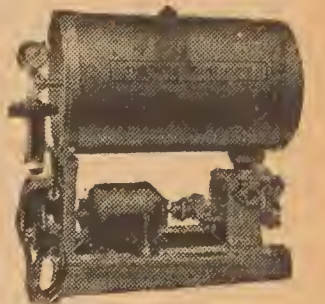


Jacket costume pattern 2697 is both practical and charming for girls of 6, 8, 10, 12 and 14 years. The skirt may be of bright red plaid woolen and the jacket of black or blue velveteen with blouse of plain red woolen. The older girl might want a combination of tweed jacket and skirt with silk blouse. The costume also offers excellent opportunity for making over or for using odds and ends of materials. Size 8 requires 1 1/4 yards of 40-inch material for skirt, strap and belt with 3/4 yard of 40-inch material for blouse, collar and cuffs and 1 1/8 yards of 36-inch material with 2 yards of binding for bolero. PRICE 13c.

How One Pump Supplies Six Homes With Fresh Running Water!

**Remarkable Discovery By Noted En-
gineers Has Only One Moving Part
Yet Delivers Water To 50
Faucets At Surprising
Low Cost.**

A WONDERFUL new pump that eliminates between 90 and 95% of the moving, wearing parts hitherto considered essential in pumps, has been developed by engineers of the Auto-Prime Pump Company, of Cleveland. Now every rural and suburban dweller may enjoy all the advantages of a city water supply at less than city cost.



Amazing Performance

Probably the most spectacular demonstration made by this new pump is an installation in the Lake Forest Addition, Madison, Wisconsin, where a single Auto-Prime serves six homes. Quite an assignment for a pump with only one moving part and a 1-3 H. P. motor, yet it supplies 59 faucets at all times without any appreciable drop in volume! And the owners of these homes will testify that they always have water available that is equal in pressure and volume to nearby city service and at a fraction of the cost.

To accomplish this task, which experts said couldn't be done, the pump was placed in a pump house over a flowing well and connected to a large storage tank. Outlet lines varying in length from 1635 to 2480 feet, feed the water to the six homes. The fact that the unit replaced another type of pump requiring a 3 H. P. motor only adds to its extraordinary performance.

Entirely New Features

In producing this advance type of pump, the inventors discarded old theories and developed a unit that is remarkably simple in construction and yet far ahead of other types in economy and operation. After several years of research and experimentation, they found that they could eliminate more than ninety parts and at the same time secure unheard-of advantages. All belts, pulleys, pistons, valves and leather suction washers were done away with. The result is that the new pump has nothing to wear out or get out of order and nothing to repair or replace.

Automatic And Self-Priming

The pump in operation is entirely automatic, requiring no starting, stopping or priming. It has a rated water capacity of 650 gallons per hour and pumps steadily hour after hour without pulsation or "water-hammer". The volume increases as the pressure is reduced—an advantage not found in piston-type pumps. Has 25% greater capacity and increased suction lift, drawing water from a depth of 28 feet! Every precaution has been taken to make it absolutely safe and foolproof, so that it will last a lifetime.

Quickly and Easily Installed

Another important feature that will appeal to the shrewd buyer is the fact that the Auto-Prime pump is delivered as a unit, all ready to set up and put to work. No special base, wiring, lugs or bolts are required.

Write For Free Book

The manufacturers of this new pump invention have published a new illustrated booklet which presents a wealth of interesting and valuable information on economical water systems. For the convenience of readers of this publication, space is provided for your name and address. Simply fill in and mail to the Auto-Prime Pump Co., Dept. C-50, 850 E. 72nd Str., Cleveland, Ohio.

Name

Address

City

It will pay you to get the full details about this amazing discovery if you want to banish the drudgery of hand and pail, and enjoy the comfort and conveniences of a fresh water supply.

FOR YOUR STOVE

AND ITS NICKEL TRIMMINGS



Besides adding beauty and cleanliness through the high luster which it gives your stove, FYR-PRUF prevents rust and thereby adds longer life. This wonderful polish is dustless—odorless—easily applied—and Absolutely Fireproof.

FYR-PRUF

STOVE AND NICKEL POLISH

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Restores Color and
Beauty to Gray and Faded Hair
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ROBES. Also sold direct from the
mill if you have no wool. Beautiful goods that gives
satisfaction and long wear. Write for catalog and sam-
ples. Prices reasonable. WEST UNITY WOOLEN MILLS,
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Lightening The Farm Womans' Labor

NO ONE industry has done more to make a comfortable, livable home out of the old-fashioned farm house than the hardware industry.

At your local "Farm Service" Store you will find hundreds of helps and supplies that are rapidly turning farm homes into as convenient and delightful places to live as the most modern city residence. Keep acquainted with your local "Farm Service" Hardware Store in order that you may know all about the latest developments in power washing machines, convenient cooking ranges, new kinds of utensils and a thousand and one other things. You are always welcome to go in and look around.

Now is the time to get your brooders all ready for action. When you need new ones—or supplies of any kind—come to your nearest "Farm Service" Hardware Store.

Look for this tag in their window



Your Farm Service HARDWARE STORES

Where prices are lower because you get personal help in the selection and maintenance of your purchases.



In the A. A. Farm Home Kitchen



Making Sauerkraut

Remove the outside leaves and hard core of cabbage. Cut into fine shreds and pack in layers, 3 to 6 inches deep, in a crock or keg. Sprinkle every layer with salt, repeating the process until the cabbage is within a few inches of the top. For every 100 pounds of shredded cabbage use ten to 12 cupfuls of salt. Press the cabbage down until the brine covers it, place a few leaves over the top, arrange a clean board or plate over the leaves and weight it down with a heavy block. Lime stones should not be used for weights since they are attacked by the acid of the brine. Remove the scum which forms on top when it is noticed and see that the kraut is kept covered with brine. Keep a clean cloth over the top of the crock to make certain that dust, dirt and insects cannot get in. When the kraut is cured, which will be from 2 to 3 weeks in winter, it may be canned.

Making Hominy (Hulled Corn)

Dissolve 4 tablespoons of lye in 1 gallon of boiling water. Boil the corn rapidly in this solution 30 minutes. Then drain and wash the kernels thoroughly several times in cold water to remove the lye. Rub with the hands until the husks, or covering of the kernels, are removed. Then place the corn in an enamel kettle and boil in a little water until tender. If not to be used immediately, wash again, pack in glass jars and sterilize by the cold pack method of canning.

Putting Down Butter

Before the grass is gone in the fall and while cream is plentiful, butter may be put down for winter use. Work the butter as for immediate use, making certain that all the buttermilk is out. Pack the butter into earthenware jars to within 5 inches of the top, make a brine from coarse salt and water strong enough that an egg will float in it. Strain through fine cloth and pour over the butter, filling the jar. Cover the jar tightly and set in a cave or cellar. This butter will keep through the winter.

How to Clean Silverware

Place the tarnished silver in an old aluminum pan or kettle which contains boiling water. Add 1 teaspoonful of baking soda and an equal amount of salt to every quart of water used. The silver should be covered by this solution. As the water boils the tarnish is dissolved.

Curing Meats

Brine Cure.

For each 100 pounds of meat use:

12 pounds of salt
3 pounds of sugar
2 ounces of saltpeter
6 gallons of water

Mix thoroughly the salt, saltpeter and sugar and rub about one-third of the mixture into the pieces of meat to be cured. Pack the meat in the curing vessel. A good plan is to put the hams on the bottom, then the shoulders and sides. Put the skin side down on all but the top layer, there put the skin side up. Weight down with some heavy material such as hard tile, brick, or hard wood; do not use pine or limestone. Boil the water and while it is still warm, dissolve the remaining part of the mixture which was left after rubbing the meat. After the brine has cooled, pour it over the meat to cover it entirely. Set aside in a cool ventilated place to cure, giving the hams and shoulders about 3

days to the pound for each piece; and the bacon about 2 days to the pound for each piece. The jowls will cure in about 7 days. After the meat has been in cure the proper length of time, remove from the brine and wash thoroughly with hot water then with cold water and allow to hang about 24 hours before smoking.

Dry Cure.

For every 100 pounds of meat use:

8 pounds of salt
3 pounds of sugar
2 ounces of saltpeter

(If the plain salt cure is desired, omit sugar).

Mix the ingredients well. Spread one-half of the mixture on a table and rub each piece of meat separately. This is best done by placing the piece of meat in the bed of salt mixture and turning it over. Make sure the mixture is applied to all surfaces. As a matter of precaution in warm weather, it is advisable to work some of the mixture in around the bones and joints of the hams and shoulders. Pack in a box or barrel and allow to remain for 7 days, then rub in the remaining part of the mixture and repack, putting at the bottom the meat that was on top and vice versa. Allow the hams and shoulders 3 days to the

Household Measures and Weights

2 cups butter (packed solidly) 1 pound
4 cups flour (pastry).....1 pound
2 cups granulated sugar.....1 pound
2 2-3 cups powdered sugar....1 pound
3½ cups confectioners' sugar..1 pound
2 2-3 cups brown sugar.....1 pound
2 2-3 cups oatmeal.....1 pound
4¾ cups rolled oats.....1 pound
2 2-3 cups gran. corn meal....1 pound
4 1-3 cups rye meal.....1 pound
1½ cups rice.....1 pound
4½ cups Graham flour.....1 pound
3¾ cups entire wheat flour...1 pound
4 1-3 cups coffee.....1 pound
2 cups finely chopped meat...1 pound
9 large eggs.....1 pound
1 square Baker's chocolate...1 ounce
1-3 cup almonds blanched, and
chopped1 ounce

A few grains is less than one eighth teaspoon.

3 teaspoons.....1 tablespoon
16 tablespoons1 cup
2 tablespoons butter.....1 ounce
4 tablespoons flour.....1 ounce

pound in the cure and the bacon about 21 days. After removing from the cure, wash with cold water and allow to hang for 24 hours before smoking.

Corned Beef.

Any part of the beef carcass can be corned, but generally the cheaper cuts such as the chuck, navel brisket, and rump are used. Cut the meat into pieces, 5 or 6 inches square. Weight the meat and for each 100 pounds allow 9 pounds of salt. Cover the bottom of a vessel with a layer of salt then a layer of meat, packing the pieces as close together as possible, then alternate layers of salt and meat, covering the top of the meat with a layer of salt. Allow the salted meat to stand for 24 hours then add a solution of 4 pounds of sugar and 4 ounces of saltpeter dissolved in 4 gallons of water, cover and weight down. The meat should be kept in the brine about thirty days to insure a thorough cure. After curing it can be either used from the brine or hung and allowed to drain thoroughly before being wrapped or smoked.—N. J. Bulletin.

If you have a small quantity of pie crust left, roll thin and cut into squares and sprinkle with cinnamon and sugar; bake till crisp—are good.—Mrs. I. B.

SALE of RAYON Bloomers

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15C B610—These Women's practical and comfortable Bloomers of heavy quality lustrous Rayon at only 85 cents give you an idea of the bargains which fill our new Spring and Summer Style Book from cover to cover. Order these bloomers—and see for yourself. The bloomers are cut full standard sizes. Roomy seat with large gusset and reinforced crotch. Elastic at waist and knees.

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Gunmetal
Dust
Pearl
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Mode Beige

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NEW YORK CITY



For the A. A. Woman Who is Handy

Mending Wall Paper

Select the right portion of the pattern in the roll for the patch. Then tear an irregular piece instead of cutting it. Paste this over the tear in the paper on the wall.

How to Make Paste for Wall Paper

Mix 1 quart of flour with sufficient cold water to make a stiff paste or batter and then add 1½ gallons of boiling water. Stir the mixture until the flour is cooked. When this has stood for a few hours, but not overnight, it is ready for use. If the paper is being hung on walls which have been painted, the paste is thinned with ½ cupful of molasses. When very heavy paper is being hung, the addition of 2 teaspoonfuls of venetian turpentine will help make it stick. The addition of alum to the paste repels crickets or silverfish which sometimes damage wall paper.

Sizing Walls

Dissolve 1 pound of glue in a little hot water and then add 1 gallon of cold water. Apply this to the wall with a brush before adding new paper.

Re-sizing Rugs

To re-size rugs which have become flimsy, dissolve 1 quart of powdered dry glue in 1 gallon of boiling water. Keep this on the stove until the glue is dissolved. Tack the rug wrong-side down on the floor, spreading old newspapers around the edges to protect the floor. Use a brush to apply the glue solution, taking care to cover every inch of space. Cover the edges of the rug with the solution. Do not move the rug for 24 hours or until the sizing is dry.

Polishes for Woodwork

A good polish for wood surfaces is made by mixing together 1 cupful of turpentine, 1 cupful of linseed oil and 1 cupful of vinegar. Another excellent polish is prepared by mixing 1 cupful of linseed oil, 1 cupful of turpentine and 1 teaspoonful of ammonia together. Either of these polishes is sprinkled lightly on a soft cloth and applied to the furniture or woodwork with the grain of the wood.

Preparing a Dust Cloth

Dust will collect on the furniture if too much polish is applied. A good way to add the right amount is to place 2 tablespoonfuls of the polish in a glass fruit jar, rolling the can until its sides are coated with the polish. Then insert the tightly rolled dust cloth, close the fruit jar and let stand 2 days. The polish will be evenly distributed on the cloth.

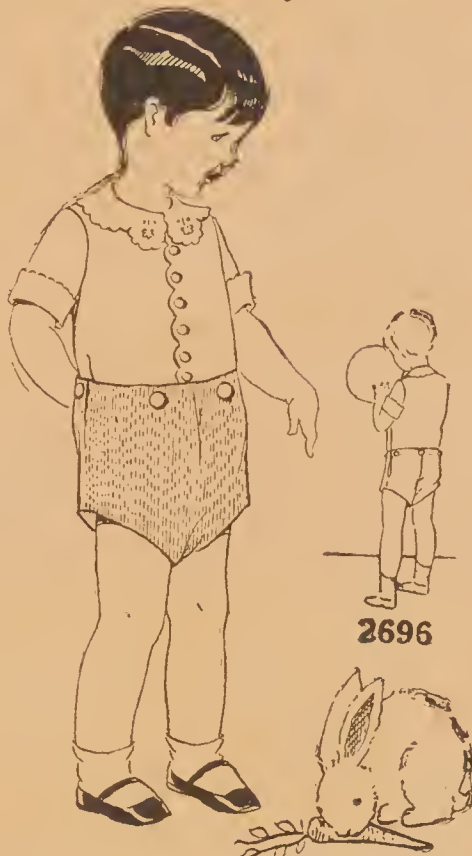
What to Expect When You Dye

Material to be dyed often needs to be "stripped" beforehand. This may be done by boiling until the water remains clear or by using a commercial bleach sold by most of the dye companies. If colors are left in the material then it is necessary to take into account its effect on the color of the dye. The following list tells what to expect. Practically any color may be obtained by properly combining the primary colors, red, blue and yellow.

Red over yellow produces scarlet.
Red over blue produces purple.
Red over brown produces reddish brown.
Red over orange produces light red.
Red over purple produces reddish purple.
Blue over red produces purple.

Yellow over red produces scarlet.
Yellow over blue produces green.
Yellow over brown produces golden brown.
Yellow over purple produces greenish brown.
Yellow over green produces light green.
Yellow over orange produces yellow orange.
Brown over purple produces chocolate.
Brown over orange produces yellowish shade of dark brown.
Orange over purple produces light reddish brown.
Orange over brown produces tobacco brown.
Orange over green produces yellowish green.

Little Play Suit



Play suit pattern 2696 with shorts shaped at sides to allow freedom of movement and easy access of the health-giving sunshine is just what little brother needs. Little trousers may be of woolen tweed, broadcloth, jersey or of cotton materials while the blouse is best when made of linen, cotton broadcloth or repp. The pattern cuts in sizes 1, 2 and 4 years. Size 4 requires 1 yard of 36-inch material for blouse with ¾ yard of 36-inch material for trousers. PRICE 13c.

TO ORDER: Write name, address, pattern sizes and numbers clearly and correctly and enclose with correct remittance in stamps or coin (although coin is sent at own risk). Add 12c for one of the new spring fashion catalogs and send to Pattern Department, American Agriculturist, 461-4th Avenue, New York City.

Green over orange produces myrtle green.
Green over purple produces dull dark green.
Green over brown produces olive green.
Purple over green produces dull dark purple.
Purple over orange produces light dull purple.
Pink over light blue produces lavender.
Pink over light yellow produces shell pink.
Pink over light orange produces coral pink.

Never attempt to dye pongee or wild silk a jet black, as this is an impossibility. The best color that can be obtained on this kind of material is a blue-black.

Never attempt to color a light shade over a darker one.

One of the best plans in coloring over old colors is to dye your goods a darker shade of the same color. For example:—you have a light brown garment of which you have grown tired, you can easily dye this a dark, seal brown and run no risk of spoiling your goods by a bad mixture of colors.



The fourth R—Rubbing!

The "readin',ritin',rithmetic" years of your children are years of added work for you—and part of this is washing their grimy clothes. But that job can be so much easier by using Fels-Naptha. Plenty of naptha and good golden soap, blended into one golden bar by our exclusive process. Two effective, safe cleaners working together to give the extra help that loosens dirt and washes it away without hard rubbing. That's the reason why....

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Famous Recipe For Stopping a Severe Cough

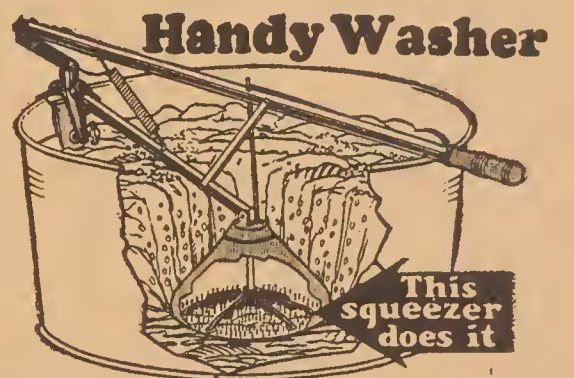
You'll be pleasantly surprised when you make up this simple home mixture and try it for a distressing cough or chest cold. It takes but a moment to mix and costs little, but it can be depended upon to give quick and lasting relief.

Get 2½ ounces of Pinex from any druggist. Pour this into a pint bottle; then fill it with plain granulated sugar syrup or strained honey. The full pint thus made costs no more than a small bottle of ready-made medicine, yet it is much more effective. It is pure, keeps perfectly and children love its pleasant taste.

This simple remedy has a remarkable three-fold action. It goes right to the seat of trouble, soothes away the inflammation, and loosens the germ-laden phlegm. At the same time, it is absorbed into the blood, where it acts directly upon the bronchial tubes and thus helps inwardly to throw off the whole trouble with surprising ease.

Pinex is a highly concentrated compound of genuine Norway Pine, containing the active agent of creosote, in a refined, palatable form, and known as one of the greatest healing agents for "flu" coughs and other severe coughs, chest colds and bronchial troubles.

Do not accept a substitute for Pinex. It is guaranteed to give prompt relief or money refunded.



Snow-white clothes in 5 min. Pumps suds back and forth through the meshes. No rubbing. The leverage makes it very easy. Saves back-breaking work. Keeps hands out of suds. **SPECIAL** on first machine in a territory. **OFFER** 30 days trial. Cat. free. No agents. **HANDY WASHER CO., 2425 E. Fayette, Syracuse, N. Y.**

PAPER YOUR HOME for 90¢ PER ROOM

You can paper the average room with high-grade, artistic wall paper for as little as 90 cents—by buying direct at lowest wholesale prices. Send for big free catalog. Not the usual small mail order catalog but a large book showing scores of artistic designs for ceilings and borders as well as walls. Write today.

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When writing Advertisers
Mention American Agriculturist

The Little Shepherd of Kingdom Come *By John Fox, Jr.*

"YES, sir," said Chad, turning quickly, but the General had seen the lad's face grow pale.

"It is very strange down here—they may be his best friends," he thought, and, being a kind-hearted man, he reached out his hand toward a bell to summon Chad back, and drew it in again.

"I cannot help that; but that boy must have good stuff in him."

Harry was waiting for him outside. He knew that Dan would go home if it was possible, and what Chad's mission must be.

"Don't hurt him, Chad."

"You don't have to ask that," answered Chad, sadly.

So Chad's old enemy, Daws Dillon, was abroad. There was a big man with the boy at the Deans', General Ward had said, but Chad little guessed that it was another old acquaintance, Rebel Jerry Dillon, who, at that hour, was having his supper brought out to the stable to him, saying that he would sleep there, take care of the horses, and keep on the look-out for Yankees. Jerome Conners's hand must be in this, Chad thought, for he never for a moment doubted that the overseer had brought the news to General Ward. He was playing a fine game of loyalty to both sides, that overseer, and Chad grimly made up his mind that, from one side or the other, his day would come. And this was the fortune of war—to be trotting, at the head of six men, on such a mission, along a road that, at every turn, on every little hill, and almost in every fence-corner, was stored with happy memories for him; to force entrance as an enemy under a roof that had showered courtesy and kindness down on him like rain, that in all the world was most sacred to him; to bring death to an old playmate, the brother of the woman whom he loved, or capture, which might mean a worse death in a loathsome prison. He thought of that dawn when he drove home after the dance at the Hunts' with the old Major asleep at his side and his heart almost bursting with high hope and happiness, and he ran his hand over his eyes to brush the memory away. He must think only of his duty now, and that duty was plain.

Across the fields they went in a noiseless walk, and leaving their horses in the woods, under the care of one soldier, slipped into the yard. Two men were posted at the rear of the house, one was stationed at each end of the long porch to command the windows on either side, and, with a sergeant at his elbow, Chad climbed the long steps noiselessly and knocked at the front door. In a moment it was thrown open by a woman, and the light fell full in Chad's face.

"You—you—you!" said a voice that shook with mingled terror and contempt, and Margaret shrank back, step by step. Hearing her, Mrs. Dean hurried into the hallway. Her face paled when she saw the Federal uniform in her doorway, but her chin rose haughtily, and her voice was steady and most courteous:

"What can we do for you?" she asked, and she, too, recognized Chad, and her face grew stern as she waited for him to answer.

"Mrs. Dean," he said, half choking, "word has come to headquarters that two Confederate soldiers are spending the night here, and I have been ordered to search the house for them. My men have surrounded it, but if you will give me your word that they are not here, not a man shall cross your threshold—not even myself."

Without a word Mrs. Dean stood aside.

"I am sorry," said Chad, motioning the Sergeant to follow him. As he

passed the door of the drawing-room, he saw, under the lamp, a pipe with ashes strewn about its bowl. Chad pointed to it.

"Spare me, Mrs. Dean." But the two women stood with clinched hands, silent. Dan had flashed into the kitchen, and was about to leap from the window when he saw the gleam of a rifle-barrel, not ten feet away. He would be potted like a rat if he sprang out there, and he dashed noiselessly up the back stairs, as Chad started up the front stairway toward the garret, where he had passed many a happy hour playing with Margaret and Harry and the boy whom he was after as an enemy, now. The door was open at the first landing, and the creak of the stairs under Dan's feet, heard plainly,

forth, her house would be under suspicion, and telling her of the severe measures that had been inaugurated against rebel sympathizers.

"Such sympathizers have to take oath of allegiance and give bonds to keep it."

"If they don't?"

"Arrest and imprisonment."

"And if they give the oath and violate it?"

"The penalty is death, Mrs. Dean."

"And if they aid their friends?"

"They are to be dealt with according to military law."

"Anything else?"

"If loyal citizens are hurt or damaged by guerillas, disloyal citizens of the locality must make compensation."

"Is it true that a Confederate sym-

pathizer will be shot down if on the streets of Lexington?"

"The hosses ain't fer away," he said.

"Oh, Lawd!"

"Did you kill him?"

"I reckon not," whispered Jerry. "I shot him on the wrong side. I'm all'ays a-fergettin' which side a man's heart's on."

"What became of Snowball?"

"He run jes' as soon as he butted the feller on his right. He said he'd git one, but I didn't know what he was doin' when I seed him start like a sheep. Listen!"

There was a tumult at the house—moving lights, excited cries, and a great hurrying. Black Rufus was the first to appear with a lantern, and when he held it high as the fence, Chad saw Margaret in the light, her hands clinched and her eyes burning.

"Have you killed him?" she asked, quietly but fiercely. "You nearly did once before. Have you succeeded this time?" Then she saw the Sergeant writhing on the ground, his right forearm hugging his breast, and her hands relaxed and her face changed.

"Did Dan do that? Did Dan do that?"

"Dan was unarmed," said Chad, quietly.

"Mother," called the girl, as though she had not heard him, "send someone to help. Bring him to the house," she added, turning. As no movement was made, she turned again.

"Bring him up to the house," she said, imperiously, and when the hesitating soldiers stooped to pick up the wounded man, she saw the streak of blood running down Chad's chin and she stared open-eyed. She made one step toward him, and then she shrank back out of the light.

"Oh," she said. "Are you wounded, too? Oh!"

"No!" said Chad, grimly. "Dan didn't do that"—pointing to the Sergeant—"he did this—with his fist. It's the second time Dan has done this. Easy, men," he added with low-voiced authority.

Mrs. Dean was holding the door open.

"No," said Chad, quickly. "That wicker lounge will do. He will be cooler on the porch." Then he stooped, and loosening the Sergeant's blouse and shirt examined the wound.

"It's only through the shoulder, Lieutenant," said the man, faintly. But it was under the shoulder, and Chad turned.

"Jake," he said, sharply, "go back and bring a surgeon—and an officer to relieve me. I think he can be moved in the morning, Mrs. Dean. With your permission I will wait here until the Surgeon comes. Please don't disturb yourself further"—Margaret had appeared at the door, with some bandages that she and her mother had been making for Confederates and behind her a servant followed with towels and a pail of water—"I am sorry to trespass."

"Did the bullet pass through?" asked Mrs. Dean, simply.

"No, Mrs. Dean," said Chad.

Margaret turned indoors. Without another word, her mother knelt above the wounded man, cut the shirt away, staunched the trickling blood, and deftly bound the wound with lint and bandages, while Chad stood, helplessly watching her.

"I am sorry," he said again, when she rose, "sorry—"

"It is nothing," said Mrs. Dean, quietly. "If you need anything, you will let me know. I shall be waiting inside."

She turned and a few minutes later

The Story Thus Far

CHAD leaves "Lonesome" with his dog "Jack." His foster parents care both dead from the plague and plans have been laid to bind Chad out to a hard fisted neighbor. After the funeral, Chad collects a rifle, some powder, and shot and a haversack and with "Jack" by his side, starts out for unknown parts. He meets the sons of Joel Turner from over the mountain who take him home. Chad's cleverness at school gains the admiration of Caleb Hazel, the schoolmaster. They become close friends. Hazel tells Chad of the "Bluegrass Country" beyond the hills. Logging operations take Chad to a distant city where he gets lost and starts home on foot. He is picked up by Major Calvin Buford. It appears that Chad is also a Buford and is believed to be a kinsman of his new found friend, who takes him to his home in Lexington in the heart of the "Bluegrass." Chad accepts the Major's offer of a home and an education. Chad enters into the social life and becomes very popular at school. He falls in love with Margaret Dean, daughter of General Dean, neighbor of the Bufords. Meanwhile feeling grows bitter between North and South and war clouds gather. Chad joins the Union forces under Grant. His command takes him back to Lexington. He is ordered to make an arrest in the Dean home.

stopped. The Sergeant, pistol in hand, started to push past his superior.

"Keep back," said Chad, sternly, and as he drew his pistol, a terrified whisper rose from below.

"Don't, don't!" And then Dan, with hands up, stepped into sight.

"I'll spare you," he said, quietly. "Not a word, mother. They've got me. You can tell him there is no one else in the house, though."

Mrs. Dean's eyes filled with tears, and a sob broke from Margaret.

"There is no one else," she said, and Chad bowed. "In the house," she added, proudly, scorning the subterfuge.

"Search the barn," said Chad, "quick!" The Sergeant ran down the steps.

"I reckon you are a little too late, my friend," said Dan. "Why, bless me, it's my old friend Chad—and a lieutenant! I congratulate you," he added, but he did not offer to shake hands.

Chad had thought of the barn too late. Snowball had seen the men creeping through the yard, had warned Jerry Dillon, and Jerry had slipped the horses into the woodland, and had crept back to learn what was going on.

"I will wait for you out here," said Chad. "Take your time."

"Thank you," said Dan.

He came out in a moment and Mrs. Dean and Margaret followed him. At a gesture from the Sergeant, a soldier stationed himself on each side of Dan, and, as Chad turned, he took off his cap again. His face was very pale and his voice almost broke:

"You will believe, Mrs. Dean," he said, "that this was something I had to do."

Mrs. Dean bent her head slightly.

"Certainly, mother," said Dan. "Don't blame Lieutenant Chad. Morgan will have Lexington in a few days and then I'll be free again. Maybe I'll have Lieutenant Chad a prisoner—no telling!"

Chad smiled faintly, and then, with a flush, he spoke again—warning Mrs. Dean, in the kindest way, that, hence-

forth, her house would be under suspicion, and telling her of the severe measures that had been inaugurated against rebel sympathizers.

"There was such an order, Mrs. Dean."

"And if a loyal citizen is killed by one of these so-called guerillas, for whose acts nobody is responsible, prisoners of war are to be shot in retaliation?"

"Mother!" cried Margaret.

"No, Mrs. Dean—not prisoners of war—guerillas."

"And when will you begin war on women?"

"Never, I hope." His hesitancy brought a scorn into the searching eyes of his pale questioner that Chad could not face, and without daring even to look at Margaret he turned away.

Such retaliatory measures made startling news to Dan. He grew very grave while he listened, but as he followed Chad he chatted and laughed and joked with his captors. Morgan would have Lexington in three days. He was really glad to get a chance to fill his belly with Yankee grub. It hadn't been full more than two or three times in six months.

All the time he was watching for Jerry Dillon, who, he knew, would not leave him if there was the least chance of getting him out of the Yankee's clutches. He did not have to wait long. Two men had gone to get the horses, and as Dan stepped through the yard-gate with his captors, two figures rose out of the ground. One came with head bent like a battering ram. He heard Snowball's head strike a stomach on one side of him, and with an astonished groan the man went down. He saw the man on his other side drop from some crashing blow, and he saw Chad trying to draw his pistol. His own fist shot out, catching Chad on the point of the chin. At the same time there was a shot and the Sergeant dropped.

"Come on, boy!" said a hoarse voice, and then he was speeding away after the gigantic figure of Jerry Dillon through the thick darkness, while a harmless volley of shots sped after them. At the edge of the woods they

(Continued on Page 42)



AMERICAN AGRICULTURIST

Classified Ads

A Place to Buy, Sell or Trade



DOGS AND PET STOCK

SCOTCH COLLIES and Welsh Shepherds Puppies. Shipped on approval. MAPLE GROVE FARMS, Pope Mills, N. Y.

IF YOU ARE interested in an English or Welsh Shepherd you will be proud to own, don't miss one of these, they will bring your cows home this summer. GEO. BOORMAN, Marathon, N. Y.

FREE DOG BOOK. Polk Miller's famous dog book on diseases of dogs. Instructions on feeding, care and breeding with symptom chart. 48 pages. Illustrated. Write for free copy. POLK MILLER PRODUCTS CORP., 1021 W. Broad St., Richmond, Va.

LIVE STOCK

(See Page 21)

POULTRY

Baby Chicks, Breeding Stock, Eggs

EARLY SPRING BROILER CHICKS—Butchers. Market men pay extra prices for your purebred Rocks, Reds, Wyandottes, Orpingtons. Descriptive Picture Folder Free, showing best varieties money making market chickens. FARM SERVICE, Route A1, Tyrone, Pa.

PEAFOWL, Pheasants, Bantams, Pigeons, Guineas. Free circular. JOHN HASS, Bettendorf, Iowa.

KEISER'S SINGLE COMB Brown Leghorns and Golden Buff Orpingtons. Excellent matings. Catalogue. F. KEISER, Grampian, Pa.

FOR SALE—Single Comb White Leghorn chicks. L. H. HISCOCK, Skaneateles, N. Y. Circular on request.

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AMERICAN MOTTLED ANCONAS—Record Layers. Lay large white eggs. Extra large type. Exceptional markings. Fine matings. Low prices. Catalogue. AMERICAN ANCONA FARMS, Grampian, Pa.

PRODUCTION BRED CHICKS that live. Large type S.C.W. Leghorns, \$20-100; \$180-1000; Invest now and take profits in 1929. ADAM SEABURY, Sayville, L. I.

SUNNYFIELD EXTRA LARGE Single Comb Black Minorcas. Exclusively. Chicks. Eggs. Stock. Extraordinary layers. Lay exceptionally large white eggs. Two matings. Low prices. Catalogue. SUNNYFIELD MINORCA FARMS, Grampian, Pa.

REGAL DORCAS WHITE WYANDOTTES—Eggs, chicks, stock. 256 egg record. Ledger. North American contest. Winter layers. Excellent type. Fine matings. Low prices. Catalogue. KEISER'S WHITE ACRES, Grampian, Pa.

GIANT LIGHT BRAHMAS—chicks—eggs—extraordinary large breeders—fine color—record layers—standard bred—low price—Catalogue. GIANT BRAHMA FARMS, Grampian, Pa.

ROSE COMB RHODE Island Red Cockerels, superb quality, \$2.50 and up, shipped on approval. ROBERT H. PURVES, Waddington, N. Y.

LEGHORNS, ANCONAS 10c. Rocks, Reds, Minorcas 12c. Wyandottes 13c. heavies 11c. Light mixed 9c. CONTINENTAL HATCHERY, York, Pa.

BUCHER SUPER-QUALITY CHICKS from inspected free range money-making stock. Reds, White Wyandottes, White Barred Rocks, Giants, Black Minorcas, Anconas, White and Brown Leghorns. Booklet Free. Low Prices. Pure Breeds. BUCHER BROS., HATCHERY, Dept. C, Bucyrus, Ohio.

CHICKS—From Pedigreed Barron White Leghorns. Imported yearly from Barron, England; dams trapnest records to 313. Big females, long bodies, large eggs. Catalog free. BISHOP'S POULTRY FARM, New Washington, Ohio.

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POULTRY

Baby Chicks, Breeding Stock, Eggs

HEAVIEST LAYING BARRED Rock pen all eastern contests two consecutive years. Records to 2347. Circular. Chicks \$25 per hundred. Cockerels \$5. H. VAN WINKLE, Box A, Camden, N. Y.

BABY CHICKS: From heavy laying strains of Rocks and Reds \$14. White and Brown Leghorns \$12. Mixed \$10. prepaid. Member I.B.C.A. SUNNYSIDE HATCHERY, Liverpool, Pa.

SINGLE COMB WHITE Leghorn chicks from two and three year hens only. 18c. Hatching eggs, 9c. RED RIDGE POULTRY FARM, Centre Moriches, N. Y.

BLACK SPANISH & RED CAPS, 15 eggs \$2.50; Duck eggs: White Muscovies, Buff Orpingtons, Pekins, 11-\$2.50. New Zealand Red Rabbits, \$5, each. BREEDERS SUPPLY, Cobleskill, N. Y.

WHITE WYANDOTTE COCKERELS: Mammoth Pekin ducks; drakes, Pearl guineas. LAURA DECKER, Stanfordsville, N. Y.

EVERLAY BROWN LEGHORNS. Tormohlen Famous strain. Baby chicks, eggs for hatching. SUNNYSIDE FARM, Emporium, Pa.

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CHICKS C.O.D.—100 Rocks or Reds, \$14; Leghorns, \$12; heavy mixed, \$12; light, \$9. Delivery guaranteed. Feeding system, raising 95% to maturity, free. C. M. LAUVER, Box 26, McAlisterville, Pa.

POULTRY

Baby Chicks, Breeding Stock, Eggs

CHICKS OF KNOWN quality bring greater returns. 16 breeds. Circular free. How to raise Better Chicks. PERRY POULTRY FARM, Perry, N. Y.

STATE TESTED and Accredited S.C.R.I. and white Leghorns. Chicks healthy. High producing Birds. W. W. HAM, Branford, Conn. Phone 141.

WOODSIDE POULTRY YARDS, chicks, Tom Barron-S.C. White Leghorns Imported 250-298 egg strain Breeder of leghorns for 28 years. Catalogue. DAVID HAMMOND, Cortland, N. Y.

BUFF ORPINGTON COCKERELS \$3. up. Hatching eggs 15-\$1; 30-\$1.80; 100-\$6. W. LOTHERS, Perulack, Pa.

FIRST AND SECOND prize cocks, first prize hen, second prize pullet, Columbian Wyandottes, production class Utica Show, \$4.50 each. Cocks, cockerels \$3. up. Hens \$2. Our Bourbon Red turkeys won at Chicago and Madison Square Garden. Stock—Eggs—Poults. MRS. C. J. DOXTATER, Evans Mills, N. Y.

DISCARD YOUR LEGHORN Males of unknown Ancestry and buy Production Bred Officially Pedigreed Leghorn Cockerels. Out cross to increase size, vitality, production, egg quality. Three hundred 200 egggers, and two 300 egggers. Our own breeding. National Headquarters Superior Egg Quality. Attractive prices. EGG AND APPLE FARM, Route A, Trumansburg, N. Y. Dept. A.

Turkeys—Ducks—Geese

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POULTRY

Turkeys—Ducks—Geese

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FOR SALE: Thorobred Mammoth Bronze turkeys. Free from disease. Enclose Stamp. MAUDE MILLS, Hammond, N. Y.

BRONZE TURKEYS, largest size. Finest color. GLIDDEN, Freedom, Maine.

GIANT MAMMOTH BRONZE turkeys, vigorous, healthy, fine markings, satisfaction. JOHN WILLIAMSON, Hammond, N. Y.

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PUREBRED MAMMOTH BRONZE, large, healthy toms, marked beautifully, satisfaction assured. Write ROBERT LEE, Lowville, N. Y., Route 1.

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PEACH AND APPLE TREES \$5; \$7.50 per 100 and up. Complete assortment fruits, berries, vines, ornamental trees, vines, shrubs, evergreens. Catalog in colors free. TENNESSEE NURSERY COMPANY, Box 102, Cleveland, Tenn.

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GLADIOLUS BULBS—36 page illustrated Catalog free, 175 varieties. Thirty All Different \$1. postpaid. HOWARD GILLET, Box J, New Lebanon, N. Y.

MILLIONS, CABBAGE, ONIONS, and Tomato Plants, \$1. 1000. Pepper and Potato Plants \$1.75 1000. Gladiolus Bulbs \$1. Hundred. CLARK PLANT CO., Thomasville, Ga.

100 MASTODON EVERBEARING \$1.85. 300, \$5. 11-illustrated Plant, Seed Catalogue free. CHAMPION ORIGINATOR, New Buffalo, Michigan.

CERTIFIED GREEN MOUNTAIN Seed potatoes. Nearly free from disease. Priced right. GLENN CARTELL, Marathon, N. Y.

Additional
Classified
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On
Page
42

HANDY ANDY Says "Here's How"

To Treat Seed Grain to Control Disease

By Ray Inman

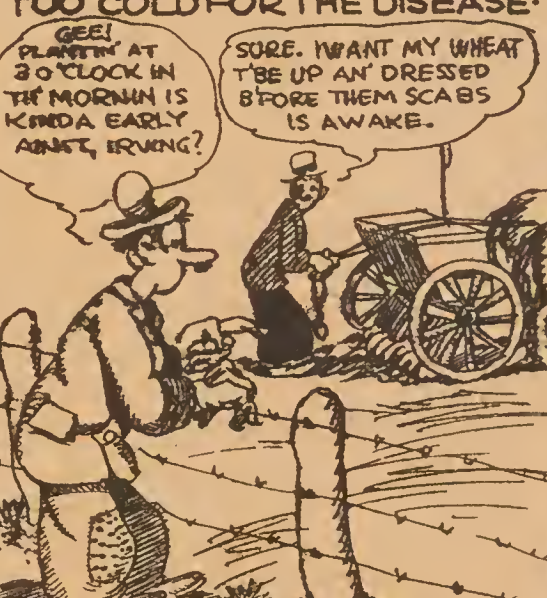
Scab-infected grain
CAN BE USED FOR SEEDING
IF PROPERLY TREATED.



THE GRAIN
THOROUGHLY-
TO ELIMINATE WORST
INFECTED SEED



Plant early and if
THICKER THAN USUAL. THE
SEED WILL SPROUT IN GROUND
TOO COLD FOR THE DISEASE.



MIXING MACHINE IS
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They have proved their worth through long and faithful service. We are prepared to supply authentic

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These splendid machines, long-known, are available in one and two-horse sizes. Strong, sturdy construction for rough Eastern conditions. Cutter bar follows unevenness of ground. Will cut banks and terraces at an angle.

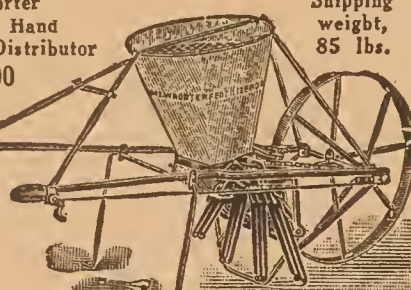
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McWhorter No. 21 Hand Fertilizer Distributor \$20.00

Shipping weight, 85 lbs.

Capacity: 80 lbs.

Extreme width 30 inches



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have capacity up to 400 lbs. Sow broadcast or sidedress rows of growing crops. The McWhorter line is the most complete fertilizer distributor line on the market, with sizes and adjustments for every requirement.

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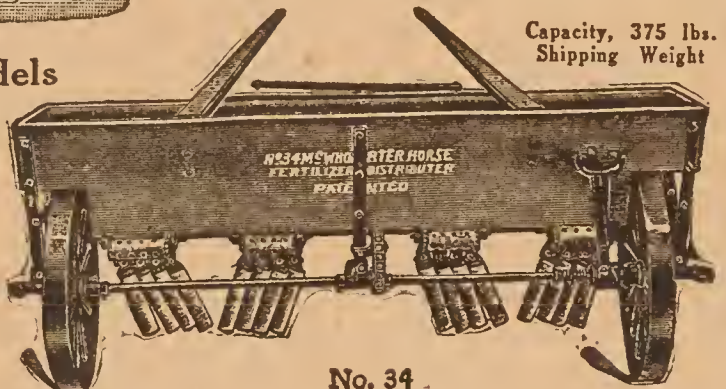
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We are prepared to supply parts for these tools which can be relied upon as dependable.

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Every market gardener needs the No. 21 Hand Fertilizer Distributor. Spreads fertilizer or lime in the furrow, beside the growing crop, or broadcast to a width of 30 inches. Instantly regulated to sow from 200 lbs. to a ton per acre. Strong, light and simple.



No. 34

Capacity, 375 lbs. Shipping Weight

The Little Shepherd of Kingdom Come

(Continued From Page 40)

Chad saw Margaret's white figure swiftly climb the stairs—but the light still burned in the noiseless room below.

Meanwhile Dan and Jerry Dillon were far across the fields on their way to rejoin Morgan. When they were ten miles away, Dan, who was leading, turned.

"Jerry, that Lieutenant was an old friend of mine. General Morgan used to say he was the best scout in the Union Army. He comes from your part of the country, and his name is Chad Buford. Ever heard of him?"

(To Be Continued Next Week)

The Outlook for Farming in 1929

(Continued from Page 9)

ducers who have been producing hay as a cash crop and shipping to the New York market must find some other source of revenue.

Even alfalfa is not as profitable as it was a few years ago. The only situation where timothy hay shows any promise at all as a cash crop is in parts of New England or Southeastern New York where hay is shipped in.

Hay producers should aim to produce a high quality legume roughage for consumption on the farm with the possibility of a small local market for good quality legume roughage.

Cabbage

The immediate market outlook for old cabbage and for the early cabbage is favorable by the light holdings in northern storage, but if intentions of heavy plantings of southern cabbage are carried out, prices will be reduced. Northern main-crop cabbage should be held close to last season's moderate plantings.

Onions.

Any increase in onion acreage in the late main-crop or Northern area

American Agriculturist, March 2, 1929, would probably result in lower prices in 1929.

Lettuce.

After several years of extremely rapid expansion of lettuce acreage, the point has been reached at which a substantial immediate increase seems undesirable, particularly in Western States, until the market develops greater capacity.

Tobacco.

The outlook for cigar types of tobacco in 1929 appears favorable. The present outlook for flue cured tobacco indicates the need for a reduction in acreage in 1929 compared with 1928. A moderate increase in burley acreage might safely be made, but there is grave danger that the burley growers will respond to present prices by overplanting in 1929. The outlook for fire cured and dark air cured tobacco does not justify an increase in acreage in 1929.

BUYERS' GUIDE

(Continued from Opposite Page)

MISCELLANEOUS

Bicycles	Meade Cycle Co., Dept. D205, Chicago, Ill.
Crow Repellent	Cedar Hill Formulas Co., Box 500 M, New Britain, Conn.
Colonization	Dominion of Canada, Dept. B47, Syracuse, N. Y.
Colonization	State of Florida, Tallahassee, Fla.
Cigars	Carney-Graham Co., Paducah, Ky.
Farms for Sale	Strout Farm Agency, 255 R-4th Ave., New York, N. Y.
Fire Arms	Remington Arms, New York, N. Y.
Food Products	W. T. Rawleigh Co., Inc., Dept. B241-AGR, Albany, N. Y.
Furs	Crosby Frisian Fur Co., 560 Lyell Ave., Rochester, N. Y.
Insurance	Merchants Mutual Casualty Co., 220 W. Delaware Av., Buffalo, N. Y.
Insurance	Postal Life Ins. Co., 511-5th Ave., New York, N. Y., Dept. AA.
Loans	Federal Land Bank, Springfield, Mass.
Loans	N. Y. Joint Stock Land Bank, Rochester, N. Y.
Magazine	Hunting & Fishing Magazine, 294 Transit Bldg., Boston, Mass.
Patent Attorney	Watson E. Coleman, 724-9th St., Washington, D. C.
Rat Exterminator	K. R. O., Springfield, Ohio
Savings Bank	National Savings Bank, Dept. AA, Albany, N. Y.
Telephone Service	American Telephone & Telegraph Co., New York, N. Y.
Transportation	New York Central Lines, 466 Lexington Ave., New York, N. Y.

Additional Classified Advertising

SEEDS—NURSERY STOCK

CERTIFIED SEED POTATOES. Smooth and Russet. Buy direct from one of New York's Premier growers, car lots or less. A. A. WEEKS, Locke, N. Y.

CERTIFIED SEED POTATOES. Irish Cobbler and original strain Carman No. 3. Buy direct from grower. Write today for prices. N. A. BAKER & SONS, Fairport, N. Y.

COOK'S CERTIFIED POTATOES. Cobblers and Russets. Better than ever. Attractive prices. No pay freight. IRVING B. COOK, Munsville, N. Y.

CERTIFIED HEAVYWEIGHT POTATOES. N. Y. State test 99.5 free from disease, yield 324 bushels per acre. RATH BROS., Pittsford, N. Y.

HARDY ALFALFA SEED 93 per cent pure, \$10. bushel; Sweet Clover 95 per cent pure, \$4.50. Return seed if not satisfied. GEO. BOWMAN, Concordia, Kansas.

CERTIFIED LATHAM AND HERBERT RASPBERRIES. Howard 17 and Mastodon Strawberries, Washington Asparagus. Other leading varieties Raspberries, Strawberries, Blackberries, Fruit trees, Shrubs, Evergreens, etc. Prices low. Everything guaranteed. Send for price list. BERT BAKER, Hoosick Falls, N. Y.

C. O. D. FROST PROOF Cabbage plants. Leading varieties now ready. 500, 65c; 1000, \$1.00; 5000, \$4.50. FARMERS PLANT CO., Tifton, Ga.

CERTIFIED BERRY PLANTS. Columbian purple also Kansas, Cumberland, Plum Farmer, Black Caps. Prices 60c doz. \$3. hundred delivered. CHAS. WHEELER, Mannsville, N. Y.

SEND NO MONEY. C.O.D. Frost proof Cabbage and Onion plants. All Varieties now ready. 500, 65c; 1000, \$1.00; 5000, \$4.50. STANDARD PLANT CO., Tifton, Ga.

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VERMONT CERTIFIED SEED Potatoes: Green Mountains and Irish Cobbler from fields which passed the unusually rigid tests of last summer. These are from high yielding, pedigreed strains. For list of growers write, H. L. BAILEY, Sec'y, VT. CERTIFIED SEED POTATO GROWERS ASSOCIATION, Bradford, Vt.

CABBAGE PLANTS, NOW Ready. My frost proof Cabbage plants will head three weeks earlier than home grown plants. Varieties: Jersey and Charleston Wakefield, Succession, Flat Dutch, Golden Acre and Copenhagen Market. Prices by parcel post prepaid: 500, \$1.25; 1000, \$2.25. Express: 100, \$1.00; 5000, \$4.50; 10,000, \$7.50. Bermuda Onion plants same prices as Cabbage plants. Roots wrapped in moss and shipped promptly. Satisfaction Guaranteed. P. D. FULWOOD, Tifton, Ga.

FREE GLADIOLUS BOOK—36 pages, 45 illustrations. Describes 171 exquisite varieties, many new. Tells how to grow. It's free! The famous beautiful Rainbow Collection of thirty bulbs, all different, \$1. postpaid. HOWARD GILLET, Gladiolus Specialist, Box J, New Lebanon, N. Y.

SEEDS—NURSERY STOCK

STRAWBERRY, BLACK, PURPLE and Red Raspberry plants, let us mail you our circular, giving description and prices. Our plants are strictly fresh dug from new fields. F. G. MANGUS, Maple View, N. Y.

FARMS FOR SALE

EQUIPPED DAIRY AND Poultry farms, four counties. Also business propositions of every description, money makers. Send for free circulars just out. FRED E. HUNT, Unadilla, N. Y.

ON STATE ROAD in Albion, Orleans County, N. Y. 132 acres, 76 tillable, 30 acres muck. 7 room house, barn 60x40 with silo. Buildings just newly shingled. 8 acres apple orchard. Here is an opportunity for one with available capital to buy right both as to price and terms. Write Geo. A. Miller, Albion, N. Y.

EXCELLENT DAIRY and alfalfa farm for sale. 1/2 mile from improved road, 165 acres, 115 tillable. Land just slightly sloping. Large fields, easily worked with heavy machinery. Large house, cow barn, silo, several hen houses. Excellent dairy farm. 100 tons hay sold this year. Easy terms and at low price. Interest 5% on mortgage. Inquire of D. M. Snyder, Auburn, N. Y.

HELP WANTED

RELIABLE MEN WANTED to sell guaranteed trees, shrubs and roses. Steady work. Pay weekly. Start now for Spring business. Wholesale and retail. WEBB NURSERY CO., Rochester, N. Y.

EVERY HOME A PROSPECT. Make big money. Employ crew. Take orders trees, shrubbery. Work entire year. All or part time. Complete cooperation. Landscape service. Com. paid weekly. We deliver, collect. Apply WILLEMS, SONS' NURSERIES, Desk A, Rochester, N. Y.

WANTED—WOMAN OR Girl in search of excellent farm home. For particulars, address MRS. HALSEY REID, Cranbury, N. J.

SITUATIONS WANTED

DO YOU NEED FARM HELP. We have Jewish young men, able-bodied, some with, but mostly without experience, who want farm work. If you need a good, steady man, write for an order blank. Ours is not a commercial agency. We make no charge. THE JEWISH AGRICULTURAL SOCIETY, Inc., Box A, 301 E. 14th Street, New York City.

WOOL—HIDES—FURS

MINK FURS WANTED. Large \$30. Medium \$24. Small \$20. Red fox, large \$30. Medium \$24. Small \$20. E. T. SHERMAN, Whitman, Mass.

WANTED—RAW FURS, Rabbits, Especially good Muskrats, \$1.75. Also want live Rabbits, Muskrats, Minks, Foxes, Raccoons, STERNS FUR CO., New Brunswick, N. J.

WANTED TO BUY

WANTED—HAY, GRAIN, Potatoes, Apples, Cabbage, Carrots. Pay highest market prices. THE HAMILTON CO., New Castle, Pa.

WANTED TO BUY old bags. We pay excellent prices. Write for prices. We pay freight. OWASCO BAG CO., Rochester, N. Y.

FARM EQUIPMENT

ROOFING PAPER, 3-ply, \$1.35 per roll, 100 sq-ft. Prepaid. Asphalt shingles, roofing, paint. Send for price list. WINKER BROS., Millis, Mass.

EXTENSION LADDERS, 20 to 32 ft. 25c per ft. 32 to 40 ft. 27c per ft. Freight prepaid. ARTHUR L. FERRIS, Box A, Interlaken, N. Y.

PRINTING—STATIONERY

MAPLE LABELS—Four sizes: \$1.85, \$2.30, \$2.75. \$3.00 per 1000, postpaid. Samples! HONESTY FARM PRESS, Putney, Vermont.

GUMMED MAPLE LABELS. Beautifully printed in colors, improves appearance, helps make sales at better prices. Positively stick to tin. Samples free. PRINTER HOWIE, Beebeplain, Vt.

TOBACCO

HOMESPUN TOBACCO: Chewing 5 lbs. \$1.50; Smoking 5 lbs. \$1.25. Fifty cigars \$1.75. Pay when received. Pipe free. FARMERS UNION, Paducah, Ky.

HOMESPUN TOBACCO Chewing 5 lbs. \$1.50, Smoking 5 lbs. \$1.25. Pipe free, pay when received. FARMERS ASSOCIATION, West Paducah, Kentucky.

LEAF TOBACCO—Good sweet chewing, 3 lbs., 90c; 5, \$1.25; 10, \$2.00. Smoking, 3 lbs., 60c; 5, 90c; 10, \$1.50. UNITED FARMERS, Mayfield, Kentucky.

WOMEN'S WANTS

LADIES' FINE LISLE STOCKINGS 3 pair \$1.00. Black, gunmetal, grey, beige, nude, French nude; sizes 8 1/2-10. Good openings for agents. A. H. TALBOT SALES COMPANY, Norwood, Mass.

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MISCELLANEOUS

USED CIVIL WAR ENVELOPES with flags, designs, etc., \$1 to \$15 paid. Other stamps on envelopes before 1871 bought. W. RICHMOND, Cold Spring, N. Y.

MISCELLANEOUS

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Cream Separators	International Harvester Co. of America, Chicago, Ill. (McCormick Deering)
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Milking Machines	Cherry-Burrell Corp., 27 Albany St., Little Falls, N. Y.
Milking Machine and Cream Separators	De Laval Separator Co., Dept. 1-27, 165 Broadway, New York, N. Y.
Milking Machines	Ottawa Mfg. Co., 622 White St., Ottawa, Kansas.
Milking Machines	Pine Tree Milking Machine Co., Dept. 30-62, 523 Willow St., Syracuse, N. Y.
Milking Machines	Universal Milking Machine Co., Dept. A.A., Syracuse, N. Y.
Teat Dilators	Dr. Naylor, Dept. 7, Morris, N. Y.

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Roofing	Edwards Mfg. Co., 312-362 Butler St., Cincinnati, O.
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Nitrate of Soda	Chilean Nitrate of Soda, Dept. E-18, 57 William St., New York, N. Y.
Potash	N. V. Potash Export My., Dept. 215, 19 W. 44th St., New York, N. Y.
Sulphate of Ammonia	Barrett Co., Dept. NK, New York, N. Y.

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Sprayers	Field Force Pump Co., Dept. C, Elmira, N. Y.
Sprayers and Dusters	John Bean Mfg. Co., 93 Hosmer St., Lansing, Mich.
Sprayers and Pumps	F. E. Myers & Bro., 286 Orange St., Ashland, Ohio.
Scalecide	B. G. Pratt Co., Dept. 12, 50 Church St., New York, N. Y.

LIME

Agricultural Lime	Michigan Limestone & Chemical Co., Inc., Buffalo, N. Y.
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Cod Liver Oil	Harris Laboratories, Tuckhoe, N. Y.
Dairy and Stock Feeds	Beacon Milling Co., Cayuga, N. Y.
Insecticide	Carbolineum Wood Preserving Co., Dept. 26, Milwaukee, Wis.
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Stock Feeds	Blatchford Calf Meal Co., Dept. 5513, Waukegan, Ill.
Stock Feeds	Corn Products Refining Co., 17 Battery Place, New York, N. Y.
Stock Feeds	Cottonseed Products Association, Dept. A-9, Dallas, Texas
Stock Feeds	Cooperative Grange League Federation Exchange, Inc., Ithaca, N. Y.
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Seeds	Wm. Henry Maule, Philadelphia, Pa., Box 3
Seeds	Page Seed Co., Greene, N. Y.
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Strawberry Plants	L. J. Farmer, Box 241, Pulaski, N. Y.
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Trees, Shrubs	Kelly Bros. Nurseries, 330 Cherry St., Dansville, N. Y.
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(Continued on Opposite Page)

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Simplified Installation
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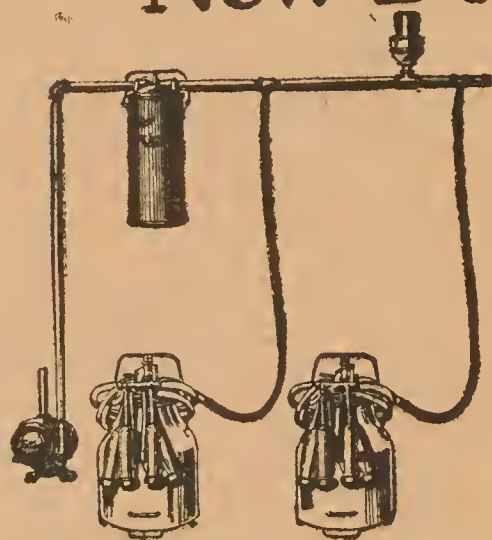
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Please send me complete information on the following (check which):

De Laval { Magnetic ☐ De Laval { Golden Series ☐
Milkers { Utility ☐ Separators { Utility Series ☐
Alpha Dairy Power Plant ☐

I milk.....COWS.

Name.....

Town.....R.F.D.....State.....

Two Lines of De Laval Separators



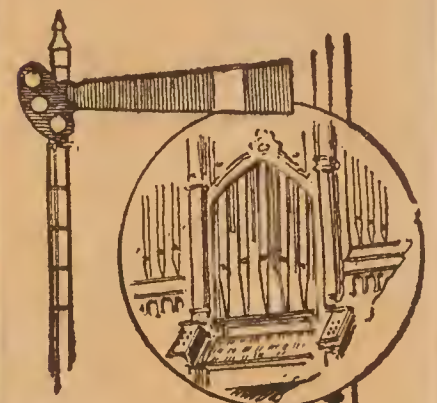
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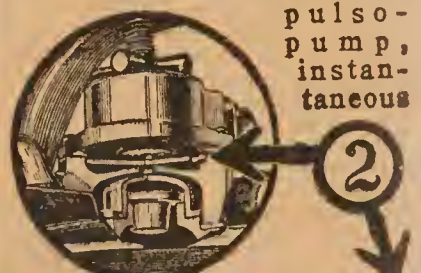
**Magnetic Force
Lightning Fast—
Reliable—Efficient**



Through the use of the electro magnet railroads operate the complicated signal systems that assure the safe and swift operation of trains. In the wonderful pipe organs electro magnets control the hundreds of valves. In the telegraph, the telephone, the steel and ore cranes—wherever positive control, lightning speed and dependability are needed, the electro magnet is used.



In the De Laval Magnetic Milker the use of magnetic force provides the simplest, most dependable and most effective pulsation control ever devised. The generator shown at (1) which is belted to the pulso-pump creates the magnetic force. When contact is made by a revolving cam in the



pulso-pump, instantaneous contact is made with a magnet in the pail top, which immediately exerts its force and lifts the metal disc shown at (2). This permits vacuum to suck back the piston in the pulsator and causes the front teat-cups to massage the cow's teats, while the two rear teat-cups are opened and milk is withdrawn. When contact of the revolving cam is broken the action is instantly reversed.

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The new Alpha Vertical Dairy Power Plant for operating De Laval Milkers and Separators is built like an automobile engine. It has



Heats water.

For washing the milker while engine is being run.

MAR 11 1929

AMERICAN AGRICULTURIST

\$1.00 Per Year

March 9, 1929

Published Weekly



A Covered Bridge—A Relic of Old Times That is Fast Disappearing

Read Governor Roosevelt's Message on Roads and Taxes--Page 24



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Swift's Red Steer Fertilizers

"IT PAYS TO USE THEM"

A "Short Course" in Greece

Teaching Farming Methods Under Difficulties

EDITOR'S NOTE—
This is the third of a
series of letters
from H. B. Allen,
Director of Education for the Near
East Relief. Mr. Allen writes from
Athens and tells of Agricultural condi-
tions in Greece.

By H. B. ALLEN,
Director of Education, Near
East Relief

everyone, for these
peasants work far
harder than most of
us can even im-

THE other evening in the little village of Adriani, northern Greece, I witnessed an important event in the agricultural history of Greece. In this typical peasant community I attended an agricultural meeting made up of forty-five or fifty young men and adult farmers enrolled for a series of evening lessons on local farm problems. Even without a knowledge of the language, it could readily be seen that the "pupils" were very much interested in the lesson. Through my interpreter I learned that the discussion was centering chiefly around the question of preparing the soil for tobacco. The keenest interest and the greatest number of questions had to do with the use of mineral fertilizers which had been tried out, it seems, by some of the farmers during the past season. Apparently the application of this new kind of manure had resulted in more harm than good.

The leader of the meeting, a young man, was himself from a peasant home, brought up on a farm in northern Greece, and a graduate of a Greek farm school, explained that the injury had come from improper use of the material. He brought out in the general discussion that the chemicals had been applied too heavily and had been placed too close to the young plants, thus burning some of the crop. As near as I could find out, he was recommending a very light application at first and then a heavier application after the plants had attained some size. I also learned at this meeting that the State Department of Agriculture was recommending a 6-8-8 formula for tobacco on most of the Macedonian soils, and it was especially interesting to note that the speaker was stressing the value and economy of always using high grade fertilizers.

Teaching Under Difficulties

I was tremendously pleased with the attendance at this meeting, the interest manifested in the lesson, and the apparent success of this whole venture. It represented some of the first fruits of the writer's efforts, in co-operation with government officials, for weeks past. Moreover, it was fairly typical of many similar evening courses which are being attempted this winter in various parts of northern Greece and Macedonia. The "winter short course" of which this lesson formed a part was not established without considerable effort on the part of the young man in charge of this center. There was difficulty in finding a suitable meeting place, but finally a room in the village school was secured; it was not easy to designate an hour satisfactory to

everyone, for these peasants work far harder than most of us can even imagine; one of the first meetings was forced to early adjournment by darkness. A lamp had been borrowed for the occasion from some home in the neighborhood but after a short time the owner reappeared to claim the light for his own needs.

The mayor solved this problem by running a wire into the room from the street and attaching an electric light bulb. This town is more fortunate than many in having a supply of electricity which furnishes light to a few of the public places and some of the more prosperous shops. In this community, more than in any other perhaps, the agriculturist engaged for this special work had caught the spirit of the undertaking, had persevered in the face of serious difficulties, and was at last rewarded with real success. While speaking to the group for a few moments before the meeting adjourned, I was informed that this was the first time in the history of the village (probably in the whole of Greece) that a school or institute dealing with practical farm problems had been made available to the peasants themselves.

Six Acres in Nine Separate Lots

Two or three days after this meeting while travelling about in the same area, I had the pleasure of an interesting visit with a fairly representative individual farmer. It was in the village of Zyghos where we had stopped to confer with the mayor in regard to certain matters. It happened that we completed our business fairly soon and so we spent an hour or so, while sipping Turkish coffee, discussing the community in general and the mayor's own farm in particular. Mr. Panayotis Balsanides told me that his village consists of 350 houses, 500 families and a total population of about 2000 people—all farmers. Of course, there are a few shopkeepers, carpenters, blacksmiths, etc., but even these tradesmen have their individual allotments of land which they manage somehow to cultivate. His own farm consists of 24 stremmas (approximately 6 acres) and is divided into 9 sections located in as many different places and on all sides of the village. The most distant piece of land is situated about one and one-half hour's walk from his home, while the nearest plot is only about 10 minutes distant.

In talking with other farmers of the region I had already discovered this same peculiar division of land, and each one seemed to be firm in his conviction that it is a wise arrangement. Mr. Balsanides presented the same argument as the others, namely, that such an arrangement is an insurance against total loss during any one season; that rain, hail, wash-outs and sundry calamities are not apt to strike in the same place during the same year. Perhaps for this mountainous

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Young farmers of the village, Vezniko, Macedonia, considering the advisability of a winter short course in agriculture. The village now has a flourishing "school". The picture was taken on a religious holiday when the young men were dressed in their Sunday-best.

High Spots from Farmers' Week Talks

Here is the Latest Thought on Farm and Home Problems

"LAST evening," said Governor Roosevelt at Farm and Home Week at Ithaca, "I spoke to the ladies of the New York State Federation of Home Bureaus in regard to the wastefulness and extravagance of our local government, our town government and in many cases our county government and I made the point that a reorganization of town and county government has got to come from the bottom; that in my judgment in the next few years reorganization is going to be forced, and the demand is going to come from the community and the town itself. . . . A very small amount of the tax paid by the average property owner goes to the upkeep of the state government and a very small part to the Federal government. The great bulk is spent right at home, in a large percentage of cases in the offices of the town and county government, with two of the main factors being the cost of roads and schools.

"I am sorry to say that most town and local government is not efficient from the modern point of view. That is your responsibility. . . . Just on the subject of highways, the local people have to pay 35 per cent of the cost and the state 65 per cent. For example, some counties have a large area, with small population, and with their share of an expensive and lengthy road system running very high, while a smaller, richer county may have 10 times the population and land values that make their road tax very small; as, in one of the wealthier counties any man who owns \$10,000 worth of real estate in the county pays but \$3.67 to complete his share of the cost of the state system of roads in his county, while in another county, Madison I think, the man who owns \$10,000 worth of real estate has a tax of \$427 as his share of highway costs. That is why the advisory commission proposed that the state

By MABEL G. FEINT

bear a greater share. Take Tompkins County, as it seems nearest for many of us. The county still has 21 miles of road to be built. Under the existing law it will cost the county \$412,000 to build this road. Under the proposed law the county's share of the expense would be \$147,000 or a saving in that one item alone of \$265,000."

Pay Taxes from Forests

Governor Roosevelt was the first Governor to visit Farm and Home Week and the largest hall on the campus was filled an hour before he was to speak, so that hundreds were unable to hear him. He confessed to owning a farm that he is unable to make pay a profit, but thinks he may be called a good forester. "I like to think of the day many years ago when I was in Germany with my family and of a little city of 6,000 or 8,000 inhabitants. Back of this city was a forest and the people of that city paid not a single cent or mark of taxes because their city government costs were paid by the income the municipality received from this forest."

Governor Roosevelt disapproved proposed reforestation legislation as dealing with forests of too small acreages and having other wasteful features. But the state must go into reforestation and the investing public must be persuaded that growing trees is as sound an investment on a large scale as investing in railroad bonds. He discussed the gasoline tax in detail as a tax that costs less to collect, one in which there is less evasion and one that is sound, as it falls on the principal recipient. It is in force in 46 out of 48 states.

Summing up the tax relief the new legislation may mean, he said, "The commission wants this

tax relief to assist every taxpayer. It is up to you to see that it does. Do not let your supervisors get it."

* * *

"In 300 years America has achieved as no other nation ever has, from the standpoint of internal development of the people and in material things. We can say, as we could not have said three months ago, that we are "all set" to do the thing that awaits to be done as never before. There is a man at the head of this nation who is of peculiar fitness for his job. Never was there so great a task or a man so fitted to fulfill it. Mr. Hoover is the greatest engineer, the tremendous man of business, the internationally minded statesman, the man of faith! To him is entrusted the task of keeping God in human affairs."—CHARLES M. GARDNER, editor, *National Grange Monthly*.

* * *

Milk Shortage An Acute Problem

"You are going to produce enough milk for the New York city demands four years from now, as there are enough extra heifers and calves being raised to assure this. The critical period in protecting the New York market will come in the next year or two. It can only be solved by the education of every single producer to a recognition of his own responsibility to produce an extra 15 pounds or so a day when asked to by his own cooperative association. The first requirement is to feed well all summer so the herd does not get thin, keep the flow up and so hold your own market for the next two or three years, whether you be a member of an independent cooperative or other organization. Then national conditions will

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The Fertilizer Market Situation

Lower Your Costs By Using High Analysis Goods at Cash Prices

By GILBERT GUSLER

Standard Farm Paper Market Analyst

THE fertilizer market is one realm where the farmer's dollar is above par. A pound of many other crops on which fertilizer is extensively used will pay for more fertilizer than they would have bought 15 to 20 years ago. Of virtually no other important item of farm expense does that hold true. This situation is all the more surprising in view of the fact that a dollar's worth of fertilizer wisely used can generally be counted upon to bring an increase of \$2 to \$4 and sometimes more in the value of the crop produced.

The accompanying chart pictures the changes in prices received by farmers for their products since 1910 and retail prices paid by farmers for fertilizer. The third line shows the changes in the value of farm products when exchanged for fertilizer. They are expressed as index numbers, taking the period from 1910 to 1914 as 100.

Fertilizer prices have been lower than prices of farm products in each of the last six years. The index of prices received by farmers in 1928 was 139; that it, a combination of units of various farm products that would have brought \$1.00 before the war sold for \$1.39 in 1928. The index of retail prices for fertilizer for the first half of 1928, which is as far as it is available, was 133. The exchange value of farm products for fertilizer in 1928 was 104.5, or, the quantity of farm products that would have paid for 100 pounds of fertilizer in pre-war days would have bought 104.5 pounds in 1928. It

would have paid for 112 pounds in 1925.

Fertilizer prices have held on a low basis for the last six or seven years because of the low incomes received by farmers, the previous over-expansion of the fertilizer industry, and changes in technical processes and trade conditions which have cheapened fertilizer raw materials.

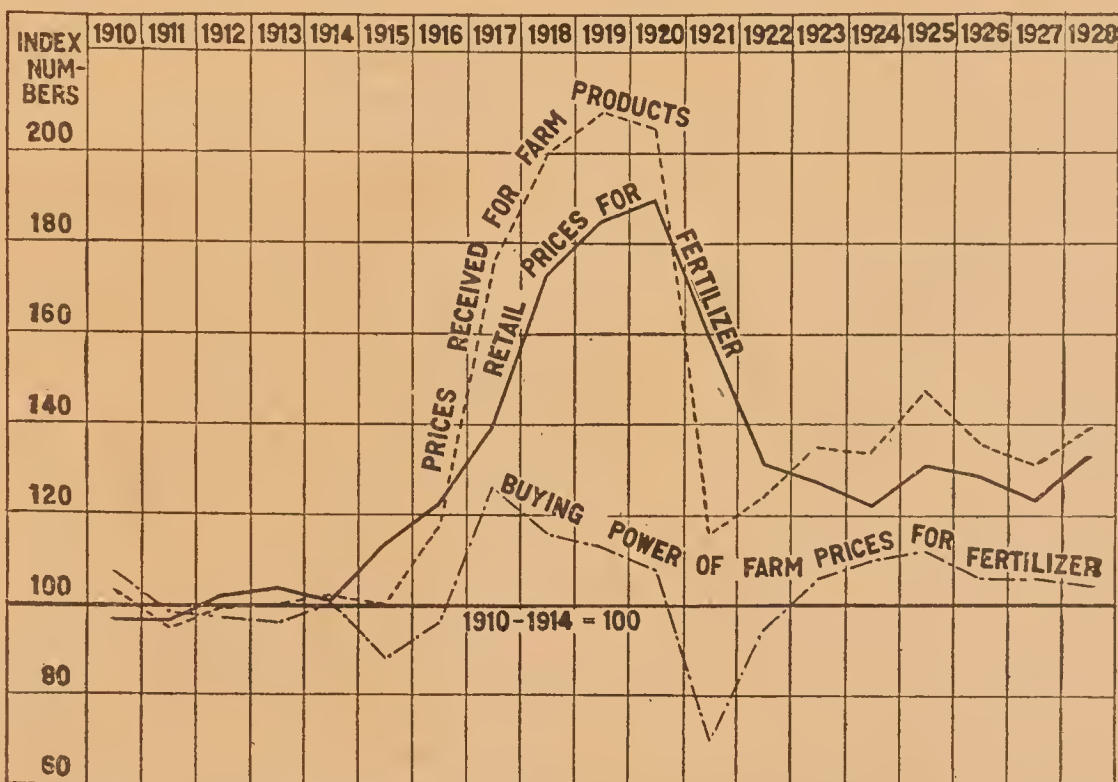
Fertilizer companies as well as farmers have been on Uneasy Street since 1920. Prices of most products farmers buy and taxes have been so

high compared with farm returns that the ability of farmers to purchase fertilizers, which in themselves were moderate-priced, has been restricted.

The fertilizer business evidently was quite profitable in the years before the war. At any rate, the number of plants in operation increased from 550 in 1909 to 784 in 1914. Sales increased at the rate of 350,000 tons a year from 1900 to 1914. Apparently, it was assumed that this growth would continue, and plant capacity was expanded to care for it. But, sales increased very little after 1914. The producing capacity of the industry has been estimated at 10,000,000 tons, which is about 25 per cent more than ever was sold in one year. Pressure to keep this capacity in use has caused price cutting and selling at close margins during the difficult times since 1920. Some plants were forced out of business, so that only 587 were in operation in 1925.

The most important change in the technical processes tending to cheapen fertilizer has been the great increase in production of air nitrates. According to H. R. Smalley of the National Fertilizer Association, synthetic ammonia comprised 37 per cent of the world consumption of nitrogen compounds in 1927; by-product sulphate of ammonia from coke and coal gas plants, 24 per cent; Chilean nitrate, 23 per cent; cyanamid, 14 per cent; and nitrate of lime, 2 per cent. In 1913, Chile deposits

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Prices received by farmers have been relatively higher than fertilizers at retail in recent years, so that farm products would exchange for more fertilizers than in pre-war days. Based on data from United States Department of Agriculture.

Editorial Page of the American Agriculturist

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No. 123 March 9, 1929 No. 10

How Much Does It Cost To Run a One-Room School?

We think the four-mill plan of school taxation, the State to pay the remainder, is O. K., but we believe that \$1500 is too large an allowance for a one-room school.—E. A., New York.

THE original intention of this school bill to help the one-room school was to make the maximum \$1500, but the idea is now to make the maximum \$1200 for 1929, \$1300 for 1930, \$1400 for 1931 and \$1500 by 1932. All of these suggestions may be changed, of course, by amendments before the legislature passes the bill.

The average cost of maintaining a one-room school in New York State is between \$1200 and \$1300. There are, of course, many under this average, and many over.

We fully agree with the writer of the above letter, that nothing should be done to increase extravagance with public funds. On the other hand, the thought back of this proposal is to give the district schools a chance to compete with the city schools for well trained teachers, and to do so with no added taxes to the district itself.

Better Milk Prices Would Prevent Shortage

THOSE who have been studying the situation are agreed that there will be the greatest shortage of milk in the history of the market next fall during October and November. The Milk Stabilization Committee, the Dairymen's League Cooperative Association, and many of the dealers are interested in a campaign to acquaint dairymen with the situation and to encourage them to make arrangements to produce more milk next fall in order to prevent the shortage and preserve the New York milk shed within its present boundaries. Every means of publicity and education are to be used to bring the facts home to dairymen.

All of which is good and commendable, so far as it goes. But we must repeat our firm conviction that the one chief way to insure a plentiful supply of milk during the short periods is to pay for it on the basis of costs of production plus a profit and to announce such increased payments time enough so that dairymen can make the necessary plans.

It is none too early for farmers to get ready to increase their milk supply next November. In fact, it is not early enough, for the chief change

needed is from summer to winter milk production. However there are some things that can be planned for now that will help next fall. The chief of these is careful feeding and care during the spring and summer so as never to allow production of any animal to decline. Once it gets down it is practically impossible to bring it back. This means constant and heavier feeding of concentrates through the entire season and plans for plenty of supplementary green crops during the summer with early cut hay and good silage next fall. Dairymen can follow such a program, and will follow it, if they are paid for it.

Therefore, the big problem before the leaders of the industry in this section is to find some way, and find it immediately, to prevent any decline of milk prices too early this spring and to announce immediately better prices or assurances of better prices for milk produced next fall.

Protect the Bean Grower

ACCORDING to the *Michigan Farmer*, a Standard Farm Paper, many leading men in Michigan interested in the growth of beans made a careful study recently of the cost of growing an acre of beans under average Michigan conditions, and found that the cost amounted to \$42.46. For the past thirteen years, the average yield for that state is 11.4 bushels, or 684 pounds per acre. This gives an average cost to the farmer of \$6.20 per hundredweight of beans. How does this compare with production in New York?

A committee, representing the Michigan bean growers, appeared before the Ways and Means Committee of Congress to urge an increase of one dollar per bushel in the tariff on beans. We hope that the committee will grant their request to protect the American bean growers.

Says Consumers Do Not Want More Butterfat in Milk

IN a recent address before a milk dealers' convention, W. A. Foster of the Borden's Farm Products Company made the point that it does not pay from the dealer's standpoint to talk richness of milk and cream line to the consumer. Mr. Foster said that the Borden Company has had some experience in selling milk testing 4.4 per cent butterfat at 18 cents a quart and milk testing 3.6 per cent butterfat at 17 cents a quart, and the experience of his company did not justify handling the richer milk at the higher price.

Consumers had the choice of the two grades of milk and they purchased during one month 52,791 units (pints and quarts) of 3.6 per cent milk, and only 34,465 units of the milk testing 4.4 per cent. The value of the sales of milk and cream for the average customer for one month was \$7.48 for users of the 3.6 milk and only \$6.73 for users of the 4.4 per cent milk. The point of Mr. Foster's address was that, judging from this experience of his company and these figures, it does not pay the dealer to try to sell milk too high in butterfat.

We hesitate, however, to accept this same conclusion, for we believe were the two grades of milk properly advertised so that the consumer could be absolutely sure that he was getting the richer milk for the higher price, there would certainly be a considerable portion of consumers who would buy the richer milk. Thousands of them spend a good deal of money every year to buy extra cream for their coffee and other purposes.

Government in Competition With Farmers

SINCE reclamation has been a policy of the government, twenty-four projects have been constructed, and four are under construction at present. The twenty-four constructed projects located in fifteen western states, include 1,956,910

irrigable acres, to which a full water supply is furnished. In addition, the government furnishes supplemental water to 1,482,950 acres which are included in private enterprises which had an insufficient water supply. The projects are subdivided into 38,428 farms, with a resident population of 143,227 people.

Representative Louis T. McFadden, in commenting on this absurd reclamation situation, recently said:

"Either we are to bury farming deep and for decades to come under these huge contemplated land reclamation projects like Boulder Dam and Columbia River, or we will, statesmanlike, hold these vast competitive resources in reserve and undeveloped until such time as, stimulated by assured profits from farm production, settlers seek these lands at prices and on terms which will justify the employment of private capital to construct the necessary works."

Representative McFadden is to be commended for his common sense on this subject. What foolishness for the government to be contemplating farm relief and at the same time spending millions to open all of this new land to agricultural production!

Nitrogen Fertilizers Increasing

DR. FIRMAN E. BEAR, head of the Soils Department of the Ohio State University, recently said that the farmers of America and of the world will soon be using several additional million tons of nitrogen. He estimated that this quantity, if applied to wheat, would produce 95 per cent of this country's average total yield of wheat.

The chief reasons for the increased use of nitrogen are: first, lower prices; and second, more knowledge on the part of farmers of the results which can be obtained by the right use of nitrogen fertilizer.

"Indeed," said Dr. Bear, "lower-priced nitrogen makes it necessary to reconsider the question as to whether legumes are the cheapest source of all the nitrogen required on the farm."

It is because of the growing importance of nitrogen that we have been trying to give the latest and best authoritative information on this subject, and on the whole subject of fertilizer practice, in the articles by Dr. A. W. Blair of the New Jersey Experiment Station. You may depend on the columns of AMERICAN AGRICULTURIST to continue to keep you informed on the important subject of fertilizers.

Results from the Chicago Milk Strike

IN many ways a milk strike is a deplorable necessity, but sometimes it is a necessity nevertheless. We have reported the news from the Chicago milk strike from time to time, but we think the thought is worth emphasizing that while the dairymen did not get all of their demands, they did get some raise in price over what the dealers offered in the first place, and what is better still, they secured recognition of their organization, the Pure Milk Association.

Now if only they would all get back of this association and work together, producers would pretty nearly put an end to future milk market problems in the Chicago district.

Eastman's Chestnut

HERE is a good one that a friend of mine sent:

Jack and Bill, brothers, were in the draft for the World War. As the time approached for them to go before the examining board, one said to the other that he guessed maybe they had better take a bath. Accordingly, they procured wash tub, water, etc., and proceeded. During the ablutions, Jack said to his brother:

"Bill, I b'lieve you're dirtier than I be."

"Well, what of it?" Bill snapped rather indignantly. "I'm two years older!"

News from the Publisher's Farm

THE last few weeks I have been more than busy. In addition to my regular jobs of publishing AMERICAN AGRICULTURIST and running my farm at Fishkill, I have been spending two or three days every week at Albany. Never have I seen the situation at Albany more hopeful from the standpoint of the farmer than it is at present.

At the February 21st meeting of Governor Roosevelt's Agricultural Advisory Commission, we recommended that a plan be adopted for re-imbursing the Counties up to 50% of the cost of removing snow from the State and County highways; this cost to the State not to exceed \$50. per mile.

A sub-committee which made a careful study of the emergency needs of the farmer for additional research work at the College of Agriculture at Ithaca and the experiment station at Geneva brought in a report which was unanimously adopted by the commission. The more important recommendations which were adopted were that funds should be made available this year to give added laboratory facilities to the experiment station at Geneva and that sufficient funds be provided for investigation of muck land problems, peach moths, codling moths and allied insects and potato diseases, production and storage. Furthermore, it was recommended that additional money be provided to expand the work of the cow testing associations, and that studies could be made of city markets, cooperative marketing and rural government. In addition, funds should be provided so that the College of Home Economics could study the costs of living on the farm and lastly, that monies be made available so that the Department of Animal Husbandry at Cornell should be permitted to render greater service to the live stock interests in solving their problems of feeding, breeding and disease control.

The Legislature will most likely adjourn on or before April first and it behooves our readers to watch what takes place in Albany very closely. In the recent issues of AMERICAN AGRICULTURIST we have tried to give you every opportunity to know of the various recommendations that have been made to the Governor on the agricultural situation in the State. The Governor in his speech at Farmers Week clearly showed that he was in entire sympathy with the recommendations made to him by his non-partisan Advisory Commission. By working closely together and letting our Senators and Assemblymen know what we want, those of us who are so vitally interested in getting tax relief and additional aid to our rural schools can undoubtedly, with the help of Governor Roosevelt and the Legislature, get what we want this year.

* * *

The first reports have just come in for the yearly records on five of the daughters of HENGVERD HOMESTEAD DE KOL 4TH. The following are the records of these five first calf heifers.

Fishkill Inka Veeman DeKol No. 1000711.
At 2 yr. 8 mo. 28 days,
Milk 13,123.1 lbs.
Butter 522.48 lbs. in 349 days.

Fishkill Jennie De Kol No. 978696

At 2 yr. 10 mo. 2 days

Milk 14,024.2 lbs. Butter 635.08 lbs. in 365 days

Fishkill Clara Inka De Kol No. 978694

At 3 yr. 0 mo. 4 days

Milk 12,856.0 lbs. Butter 551.60 lbs. in 365 days

Fishkill Inka Pontiac De Kol No. 1000712

At 2 yr. 7 mo. 17 days

Milk 10,252.8 lbs. Butter 453.86 lbs. in 341 days

Fishkill Colantha Inka De Kol No. 1000705

At 2 yr. 10 mo. 5 days

Milk 12,194.1 lbs. Butter 527.40 lbs. in 365 days

Since the first of the year we have made the following sales of bulls:

Fishkill Colantha Inka No. 552463,

Sold to Graham Bros. of Swan Lake, New York.

Fishkill Inka Triumph Hengerveld No. 550695,

Sold to Geo. Beckwith, Stissing, New York.

Fishkill Vale Colantha No. 552464,

Sold to Wm. A. Whalen, LaGrangeville, New York.

Henry Morgenthau Jr.

A Visit with the Editor

*Rain before seven,
Storm before eleven*

ONE morning, more years ago than I like to remember, Father and I arose early to go blackberrying, but when we looked outdoors it was raining.

"Never mind," said Father, "See that blue sky over there in the West? That means that by the time we get to the berry patch, the sun will be shining."

So we started out in the rain, but the patch of blue in the western sky kept growing until finally the sun came out and chased away all the clouds.

More than almost any other trade, farming depends upon the weather, and probably for this reason the average farmer is a good weather prophet. He has built up, and handed down through the years, many old rhymes and sayings founded upon the observation and experience of generations.

Some correspondence with my brother, George Duff, and with K. E. Chute of Hayward, California, has brought some of these weather rhymes and prophecies to mind. Some are nonsensical, but many of them are fairly reliable.

All of us have no doubt heard this one:

*A rainbow in the morning
Is the shepherd's warning;
A rainbow at night
Is the shepherd's delight.*

This is good logic because thunderstorms in the northern hemisphere generally travel from West to East and a rainbow at night means clear sky in the West and the sun lighting a cloud bank that has passed us by.

*Thunder in the West
Brings the hay-maker (or hired man) rest,
But thunder to the North
Brings the hay-maker forth.*

This is true because a storm which grumbles from a point north or Northwest will usually pass around, but if thunder is heard from points directly west, it is pretty likely to rain.

*Ring around the moon,
Storm very soon.*

This is a good sign of storm because it indicates a heavy haze in the atmosphere. Some of the prophets go further, however, and claim that the number of stars within the circle show the number of days before the storm. There is nothing to this except possibly the thicker the haze, the fewer stars showing.

The condition of the dew in the morning is always a good sign of coming weather conditions. Every dweller in the country knows that if there is no dew in the morning it is almost certain that either the sky was clouded or that there was a high wind, or both, all indicating that there is a storm coming.

*When the grass is dry at morning light,
Look for rain before the night;
When dew is on the grass,
Rain will never come to pass.*

Then there is the old rhyme about the setting sun:

*When the weary sun hath made a golden set,
And by the bright track of his fiery car,
Gives token of a goodly day tomorrow.*

Old-timers have often foretold the weather by the fog. Here is the rhyme:

*When the mist creeps up the hill,
Farmer, out with your plow and drill;
When the mist begins to nod,
Farmer, leave alone your sod.*

However, heavy fogs generally come in periods of fair weather. "Mackerel sky", or horizontal bands of stratus late in the evening, forming near sunset and disappearing soon after sunrise, indicate coming high wind, or wind and rain. Red, angry sunrise indicates storm with wind, but a bright red sunset foretells fair weather. In fact, such sunsets are the results of long, dry spells when the air is full of dust.

Blue, smoky haze in autumn or spring is usually caused by forest fires and is generally a sign of dry weather. This haze often forms a ring around the moon and offsets the theory that such a ring denotes a coming storm.

Sun dogs, which are large circles around the sun, having one or more imitation suns or moon within the circle, foretell a great storm. This phenomenon is very rare in the East but is often seen on the

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The Long Island Cauliflower Association sells a large part of the crop grown by its members. The above picture was taken during a cauliflower auction at Riverhead. Mr. Arthur Howell, auctioneer, may be found near the center of the picture and Mr. H. R. Talmage, president of the association, is standing at the extreme right.



What happened when the spray rig broke?

Read what R. C. Ferguson says:

We get many fine letters from fruit growers about the excellence of NuREXFORM. Here is an unusual one from R. C. Ferguson:

"I hired an outfit to do my spraying this year. While in my orchard he broke down with a tank full of NuREXFORM. The repairs would take three hours. He said to me: 'We will have to empty the tank as the lead will plug up the pipes.' I told him not to worry as this was different lead. He was greatly surprised that we had no trouble with the tank."

* * * *

Remarkable suspension is not the only advantage of NuREXFORM Improved (Patented) Dry Arsenate of Lead. All fruit growers speak highly of its spreading, adhesive covering and controlling qualities as well.

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Rex Oil Emulsion
Rex Bordo Mixture
Sulphur
Copper Dusts
Rex Calcium Arsenate
40% Nicotine Sulphate

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Small Can, enough for one bushel, **\$1.00**



Seed coated with Stanley's Crow Repellent

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AMERICAN AGRICULTURIST



A.A.'s Western New York Farm and Home Talk

Four Reasons for Pruning

By M. C. BURRITT

ANOTHER growing season will soon be beginning and with it will come to all fruit growers another opportunity to produce fruits of which they can really be proud. The very first—and one of the most important—steps in this process is pruning. Realizing this, we have been at work on all suitable days, in our apple trees. So have many other growers and much pruning is already done, although a cold February has slowed up the work.



M. C. Burritt

In AMERICAN AGRICULTURIST, the issue of January 14, 1928, I discussed in detail the pruning of old trees in orchards not properly handled to date, and in the issue of March 10, 1928, the pruning of younger but bearing orchards was discussed fully. Several times this winter I have referred to the importance of and to good methods of pruning. In this week's talk I must of necessity repeat some of what has been said before, though I hope to say it in new and different ways. We need to remind ourselves constantly of the importance of pruning and to keep abreast of the latest and best information as to how to do it.

We prune for four principal reasons: (1) to help build a framework that will be strong and serviceable; (2) to expose as many fruiting spurs and shoots to the sunlight and air as possible so as to best utilize the leaves and develop the fruits; (3) to thin the fruit spurs and branches so as to regulate the load and increase the size of the remaining fruits; (4) to keep the tree in hand as to spread and height so as to make it most convenient to prune, spray and harvest. One who prunes so as to satisfy these essential requirements will prune well.

Too Many Main Branches

When I start to prune a tree I usually walk around it and size up its framework first, noting where it is weak, where there are too many main branches or any crossing limbs. These I take out entirely or head back so as to give others more room or to check or divert growth. In general I think most of us make the mistake of leaving too many main branches which force the bearing fruit spurs to the tops and outsides of the tree by crowding and shading out those on the inside. Another mistake many of us make in shaping our trees is bad crotches. A narrow angle made by a branch allowed to grow almost as large as the parent limb makes a weak crotch. The

wider the angle the stronger the crotch union because of the greater amount of interwoven tissue.

While in Virginia apple orchards last August I was impressed with large amount of fruiting wood and spurs in the insides of the trees. There were apples, good quality red apples, all through the trees. This had apparently been accomplished by using a modified leader system with only three or four main side branches so as to admit plenty of light and air to the middles of the trees. A common mistake in New York orchards is to cut off all the inside fruiting branches and leave long bare limbs with bushy tops and ends which limits the total bearing surface and shades the centers.

Good size and uniformity in the fruits everyone knows is highly desirable. This cannot be obtained unless the load of fruit is moderate and well distributed. When conditions are right for a crop nature is prodigal with bloom and fruits. One way to thin the fruits and direct the energy of tree and soil to fewer fruits is by careful and judicious thinning of the smaller branches and fruit spurs in the tops and outsides of the tree. This practice tends to increase the average size and, if supplemented by thinning after the fruit is set, will produce very desirable uniformity.

Size and Shape More Important Than Age

More and more we are coming to see that it is not necessarily the age of our trees that is handicapping us in producing good apples, but rather the size and poor shape of our trees. They are too high. Too close together they have been crowded upward. For efficient spraying and easy picking we must keep our trees better in hand. This means planting farther apart in the first place and then heading in on the sides and tops to keep a proper space between trees and to keep them down to a height of not more than twenty to twenty-four feet.

There may be those who would like to read and learn more about the pruning process, the reasons for it, tree reactions and results of experimental studies. To such I would suggest Cornell Bulletin 415 by Chandler on "Results of Some Experiments in Pruning Fruit Trees", 419 by MacDaniels, "The Apple Tree Crotch", and Pennsylvania Bulletin 224 by Fagan and Anthony on "Training and Pruning Apple Trees". Those who want to go deeply into the subject should get Chandler's "North American Orchards" (Lea and Febiger, Philadelphia). Bailey's "The Apple Tree" is most delightful and informing reading to growers who love their trees. —M. C. BURRITT, February 24, 1929, Hilton, N. Y.



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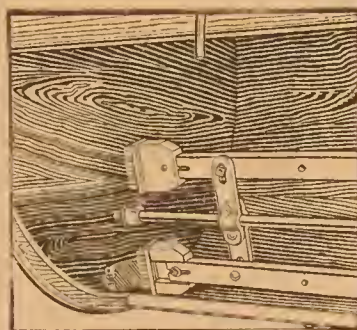


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With the A. A. Fruit Grower

Keep Poor Apples Off the Market

ONE of the most popular subjects

By C. E. SNYDER

discussed today, whether one is of urban or rural proclivities, is that of "Farm Relief". "What can we do to help the farmer?" seems to be the burning question just at present. Whether this sudden, acute interest in the farmer and his success means anything at all more than a chance to "blow off steam" is doubtful, but, if there ever was a time when the farmer could hope to get some real help, some real cooperation from his urban brother, it would seem as though this was the time; that is if they really mean what they are saying to us. If, with all the protestations of friendly interest and desire to help we are getting now, we do not get anywhere, we are sunk for all time.

The purpose of this article is to discuss briefly one of the many angles of the proposition of Farm Relief from the standpoint of apple growing. This is one of the great industries of the State, certainly one of its greatest industries needing help. There are many sides to the question, but this one seems to the writer to be a valuable one yet one very much neglected.

Profit from Waste Products

In all programs we have seen for the betterment of agriculture and especially for fruit growing, one excellent business practice is conspicuous by its absence, at least it has not received any emphasis worthy of note. Many ideas have been proposed, some good, some doubtful, some fantastic. Governor Roosevelt's committee, a very able and high-minded body of men, vitally interested in agriculture, ought to be able to sift the chaff from the wheat without difficulty.

There is a practice that has been made use of by big business the world over, that has been proven by time and experience to be perhaps the surest method of rescuing stricken business from disaster or of making a good business better. This practice is covered by one word, "Research". Not research for the purpose of growing more produce but rather that of trying to find new and profitable ways of disposing of what we now produce. This necessarily comes under the head of marketing, which, of course, is made a part of all programs for agricultural betterment. The kind of research I would emphasize, however, would not be so much how to find out "How to get more for the bushel of packed apples" but rather "How to get more out of the part that does not go into the packed bushel"; to make them a paying proposition rather than a loss. If we could do that, we would automatically reduce that part of the crop that goes on the market as fresh fruit to a point where there would be no surplus for many years to come, which, of course, is what we are all striving for.

Keep Poor Stuff Off the Market

By "Research" I mean intensive study of the possibilities of using the poorer grades of apples for some other purpose than they are used for at present. Think of the wonders that have been discovered by the various lines of business in their attempts to dispose of their waste in a profitable way. Consider the meat packers and how research has made use of every particle of the carcass, also the thousands of wonderful things research has developed from coal and coal tar. Think of the possibilities of cellulose developed from wood fibre by this same research and, getting nearer home, news paper from corn stalks, or, the lemon growers who turned a waste which cost them two or three dollars a ton to get rid of into a product that brings them in annually millions of dollars.

There are possibly twenty states in which one of the major agricultural in-

dustries is the growing of apples. It

is only natural to assume that all these states want the apple industry to prosper. Let us suppose that each of these states would establish at its state college or experiment station, a research foundation for the sole purpose of studying how to make use of waste apples profitably, how to dispose of the lower grades of apples so as to keep them off the fresh fruit market. Is it unreasonable to think that, out of these twenty different bodies of men, all studying how to use up this waste in other directions than we are now using them, some one, somewhere, would not find a solution? Other lines have done it. Why not we? Can we not induce the great state of New York to set the ball rolling at this most propitious time by establishing a Research Foundation at Cornell or elsewhere? Why not make this a live, vital part of our apple program? It is a thing that would not necessarily require a large appropriation and yet when we consider what remarkable things research has done in other lines, we cannot but feel that it has wonderful possibilities for our great industry.

The Apple and Thorn Skeletonizer

QUITE a bit of damage has been done in the last two years by an insect known as the apple and thorn skeletonizer. This insect came from Europe in 1917 and does most of its damage on apple trees. It has done most of the damage on trees which were not thoroughly sprayed. In fact, two years ago many of the unsprayed trees in New York State looked as though they were badly diseased, due to the drying up of the leaves. The apple and thorn skeletonizer is an insect which eats the surface of the leaves and can therefore be controlled by spraying with arsenical poison.

Usual Distances for Planting Fruits

Apples	30 to 40 feet each way
Apples, dwarf	8 to 10 feet each way
(Paradise stocks)	
Apples, dwarf	12 to 25 feet each way
(Douchin stocks)	
Pears	20 to 30 feet each way
Pears, Dwarf	10 to 15 feet each way
Plums	16 to 20 feet each way
Peaches	16 to 20 feet each way
Cherries	16 to 25 feet each way
Apricots	16 to 20 feet each way
Grapes	8 to 12 feet each way
Currants	4 x 5 feet
Gooseberries	4 x 5 feet
Raspberries, black	3 x 6 feet
Raspberries, red	3 x 5 feet
Blackberries	4 x 7 to 6 x 8 feet
Cranberries	1 x 2 ft. each way
Strawberries	1 x 3 or 4 feet

The Farm and Garden Rule Book—Bailey

Pruning Small Fruits

Raspberries and Blackberries—When the new shoots of black caps and purple caned varieties are about two feet from the crown, pinch off the tips to cause the canes to branch. In the spring, head back these laterals one-half or more depending on their vigor. As soon as the crop is harvested, cut out and burn all the old canes.

Do not pinch back red raspberry canes in the summer. In the spring the canes of the ranker-growing varieties are shortened to about four feet high.

Gooseberries and Currants—Prune the bush so that you have from six to ten shoots from the crown by removing four-year-old wood and older and by cutting out the weaker of the young shoots. The bush then carries most of the two and three year old wood with sufficiently vigorous young shoots to take the place of the older shoots which are cut away.

The Fertilizer Market Situation

(Continued from Page 3)

furnished 54 per cent; sulphate of ammonia, 36 per cent; cyanamid, 4 per cent; nitrate of lime, 3 per cent, and synthetic ammonia, 3 per cent.

The increasing domestic output of by-product sulphate of ammonia and the progress being made in production of air nitrates in this country as well as abroad have kept down the cost of nitrate fertilizers and probably will cheapen them further in the next five or ten years.

Nitrogen from organic sources, such as tankage, dried blood and cottonseed meal, does not make as effective fertilizer as that from inorganic ammoniates, but these products improve the mechanical condition, hence, fertilizers containing nitrogen from both sources are preferred. Increasing demand for such products for feeding use has kept them on a higher price level than the inorganic forms and there is a tendency to use peat and garbage tankage in their place.

U. S. a Potash Importer

The United States is dependent upon European producers for about 80 per cent of its potash, as many of the domestic sources developed during the war were unable to compete when imports were resumed. The bulk of the domestic supply comes from the beet sugar, industrial alcohol and cement plants and some from Searles Lake, California.

The transfer of Alsace to France after the war divided the European potash beds and took part of the supply away from control of the German syndicate. Competition between the German and French producers kept the price of potash delivered at New York from 1922 to 1924 considerably lower than in prewar years in spite of higher costs for labor, mining supplies, land and ocean freights and distribution. In the last few years, however, they have joined forces, allocated sales and advanced prices somewhat, although they remain below prewar. Since these European deposits were estimated before the war to contain 20,000,000,000 tons, potash salts are unlikely to become expensive for many years.

The United States formerly exported large amounts of Florida phosphate rock to Europe, but extensive deposits have been developed in Tunis and Algiers. The fall in exports from this country has made the supply for domestic use more ample and kept down the price. With liberal supplies in Florida for several years, and large phosphate deposits in Tennessee, Kentucky, Idaho and Wyoming, phosphate fertilizer is likely to remain moderate-priced.

Prices Now Holding Firm

These influences working on each of the fertilizer ingredients resulted in a wholesale price level for inorganic ammoniates from 1922 to 1926 averaging 100 per cent of prewar; organic ammoniates, 133 per cent; phosphate rock, 106 per cent; and potash, 83 per cent of prewar. Today, wholesale prices for fertilizer materials, except organic ammoniates, range from about equal to 1913 to as much as 22 per cent lower. Inorganic ammoniates show the greatest declines. Potash prices advanced from 1924 to late in 1926 and have since been held very stable at about 5 per cent below the 1913 level.

The tightness in the credit situation as well as low prices for some crops has restricted fertilizer sales. Manufacturers have been trying in recent years to change from a credit to a cash basis. Rediscount rates of most of the Intermediate Credit Banks have advanced from 4½ per cent a year ago to 5½ to 5¾ per cent at present and commercial banks probably are scrutinizing loans more carefully than last year.

In spite of indications of somewhat smaller sales, prices are holding firm, as the decline in volume for the entire country is not expected to be very large. There are several reasons for the resistance prices are showing. For one thing, the decrease is from the large sales of a year ago. Then, the industry probably is more inclined to

stand together and avoid the disastrous price cutting measures used under similar conditions in recent years.

The index number of wholesale prices of mixed fertilizers in December, 1928, as reported by the United States Department of Labor, was two per cent higher than a year previous. The index for fertilizer raw materials was one per cent lower.

How to Reduce Costs

While these symptoms give no promise of lower-priced fertilizers this year, it is possible for many individual farmers to cheapen their fertilizer costs. This can be done in two ways:

First, by buying higher-analysis fertilizers. So much of the retail cost represents labor of handling, freight, hauling costs, commissions and fixed charges that the cost per unit of plant food runs less in the high analysis goods. The tendency in the industry is to put up much more concentrated mixtures than before, leaving any filler needed for easy handling in the field to be added locally.

Second, if unable to pay cash, use bank credit wherever possible rather than mercantile credit to purchase fertilizer. Owing to the percentage of uncollectible accounts, time prices are bound to be higher than cash prices.

A "Short Course" in Greece

(Continued from Page 2)

region, with its unusual weather conditions, they are not so far from the truth after all. However, the Settlement Commission is planning soon to redistribute the land (very wisely I think) and combine individual holdings into not more than three sections.

Farmers Were Refugees from Thrace

Mr. Panayotis Balsanidis, who is a refugee in common with all other inhabitants of this village, came originally from Eastern Thrace. The refugee problem is handled by the Refugee Commission which functions jointly under the League of Nations and the Greek Government and constitutes a most interesting and wonderful piece of work. The barest outline of the Organization's numerous activities and many ramifications would require a long article in itself. When Mr. Balsanidis came to Zyghos in 1923 he received from the Commission, twenty-four stremmas of land, one ox, and a set of tools to be shared with two other farmers. Payment for this land and equipment is provided partly by the indemnity which is due Mr. Balsanidis for his former holdings in Eastern Thrace, and partly by long term notes requiring no interest. This man has added to his original equipment by purchasing a second ox, one donkey, two calves and a heifer soon to freshen. Unlike most of his neighbors he devotes only a small portion of his land (about one-fourth) to tobacco. The largest part is in grain; winter wheat, barley, oats and "meslin"—a mixture of wheat and barley peculiar to this part of the world. He told me that he is able to get a fairly cheap supply of wood from the nearby mountain and uses all of his animal manure on the land. He tried some mineral fertilizer two years ago but "the plots receiving this treatment seemed to suffer most during the hot dry period of summer and there was no effect the second season". Here apparently is an opportunity for the agricultural department of Greece to render valuable assistance to its farm citizens, for mineral fertilizers must very soon play a much more important role in the cropping systems of the country. A representative of the Settlement Commission told me that in the near future, due to the rapidly increasing population, individual holdings of farm land in Macedonia must be cut down from twenty-four stremmas to fifteen stremmas per family. Thus will arise an urgent necessity for increased yields and more efficient use of the soil.

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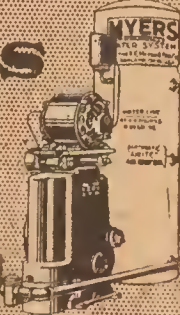
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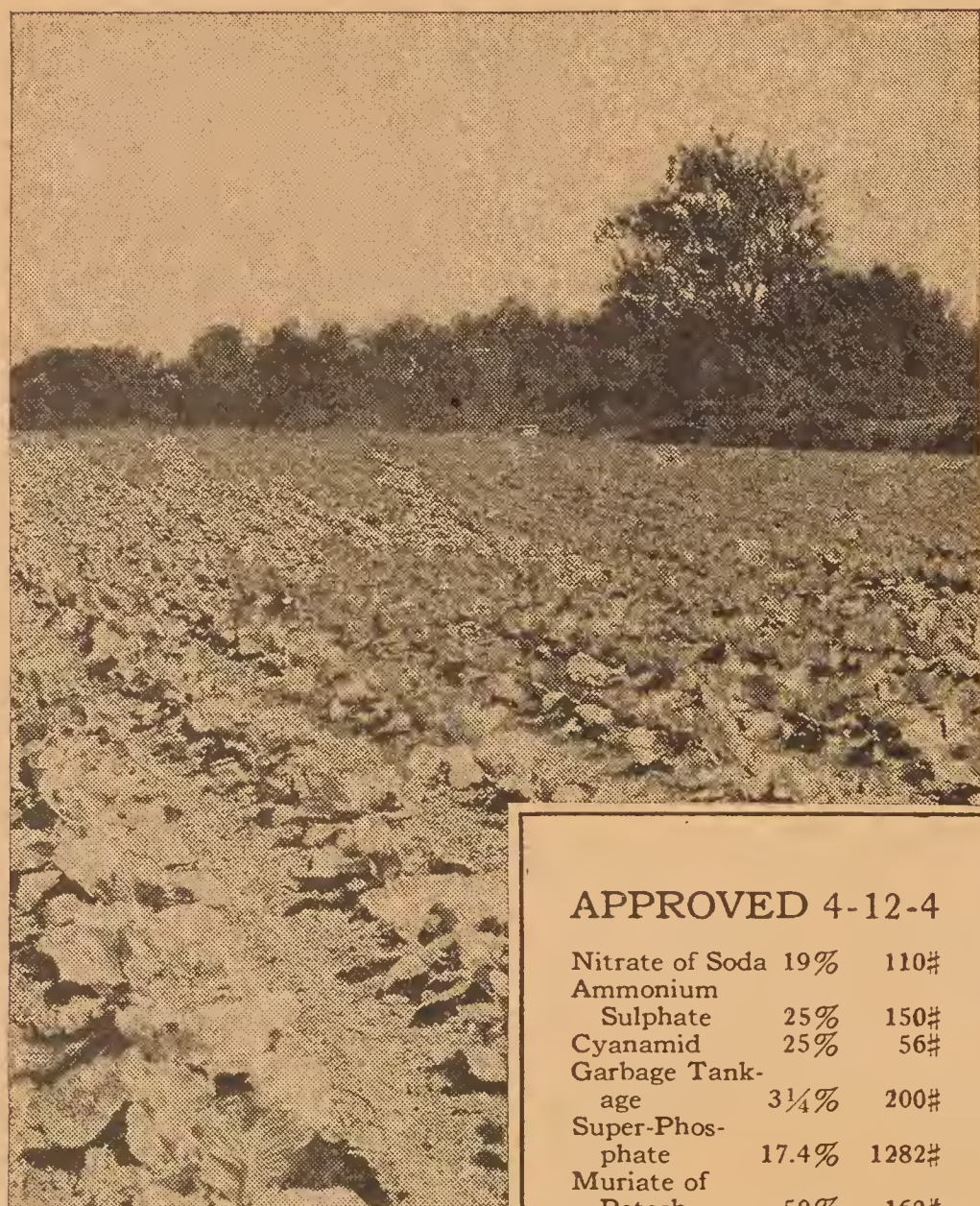


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With the A. A. Vegetable Grower



Erie Growers Well Organized

THE Erie County Growers' & Shippers' Association of Orchard Park, N. Y., holds a number of community meetings each year preceding its annual session which was held at Orchard Park on January 30.



Paul Work

About 250 members were in attendance and they heard the report of their manager, Albert Schillroth. This Association handles about \$175,000 worth of produce for its members and furnishes supplies to the extent of over \$50,000. They have built up a splendid plant for handling produce and loading and icing cars, and their books show a healthy surplus. Mr. Charles Endress of Boston, N. Y., is president of this association.

The operations of this association are particularly interesting because its growers are within easy reach of the Buffalo market, and no attempt is made to contract their produce or to require them to handle it through the association. In spite of this fact and on account of good service, the organization has been able to build a successful business.

There is no doubt but that this policy is far from ideal as the flow of produce through the packing house is somewhat irregular; it does show that the thing can be done.

Tariff Hearings

All reports indicate that the vegetable recommendations from this state received a very cordial reception at the Ways and Means hearings at Washington. The New York State Vegetable Growers' Association has taken membership in the National Horticultural Council, which organization assisted in the previous hearings and will represent the New York growers in further hearings. Mr. George Kricheldorf, manager of the South Shore Growers' & Shippers' Association, attended the hearings representing the N. Y. S. V. G. A. as well as his own association.

Florida Muckland Growers

Florida is a great vegetable state, but this name also designates one of the most extensive muckland sections in New York. This Orange County district has suffered very severely during the past few years from floods and indications point to the very serious need of united action on drainage problems. The principal crop is onions, and it is reported that a very serious obstacle lies in the fact that some of the growers do not have title to their land. In the early stages when the land was considered of no value, some of them were permitted to clear and use land without securing title and so it is difficult to arrange for distribution of costs. This section is near the New York market and has been a very heavy producer.

Vegetables on Farm and Home Week Program

Almost every period of the Farm and Home Week Program at Cornell, February 11-16, offered topics of interest to vegetable growers. Professor E. L. Worthen reported on progress in the newer forms of fertilizers. Trials so far have indicated that the highly concentrated mixed fertilizers are giving satisfactory results provided the user reduces the amount in proportion to the plant food content and is careful to see that they do not come in too direct contact with seed or plant roots. Mr. C. B. Sayre of Geneva spoke on methods for tomatoes and peas. He finds that with proper management, certain varieties of wrinkled peas may be planted almost as early as the smooth Alaska. His results, so far, are printed in a

preliminary way in Geneva Bulletin 553. His work is planned primarily for canning crops, but many of the points are applicable to other growers.

Vegetable Research Needs Presented

Mr. P. D. Vercrouse, president of the New York State Vegetable Growers' Association, presented vegetable gardening needs to the research subcommittee of the Governor's Agricultural Commission at a recent hearing. The growers are asking for studies of muckland soils and diseases, for fertilizer and cultural studies on muck soils, for studies of culture as affecting market quality, grading and handling of all vegetable produce and for transportation studies. Mr. B. P. Jones of Hall, N. Y., presented the needs of potato growers at the same time. These askings are to be followed closely and the officers are hopeful that tangible results will materialize.

Onion Maggot Control

The College of Agriculture at Cornell has issued a "Vegetable Service Letter" embodying the findings of Dr. Hugh Glasgow of Geneva on the control of onion maggots. An emulsion of red engine oil, potash fish oil soap and water is prepared. This is diluted in a 4-4-50 Bordeaux mixture which is applied directly to the row with a sprayer giving about 50-pound pressure. This forces the liquid down to the base of the plants. The first application is made when the onions are an inch high with successive doses seven to ten days apart. Excellent results have been achieved. The details may be obtained by writing to the College of Agriculture at Ithaca for Vegetable Service Letter No. 31.

Fertilizer for Head Lettuce

What fertilizer is commonly recommended for growing head lettuce?—P. R., New York.

MOST of the lettuce grown for sale is raised either on a fine sandy loam that is well supplied with humus or on muck. Because lettuce has a shallow root system, well rotted manure is important for upland soils. A general recommendation for commercial fertilizers on this type of soil is to apply those containing from 3 to 6% of nitrogen, 6 to 8% of phosphoric acid and 4 to 6% of potash.

On muck soils which are high in nitrogen a 2-8-4 or a 4-8-4 is recommended or if higher analyses are used those with the same relative amounts of plant food. There is some evidence that heavy applications of potash increase tip burn.

Turning the Straw Stack into Manure

We read somewhere about making artificial manure from straw. Is this practical and is the product valuable?

THE New York Experiment Station at Geneva has made a number of tests in making artificial manure. In these tests the straw was built into a flat pile about four to six feet high. Each layer about six inches deep was tramped down, wet thoroughly, and then commercial fertilizer was sprinkled over it. The fertilizer was a mixture consisting of 60 pounds of ammonium sulphate, 30 pounds of superphosphate, 25 pounds of muriate of potash and 50 pounds of ground limestone. Half a ton of straw with these fertilizer materials and the necessary water will make two to three tons of artificial manure and will cost from \$2.50 to \$3.50. This process requires quite a bit of labor. We consider it doubtful whether it would be practical

(Continued On Opposite Page)

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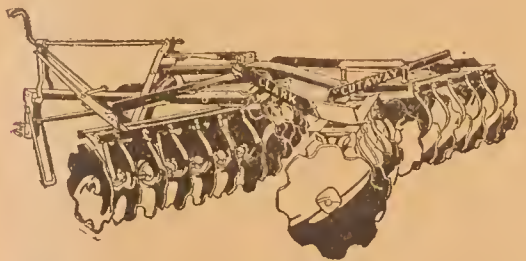
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Green Mountains, Irish Cobblers, Smooth Rurals and Russet Rurals—College inspected. Satisfaction upon arrival guaranteed. Write for prices. We pay the freight. New York Co.-Op. Seed Potato Ass'n Inc., Utica, N.Y.

He Couldn't Buy it Back

Mr. James E. Colegrove of Corry, Pennsylvania, sold his Clark "Cutaway" to a neighbor. Later on he tried to buy it back, but his neighbor refused to sell. Mr. Colegrove wrote us and told us why. Read his letter for the reason.

"Your favor of the 17th received. Are the 18-inch disks superior to the 16-inch, if so in what way? Please send me delivered prices on:
A-5 20, 16 in. disks 5½ ft. cut 3-h hitch
A-6 24, 16 in. disks 6½ ft. cut 3-h hitch
X-5 20, 18 in. disks 5½ ft. cut 3-h hitch
X-6 24, 18 in. disks 6½ ft. cut 3-h hitch
and I will select the one I think is best suited to my work. I bought a Double Action Harrow of you about 25 years ago and used it about 10 years and a team ran away with it and scattered it all over the farm, and I could not see any way to repair it. I sold it to a man who has a 250-acre farm; he patched it up and is using it yet. I tried to buy it this spring, but he would not sell, said they used it more than any other implement on the farm. It is possible I may help you to sell some of your implements. I shall not be afraid to recommend them."



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Please send me FREE catalog, prices and book, "The Soil and Its Tillage."

Name

Address

(Continued From Opposite Page)

on the general farm but it is quite possible that it will be used to a considerable extent on vegetable farms where no live stock is kept.

How to Spray Potatoes Effectively

IN all spraying operations the points of importance are: (1) use of the proper mixture, (2) proper machinery, (3) sufficient nozzles, (4) proper nozzle adjustment, (5) proper pressure, and (6) use of sufficient spray material to cover the plants thoroughly.

No definite statement can be made concerning the necessary number of applications. The aim should be to keep the plants covered with a film of Bordeaux mixture.

Controlling "Damping Off"

What is the best way to prevent damping off of seedlings in hotbeds and greenhouses?

PROPER sterilization of the soil before the seeds are planted will help some, but probably the use of formaldehyde has given as good control as any method where this disease is prevalent. The following method of use is recommended by the New Jersey State College of Agriculture:

"Dilute one part of commercial formaldehyde in 50 parts of water and apply this solution at the rate of one-half to 1½ gallons per square foot of soil, which is then covered for at least 12 hours. Next stir the soil thoroughly several times. Seeds or plants are not to be placed in this soil for at least 10 days or two weeks after treatment."

In addition to this treatment, control is helped by giving the plants room enough so that they are not crowded, watering them only on sunny days when the soil will dry out quickly and putting a layer of dried sand on the top of the soil.

Growing Iceberg Lettuce

Can the iceberg type of lettuce be grown in New York State? Why is it preferred on the market rather than the "butter type"?—L. H., New York.

THE iceberg type of lettuce is crisper than the butter type and the inside of the head is whiter. This type is grown on the Pacific coast for winter shipment and in the Rocky Mountain States during the summer. We understand that attempts to grow it commercially in New York State have not been successful. We will be glad to hear from any of our readers who have had experience with it.

Cutting Seed Potatoes

Is there any advantage in allowing seed potatoes to stand a few days after they are cut?

IF freshly cut seed is planted in soil that is too hot or too cold or too wet or too dry, the cut surfaces do not heal over and as a result many of the seed pieces will rot. For this reason it is a good idea to store cut seed in a dark, fairly moist place at 70 degrees Fahrenheit until they heal over. This keeps the moisture in and decay organisms out. If seed is greened it should be done before the seed is cut.

Growing Lima Beans

I am considering the growing of a few lima beans this year. Can you give me a few hints as to the essentials of this crop?—M. L., New York.

LIMA beans require a growing season of at least 180 days. Even a light frost injures the foliage and most of New York's crop is grown near some body of water which moderates the temperature.

A light, fairly rich loam is the most favorable soil, and as the crop is a legume, a rather light application of fertilizer low in nitrogen is commonly used. The seed bed needs to be fitted thoroughly and the crop is planted at about the same date as corn. A corn planter with special plates can be used for dropping the beans. It requires about a bushel and a half of seed to plant an acre.

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Oats—Both loose and covered smut.

Barley—Stripe disease, covered smut, and loose smut, in certain six-row winter varieties.

Sorghum—Kernel smuts.

Rye—Seed-borne stem smut.

Two years of severe tests by many authorities, including experts of Agricultural Experiment Stations and the U. S. Department of Agriculture, have convincingly proved the value of this new disinfectant to American farmers.



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High-yielding strains—Officially inspected and certified. Let us quote prices on
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With the A.A.
Crop Grower



Seeding a Cover Crop After Oats

I have read of farmers plowing under rye or some similar crop when stable manure is not available and plan to do this in the future. It is evident that if the ground is plowed and fitted for the rye, then plowed and fitted again, the tillage labor cost per crop, is doubled. This is undesirable. Would it be practical after cutting an oat crop, to broadcast rye, then cut the oat stubble with a mower to cover the seed? Would this be sufficient coverage to prevent winter-killing?—A. B. T.

I DO not know just what rotation you had in mind as the usual custom is to seed down after oats. I doubt very much if you would succeed in sowing rye in the way you mentioned. In growing green manure crops, it is usually considered more important to get away from losing the use of the land for a year than to save labor. The reason rye has been popular is that it can be sowed after the crop is harvested and the land can again be used next spring. Where rye is put in after such a crop as corn or potatoes, labor can be saved by discing the land without plowing. On very light soil it might be possible to do this after oats.

Another important item, if your land lacks humus is to get some legume growing on the soil but perhaps you have already done this. If you can get a start with alfalfa, you will find that even after the hay is cut there is a big volume of roots that will decay when the land is plowed.

Another way of getting a green manure crop without losing the use of the land for a year is to cut the hay, then plow and sow buckwheat which is plowed under in the fall or the following spring.

Have any of our readers had experience in growing rye after oats without plowing?

Michigan Considers Drastic Potato Grading Bill

A POTATO grading bill, more drastic than any ever drafted for enactment into law, has safely hurdled the first and main barrier—the growers, shippers and dealers—and now awaits action by the state legislature of Michigan.

If enacted into law, it would make it a misdemeanor for anyone to possess ungraded potatoes packed for sale. No one is exempted under its provisions.

"Potatoes for table use shall not be sold that do not meet the requirements of U. S. Fancy grade, U. S. No. 1 grade or U. S. No. 2 grade," states the bill in its opening section.

The real teeth of the measure are contained in Section 9 which reads:

"The intent and purpose of this act is to regulate the sale of potatoes for table use intended for interstate and intrastate commerce when such sale is made by the grower, dealer or distributor, or any other person either by wholesale or retail or in any other manner."

This provision removes the exemptions under the present state grading law. It aims to make growers and retailers, as well as dealers, shippers and truckers, sell only graded potatoes. —The Packer.

Recommend Keeping Cull Potatoes Off the Market

AT the recent meeting of the American Fruit and Vegetable Shippers Association, the question of keeping cull potatoes off the market received a lot of discussion. At the meeting, which was held in Chicago, it was stated that cull potatoes seldom pay freight charges yet they pull down the prices of higher grade stock.

The remedy, according to officials of the association, lies in handling only U. S. No. 1 potatoes, graded by fed-

eral inspectors, and with packages properly branded so as to show the grade. By way of definite suggestion, the shippers association makes the following recommendations:

Handlers of potatoes in all shipping districts are asked to make a study of conditions in their territory with the view of improving the grading of potatoes. Both growers and shippers are asked to confine their shipments to U. S. No. 1 as determined by federal inspection, and to ship only potatoes that are free from dirt or other contaminations that detract from appearance and affect market conditions.

It is also suggested that wherever possible federal inspection of potatoes at point of shipment be resorted to.

Why Clean Plowing Kills Corn Borers

Could you explain to us why clean plowing kills the corn borer? It would seem that the borers would not have great difficulty in burrowing their way up from the soil.

THIS insect has four stages in its life history, namely the moth, the eggs which are laid by the moth, the borer which does most of the damage and the resting stage or pupae into which the borer changes and which later develops into the moth. It has been found that if all corn refuse is turned under completely that many of the borers do find their way

Yield of Crops Following Red Clover and Rye Respectively

	Acre Yields			
	First Crop Oats, Bu.	Second Crop Wheat, Bu.	Third Crop Corn Fodder Bu.	Fourth Crop Wheat, Bu.
After red clover.....	98	37	3.7	35
After rye	53	24	3.5	32

to the surface of the soil. If they find any corn stalks they will bore into them and continue their development but if none are found they soon die. This explains why clean plowing early in the season is such an efficient method of control. It does not work after May 1st because many of them at that time have already turned into moths.

Seed Beans from California

Last year there was quite a bit said about buying Red Kidney bean seed from California. Do you believe that it is profitable to do this?

SEED beans from California were advised due to the fact that a large percentage of New York's supply was diseased which resulted in lessened production. The California supply was much freer from these diseases but there is no evidence to show any more resistance to disease than the seed in New York State. We believe that those who purchased seed from California last year were, in general, well pleased.

Land Roller Controls Canada Thistles

BEING a subscriber to American Agriculturist at times I read that my fellow subscribers are troubled with Canada thistle. We also have been troubled. Our cure is to roll with a common land roller that breaks off the stems and they die. We have practiced this seven or eight years. It has not failed at any time. It works the same with the yellow mustard. Roll when in bloom.—A. F., New York.

High Spots from Farmers' Week Talks

(Continued from Page 3)

take care of the market. But in the interim, don't let it get away.—FRED H. SEXAUER, president of the Dairymen's League Cooperative Association.

* * *

Some Money Making Hints

"Oats, timothy hay cover for grain and buckwheat are money losing crops unless you get well above the state's average yield. Cabbage and peas are only for the man who knows how to grow a good crop and he should be a good guesser and a consistent producer, not one who plans to plant his biggest acreage the year after the peak in price. Pork is cheap, but is soon to be high, with beef. Eggs have a good outlook and will have for some years because the beef growers who went into poultry when beef went down are now returning to beef production. Cows are at the peak of prices and many are being imported into the state. Sheep are at a high point. The man who is in the sheep business will have good returns, but must expect violent fluctuations. He should sell some sheep now to get some of the benefits of the situation rather than to buy all the sheep his neighbors have. The man who expects to buy sheep now and to enter the business in a large way now, may be disappointed. Specialties in crops or foods will increase in price. If we live on a road where the traffic is heavy take advantage of the opportunity for roadside sales. Distribution problems are best solved by selling at the door and by the use of trucks. Industrial stocks are way up; farms are way down. The worst severity of farm depression is over in New Jersey and New England and in some sections of New York State, though it is not over in western New York."—DR. GEORGE F. WARREN, farm economist at Cornell.

* * *

"What do the new bills to increase the state aid to rural schools as introduced by Assemblyman Rice and Senator Webb, mean to the poorer counties, also the tax relief to be brought about by the proposed gasoline tax? If the Governor's advisory commission's recommendations are made into law it will save the taxpayers of the state \$140,000,000 within the next ten years, or at the rate of 14 millions a year. The poorer counties will receive real tax relief. Take Tompkins county for example, which will receive in tax relief within the next ten years \$1,246,888 or an average of \$125,000 a year; Albany county will pay \$943,000 less taxes; Allegany, \$2,500,000 less and Chenango \$1,995,000 or \$200,000 a year. This is the finest tax relief measure I ever saw as it is tailored to suit the case."—MARK GRAVES, member of Governor Roosevelt's Tax Commission.

* * *

Eliminate Certified Milk?

"There is a tendency on the part of health officials to do away with certified milk as a grade of milk and to simplify and make more definite and effective the grading of milk. Certified milk can never be made absolutely safe, as without pasteurization there is danger from tuberculosis and other diseases, which may enter the herd at any time or be the result of carriers who handle the milk. In Alabama the health department ordered examinations for typhoid of each milker three times the first year and once a year thereafter. It was found that three per cent of them were typhoid carriers. Even under that system they expected to locate not over 90 per cent of such carriers, as not every day may traces of typhoid be found in the discharges of carriers. As to diphtheria and other diseases communicable through milk, it is impossible short of pasteurization to be safe. Even pasteurization has occasional slips. The safest milk is that from tuberculin tested cows, properly produced and then properly pasteurized. The dairy industry in Alabama where all cows are TB tested under the new system of inspection and rules in entire harmony with the health officers and in 1½ years the milk inspection showed an increase from 46 to 98.4

per cent of efficiency from the health standpoint. We would be pleased if every state would use this system."—LESLIE C. FRANK, U. S. Public Health Service Washington, D. C.

* * *

"Stabilizing the milk supply at a fair price and protecting the farmer, is the most pressing problem for the New York City Health Department. If it had not been for the cooperation of the farmer, his willingness to come along the city could not have its splendid milk supply today, the largest single factor in its greatly reduced death rate of infants."—DR. SHIRLEY W. WYNNE, Health Commissioner of New York City.

* * *

Electric Milk Coolers

Besides about 500 addresses on topics of interest to rural and city men and women, a score or more of interesting exhibits were inspected by visitors. Outstanding among these were the electrical appliances, demonstrations of methods of wiring and a tank for cooling cans of milk electrically, made at home at a cost of \$35 as compared to \$250 for a commercially made one of similar capacity; a wonderful collection of books and of posters and other information as to county libraries now in successful operation over the country with trained librarians on hand to answer questions and with the new Tompkins County book truck as an example of modern rural book service; a comprehensive exhibit of 4-H club literature, results of projects and similar material; a rural school exhibit of nature lore in wide range; a beautiful exhibit of apples, grown and graded at the college, the exhibit included six plates of the new Cortland apple; exhibits and demonstrations in the best ways of making cheap wood into best grade fence posts with the statement that the state needs 12,000,000 new fence posts each year and 1,000,000 new grape posts; a students' live stock show including the showing of calves to illustrate results of different methods of calf feeding; trips to see the herd in the protein feeding demonstration; a variety of exhibits of clothing and foods, of table service, toys, books and clothing for children and of home crafts, especially of hooked rugs as done by women of the state who are delighted with this means of earning something in spare time. There were many banquets and evening events of rare interest with an informal social hour each evening of which more may be said later.

Makes Record Potato Yield

THE highest acre yield of potatoes ever produced in Pennsylvania—696 bushels—was grown last season by H. J. Walton and Sons of Chester County. In producing this record crop Mr. Walton used certified Russett seed which was planted seven inches apart in the row. The rows were 28 inches apart and the field was fertilized liberally and cultivated frequently. The patch was sprayed 12 times during the season.

During the past season more than 350 Pennsylvania farmers qualified for the Pennsylvania 400-bushel potato club.

Seed Law Helps in Securing Good Seed

Is the New York Seed Law of any particular benefit to farmers? So far as we can see, there has been little improvement in the quality of seed since this law was passed.

THE New York Seed Law was put on the books for the protection of farmers and although it does not make it unlawful to sell poor seed, it does require that the facts be put on a tag attached to the seed. In other words, the benefit secured from it is largely up to the purchaser. If he studies the information on the tag and lets it guide him on the seed purchases, it certainly cannot help but be of considerable financial benefit.

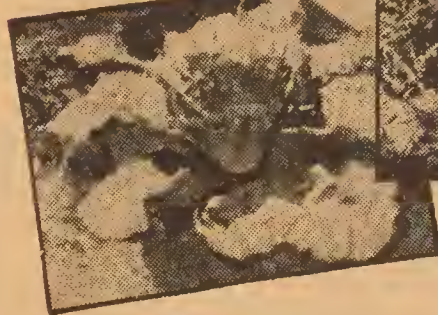


At left: Sweet corn stimulated by paper mulch and—

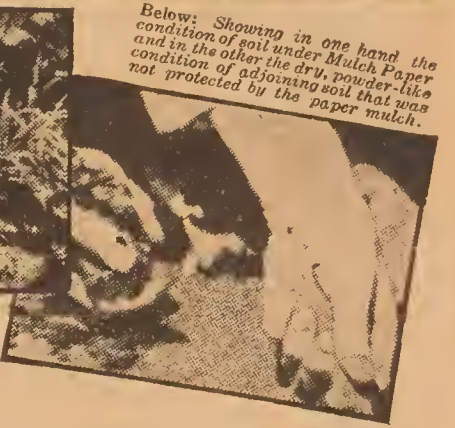
Below: Sweet corn planted at the same time under ordinary conditions.

The MIRACLE OF MULCH PAPER

Below: Cabbage plant growing under Mulch Paper, planted at the same time as—



Cabbage plant unmulched, showing comparative dwarfing and weeds.



This year let Gator-Hide produce bigger, better and EARLIER crops for you

WHY not put Gator-Hide Mulch Paper to the test yourself this year? Why not let it demonstrate on your own land just how it promotes plant growth by increasing soil temperature and conserving moisture? Why not let it PROVE to you that it practically eliminates the back-breaking labor of constant cultivation?

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Gator-Hide Mulch Paper, made by the INTERNATIONAL PAPER COMPANY, the world's largest paper manufacturers, is one of the toughest, strongest, most durable papers made. It is treated by a special process with a particular grade of asphaltum.

Unrolled directly over the proposed plant beds, and anchored by soil or other available material



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along the edges, Gator-Hide Mulch Paper imprisons the moisture in the soil and prevents its evaporation by the sun. Its

black surface catches and retains the sun's heat, raises the soil's temperature, and checks cooling at night, thus promoting continuous bacterial activity and liberating night and day nitrous food matter for the plant. Planting with Gator-Hide is done THROUGH holes made in the paper, at usual spacings or BETWEEN two successive strips of paper. The result is that while plenty of space is provided for the plant, no space is available for rank weed growth.

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If you are not among those thousands who tried Gator-Hide Mulch Paper in 1928 and who are planting acres under Gator-Hide in 1929, try just a few rolls in order to see for yourself just what miracles this paper will produce.

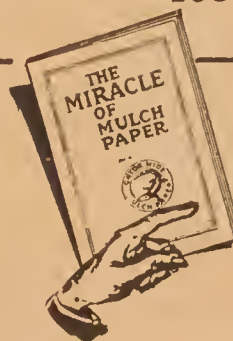
Order through your regular dealer, but if he is not prepared to supply you, write us direct, using the coupon and mentioning his name. An interesting booklet, "The Miracle of Mulch Paper", showing you just how Mulch Paper should be used, will be forwarded.

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The Leg Band Test will convince you too!



"Your claims for bigger bone development sounded good to me," one poultryman told us, "but from looks alone, I failed to realize how well Larro Chick Starter bore out that claim."

Finally, a large hatch of chicks were taken off, and pedigree bands put on their legs. Part of these chicks were put on Larro; the rest on the feed formerly used.

"Imagine my surprise," he continued, "when I found I had to change the bands on the Larro chicks more than a week before they started to get tight on the legs of the other chicks."

You try it!

Put leg bands on two pens of chicks. Feed one pen on Larro Chick Starter (directions on each bag). Feed the other pen on any other feed you wish.

Here's what you'll find. Larro grows bone so much better you'll have to remove the leg bands anywhere from 5 to 12 days before they start getting too tight on the other chicks.

BONE—the skeletal structure which houses all the vital organs: the foundation for sustained, profitable production. **BONE**—constituting the frame, the size of which determines the future capacity for conversion of feed into eggs; the very basis of future ability to stand up under working conditions. **BONE**—the material which can be developed only during the growing period, and then only by a feed which maintains maximum health and physical condition. **BONE**—what Larro Chick Starter and Larro Growing Mash are particularly noted for.

You'll have better birds if you feed them Larro Feeds.



Two Leghorn chicks at six weeks—note the difference in bone development



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Chick Starter
Chick Grains
Growing Mash
Growing Grains

Egg Mash
Scratch Grains
Dairy Feed
Hog Feed

With the A. A.
DAIRYMAN



Imports of Dairy Products

By R. L. GILLET, Statistician, N. Y. State Department of Agriculture and Markets

THERE has for several years been a tendency toward a constantly increasing volume of milk and cream imported from Canada over the border adjacent to New York State. Part of this comes from nearby Canadian farmers who make daily deliveries to plants near the international boundary line. Some is shipped from Canadian dairy plants to consuming centers in New York State or elsewhere. In addition to the milk and cream coming across the New York line, large quantities are imported into New England, especially through the Vermont customs district, while smaller quantities are imported in the vicinity of Detroit, and westward. The 1927 importations of milk and cream fell off somewhat compared with previous years, due in part at least to embargoes because of a typhoid epidemic in Montreal and adjacent territory and because of federal legislation imposing more stringent regulations regarding the conditions surrounding production before the commodities could be imported.

In terms of the equivalent milk required for its production, the imports into the United States are equivalent to 485,686,000 pounds of fresh milk, while the imports across the New York State border are equivalent to 220,249,000 pounds of fresh milk or about 4.4 per cent of that received from New York State farmers at the dairy plants in the state.

Imports of Butter and Cheese

Butter and cheese are imported from many countries, the total imports of butter into the entire United States in 1927 amounting to about 8,460,000 pounds and the exports amounting to 4,341,000 pounds, leaving net imports of 4,119,000 pounds or about the same as the total quantity produced in Erie county, New York. The principal countries from which butter was received in 1927 were New Zealand, Argentina, Denmark and Siberia.

Cheese is imported in much greater quantities, the principal sources being Italy, Switzerland, Canada and France. With total imports of 79,796,000 pounds and total exports of 3,410,000 pounds or net imports of 76,386,000 pounds, cheese is by far the most important dairy product imported. From the standpoint of the dairy industry in New York and the other northeastern states, it is probable that the imports of milk and cream represent a much greater competitive factor than do importations of other dairy products since they are quickly perishable in nature and must be consumed promptly in the same markets which are supplied by the dairymen of this region.

Necessary Organization

EDITOR'S NOTE: Some time farmers are going to realize that they must meet organization with organization. We say "Amen" to the following:

FOR several years there has been a tendency toward the combination, consolidation or merger of companies which handle milk and other dairy products. No matter what we may call this movement, or whether we consider it good or bad for the several interests concerned, it is a fact. If it continues, and it is likely to continue, we shall have a few great companies instead of many small ones, or many of both kinds, engaged in the purchase, processing and distribution of dairy products.

There is nothing alarming in such a movement if it is based on the firm foundation of economy in operation; for it is true that the benefits of all economies in any line of business are ultimately shared by all concerned in

(Continued on Page 22)



Freshening
time
is
**DANGER
TIME**

THE modern dairying pace leaves the average cow with little reserve vigor to enable her to go through calving with ease and safety. Sluggish organs should be toned up. Appetite, digestion and elimination should be normal and regular.

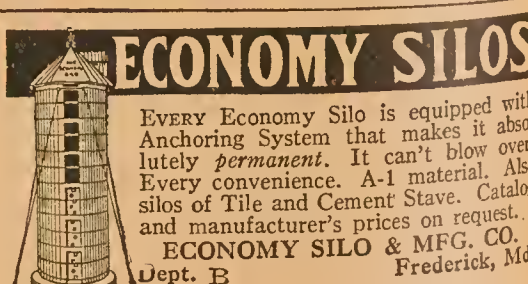
The use of Kow-Kare before and after calving has saved many health disasters, rescued many production losses for cow owners for the past thirty years. Countless dairymen will not have a cow freshen without Kow-Kare conditioning.

"Step Up" Milk Yield

During barn-feeding, when heavy, dry feeds place an added burden on the digestive and milk-making organs a regulator is needed to maintain the health and vigor that insures full milk pails. Kow-Kare is a scientific compound of Iron, the great builder and blood purifier, blended with potent medicinal herbs and roots. It enables cows to thrive on natural foods, milk profitably, resist disease, maintain breeding vitality.

Drug, hardware, feed and general stores sell Kow-Kare—\$1.25 and 65c sizes. If your dealer is not supplied we will mail postpaid.

DAIRY ASSOCIATION CO., INC.
Lyndonville, Vermont



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Twist! Bend! Stretch!

In a single hour
this Goodrich Giant
measures months of wear

WORKING at high speed, a whole battery of machines at our factory tests out samples of all the material that goes into Goodrich rubber boots and overshoes.

The first machine takes a piece of sole-rubber and rubs it to and fro, a hundred times a minute.

Str-r-etch! A second machine stretches a strip of leg-rubber many times more than you could ever stretch it—to make sure it is elastic, yet strong.

Still another machine—most astonishing of all—tests the special materials that go into the toe and over the instep. Twist, bend—twist, bend—over and over again! In months of hardest wear you couldn't give your boots the punishment these machines give in a few minutes.

It's really as if a "giant farmer"—working for your protection—put on a pair of Goodrich rubber boots or overshoes and strode through a whole year's wear in a single short afternoon.

These tests assure you of good value when you buy Goodrich footwear. Look for the name Goodrich. It is plainly stamped on all our boots, overshoes and rubbers—the honor mark of a great company.

From sturdy boots, overshoes and work-rubbers for men and boys to dainty stylish Zippers and rubbers for women and girls, the Goodrich line of tested rubber footwear meets the needs of every member of your family. *The B. F. Goodrich Rubber Company, Akron, Ohio.*

Goodrich

RUBBER FOOTWEAR FOR EVERY MEMBER OF THE FAMILY



A favorite with farmers—this brown Goodrich boot with white sole. Sizes, boys' to men's. All lengths, knee to hip.



This sturdy Norka comes in black with white or brown sole. Unrivaled for heavy wear.



These strong, comfortable all-rubber overshoes come in all sizes with 4, 5 or 6 buckles.

Reviewing the Latest Eastern Markets

Milk Prices

The following are the March prices for milk in the basic zone of 201-210 miles from New York City.

Dairymen's League prices are based on milk testing 3.5%. Sheffield on the basis of 3%.

Class	Dairymen's League	Sheffield Producers
1 Fluid Milk...	3.37	3.17
2 Fluid Cream		2.30
2A Fluid Cream	2.46	
2B Cond. Milk...		
Soft Cheese...	2.71	
3 Evap. Cond.		2.30
Milk Powder		
Hard Cheese	2.40	
4 Butter and American cheese. Based on New York City Market quotations on butter and American cheese.		

The Class 1 League price for March 1928 was \$2.90 for 3.5% milk and Sheffield's \$2.80 for 3%.

The above prices in each class are not the final prices the farmer receives. The final price received from the dealer is the result of the weighted average.

Butter Firm At Higher Prices

CREAMERY	Feb. 27	Feb. 29, 1928
SALTED		
Higher than extra...	50 1/2-51	50 -50 1/2
Extra (92c)...	50 -	49 1/2-49
84-91 score...	46 1/2-49 3/4	46 -49
Lower Grades...	45 -46	44 1/2-45 1/2

The butter market has been through a rather hectic period since our last report but during the past week it has maintained a level keel. In fact it has not only done that, but has proceeded into clearer waters and on a slightly higher level.

At this time of the year the trade is very apprehensive. Caution marks all changes. It is that period just ahead of the flush that is watched most carefully. Therefore, receivers have been inclined to follow a free selling policy. This has helped the present situation, keeping holders clear of fresh arrivals, reducing street stocks and appreciably cutting into the reserve. There is much encouragement in this. On the other hand, there are one or two factors that temper the position of the market; namely, fresh butter supplies are running considerably ahead of last year, and the severe storms have held back shipments that may serve later to embarrass the market for a brief spell.

On February 26, a slightly firmer tone came to the surface and prices were bid up to 50c on creamery extras. For a time it seemed to strain the situation. Some of the big buyers refused to follow the advance in a large way, paying the price to the extent of their immediate requirements. On the 27th,

the price of 50c had become the inside figure on extras but at that level the demand had no features of speculation, which is quite natural. However, buyers did not seem to show any hesitation about paying the price for current needs.

Under-priced goods are beginning to show a marked shortage and values are beginning to show a narrow range. This is going to react to the advantage of the higher grades if the situation continues, and there seems to be no reason why it should not for a while at least. On February 21, there were slightly over 6,000,000 pounds of butter in the four largest cities, compared with 9,876,165 pounds on the same day a year ago. In other words we have more than a third less butter on hand in those four cities than last year.

Fresh Cheese Easier

STATE	Feb. 27	Feb. 20	Feb. 29, 1928
FLATS			
Fresh Fancy	23 1/2-25	24 -25	23 1/2-24
Fresh Average			
Held Fancy	27 1/2-29	27 1/2-29	29 -29 1/2
Held Average			

Although we show 25c as the top figure for fresh cheese, the price is extreme. On February 27, it was difficult to obtain over 23 1/2c for fancy fresh whole milk flats. A few of the small lots of specials were quoted at 24 1/2 and 25c and these were included in the above prices. Held cheese on the other hand holds steady, fancy bringing 27c to 28c and specials 28 1/2 to 29.

The situation in the cold storage market remains unchanged. On February 21, the ten cities making daily reports had on hand 13,095,000 pounds whereas, on the same day a year ago, those same cities reported 9,116,000 pounds. The surplus over a year ago it will be seen therefore, is precious close to 50%.

Egg Prices Approach Record Levels

NEARBY WHITE	Feb. 27	Feb. 20	Feb. 29, 1928
Hen's Sel. Extras...	46-	50-	36 -37
Hen's Av'ge Extras...	44-45	48-50	33 1/2-35
Extra Firsts	42-43		32 1/2-33
Firsts			31 -32
Undergrades			30 -
Pullets			
Pewees			
NEARBY BROWNS			
Hennery	48-49	53-	33 -34
Gathered	48	49-52	32

In the reference number last week we reported egg prices at 50c for the top qualities. That was the beginning of a sky rocketing on the part of the market that carried prices up to 54c on top quality. The spectacular advance, which has not been reached in mid-February since 1920, followed what might be termed famine conditions.

There has been a marked scarcity of fresh mixed colored eggs from the central and southwest. On February 19, receipts were closely cleared. Had buyers been a little more urgent, the prices on that day could have been forced upward but receivers were content to let matters take their course. On the 20th, the shortage was extremely acute, there was a scramble for supplies and higher prices were bid. The higher prices were well sustained by reports of severe weather conditions throughout the entire country. The situation continued on the 21st, when the best qualities of nearbys went up to 54c with premiums being paid on jobbing sales of 1c and 2c on the best Jerseys. At this time, it was easy to sell practically anything available at the current quotations. At the same time storage eggs were practically out of the wholesale market. On top of that President Coolidge's action increasing the duty on frozen eggs from 6c a pound to 7 1/2c a pound was announced.

The situation continued until Saturday, when the market eased off a bit, for sentimental reasons, there being considerable uncertainty as to whether the buyers would clear all late deliveries.

Over the week-end, sufficient supplies rolled in to bolster the market and prices eased to 42 and 43c on the best Jerseys. During this period of sky rocketing prices and short supplies

nearby eggs were filling in the breach, therefore, it was to be expected that as soon as a few extra eggs arrived, extreme prices on nearbys would be hit. The sharp decline was apparently too severe for prices immediately began to recover and at this writing, nearbys of first quality easily bring 46c with premiums not difficult to obtain. On February 27, we had a return of near famine conditions on western mixed colors, with prices being bid up. Once more nearbys are meeting increased demand, although the highest grade of eggs is running into a little more difficulty because the retail trade hesitates paying prices asked.

Live Poultry Market Well Sustained

	Feb. 27	Feb. 20	Feb. 29, 1928
FOWLS			
Colored	-31	30-31	26-27
Leghorn	-31	30-31	25-26
CHICKENS			
Colored	31-36	31-35	31-36
Leghorn	31-36	31-35	31-36
BROILERS			
Colored	35-45		45-55
Leghorn	35-42		-45
CAPONS	35-42	40-45	40-45
TURKEYS	25-40	-40	30-50
DUCKS, Nearby	-28	-28	29-33
GESE	20-22	20-22	22-23

The live poultry market is holding up very well, in spite of the fact that the freight listings are considerably beyond expectations. Buyers heard of this on Tuesday and took alarm, refusing to go above 30c on fowls. However, it appears that all of the freight shipments rolling will not get in before the end of the week, and the market appears to have come to rest at 31c for fowls, the express market holding to the freight level. We may find a slight over-supply next week, and those who are contemplating shipping should keep close to the radio.

Broilers are quiet. Buyers are not taking hold any too well, and at the present prices, some stock may not clear promptly. On February 27, New Hampshire broilers opened their season on the market.

Maine Potatoes Dragging

	Feb. 27	Feb. 20	Feb. 29, 1928
STATE			
150 lb. sack...	1.75-1.85	1.75-2.00	3.60-3.75
Bulk, 180 lbs.	1.90-2.10	2.00-2.15	
MAINE			
150 lb. sack...	1.75-2.10	2.00-2.25	3.75-4.25
Bulk, 180 lbs.	2.25-2.40	2.25-2.40	4.50-5.00
PENNA.			
150 lb. sack		2.00-2.15	
No. 1			
Bulk, 180 lbs.	1.90-2.10		
LONG ISLAND			
150 lb. sack	2.25-2.50		
No. 1		2.25-2.50	4.50-4.75
Bulk, 180 lbs.	2.50-2.75	2.60-2.85	5.35-5.70

The potato market seems to have taken a particular dislike to Maine stock of late, for prices on Maine potatoes have suffered the most severe break of any since our last report. Long Islands are unchanged, but they are not moving very satisfactorily. States have also suffered slightly but Maines got the worst kick.

Floridas made their first appearance on the market on the 27th, a few barrels came in by Clyde steamer and sold at from \$5 to \$8 per barrel. Naturally they are not going to interfere with our trade for some time. At the price they are bringing, Florida growers are not getting much nourishment.

Meats and Live Stock

Live veal calves still command good prices. The best nearbys are bringing \$19 to \$19.50, with prices ranging down to \$11 for small stock and culls.

Steers are meeting a steady market and active demand. The best are bringing \$14 in a small way with the top of the market generally from \$13.25 to \$13.50 and commons and mediums from \$9.50 to \$12.25.

Bulls are steady, a few good ones bringing \$9.75, others ranging down to \$7.50.

Cows are a little irregular. A very few are good enough to bring \$9 or better most of the arrivals bring \$7 and \$8, with low cutters down to \$4.

It is impossible to report on the lamb market for none are offered. If

there were any here they would doubtless bring from \$14 to \$17.

Country dressed veal is in light supply, and the best marks are bringing 22c to 23c. The market is none too active but there is an undertone that indicates an upward trend.

The supply of dressed hot-house lambs has been excessive, and the market is weak. The best ones bring from

Market Reports Daily by Radio

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\$11 to \$13 each, but anything else is dragging badly.

Live hogs are doing well, Yorkers weighing from 135 to 180 lbs. \$10 to \$10.25; 130 to 160 lbs., \$10.25 to \$11; 165 to 200 lbs., \$11.25 to \$11.75.

Live rabbits are meeting a slow demand and are tending to accumulate at prices ranging from 23c to 28c.

Beans Hold Steady

The bean market holds steady and all varieties are held with confidence. However, trade is rather light. Marrows are still bringing from \$10.25 to \$13 depending on size and quality. Peas range from \$10.75 to \$11.50, and Red Kidneys are selling from \$8.25 to \$9. California Limas are bringing from \$13 to \$13.50.

Fancy Hay Wanted

No. 1 timothy is scarce on the New York market at this writing, February 28. Unless a shipper is sure he has No. 1 timothy he need not expect \$26 or \$27 a ton for anything he may ship forward. Timothy containing mixtures will not bring better than \$25 and some sells as low as \$16, and timothy grading No. 2 or downward brings from \$19 to \$25 with sample hay at \$14 to \$16.

Feeds and Grains

FUTURES	Feb. 27	Feb. 20	Feb. 29, 1928
(At Chicago)			
Wheat (Mar.)	1.23 3/8	1.28 3/8	1.33 3/8
Corn (Mar.)	.96 1/8	.95 3/8	.95
Oats (Mar.)	.49 3/8	.49 1/2	.56 1/4
CASH GRAINS			
(At New York)			
Wheat, No. 2 Red	1.58 3/8	1.65 3/8	1.65 3/4
Corn, No. 2 Yel.	1.14 3/8	1.14 3/4	1.15 3/4
Oats, No. 2	.63	.63	.69 1/4
FEEDS	Feb. 23	Feb. 20	Feb. 25, 1928
(At Buffalo)			
Grade Oats	38.50	39.00	36.50
Spring Bran	32.00	32.00	37.50
Hard Bran	34.50	34.50	40.00
Standard Mids	31.00	30.50	37.50
Soft W. Mids	39.50	39.50	44.50
Flour Mids	36.00	36.00	39.50
Red Dog	38.00	38.00	41.00
Wh. Hominy	38.50	39.50	40.25
Yel. Hominy	38.50	39.50	39.00
Corn Meal	40.50	41.00	41.00
Gluten Feed	50.00		44.75
Gluten Meal	60.00		54.00
36% C. S. Meal	46.00	46.00	46.50
41% C. S. Meal	50.50	50.50	51.00
43% C. S. Meal	53.00	53.00	53.50
34% O. P. Linseed Meal	58.00	58.00	51.50

The above quotations are those of the local Buffalo market and are F. O. B. They are reported in the weekly letter of the N. Y. State Department of Agriculture and Markets.

A New Book

Turkey Production by L. E. Cline

Recently there has been an increase in the interest in growing turkeys perhaps due to the discovery that disease control largely depends in keeping them isolated from hens. This new book on turkey production is written by L. E. Cline who is in the Agricultural Extension Service of the University of Nevada. The book covers the entire field of breeding stock, incubation, feeding, marketing and disease. Copies can be secured direct from the author, L. R. Cline, Box 588, Fallon, Nevada.

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Mr. George A. Heyl, Washington, Ill., nationally known as a breeder and exhibitor of prize Hackney, Welsh and Shetland ponies, writes:

"I have used Goodyear Tires for more than fifteen years. Both passenger car and truck tires, Goodyear All-Weather and Goodyear Pathfinders, and under all conditions they have performed to my complete satisfaction. Several times I have noted the performance of other makes which came as standard equipment on new cars. None of them seemed to have the Goodyear hardihood or give the consistent wear I had come to expect from Goodyears. So my replacements have always been Goodyears and always will be. They are the world's greatest tires."



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—that's what Goodyear engineers sought, and FOUND, in this great new PATHFINDER

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But to yoke such quality with *low price*—that was a task well worthy of the best talent of the greatest rubber manufacturer!

Goodyear faced that challenge, and now Goodyear has successfully answered it—in the new Goodyear Pathfinder tire.

Any illustration we might print of this tire could do small justice to its massive and rugged construction, its deep-cut thick tread, its handsome strength.

Read, instead, the features which make

the new Goodyear Pathfinder an *outstanding* tire in quality and value; and then remember that despite this quality and value it sells at a really *moderate* price:

1. A *balanced* tire, with all parts equally durable.
2. The powerful carcass is made of genuine Supertwist cord, with its matchless vitality and resistance to fatigue.
3. The heavy tread is wide, designed for slow even wear, and it delivers exceptional traction and non-skid protection.
4. Tread materials *embody* the same

tested principles of rubber toughening as distinguish the famed Goodyear All-Weather Tread.

5. Materials, workmanship, and inspection are to the strict Goodyear standard.
6. Available in both High Pressure and Balloon sizes.

Goodyear considers this new Pathfinder an economic triumph, and is proud to mark it with its name and seal.

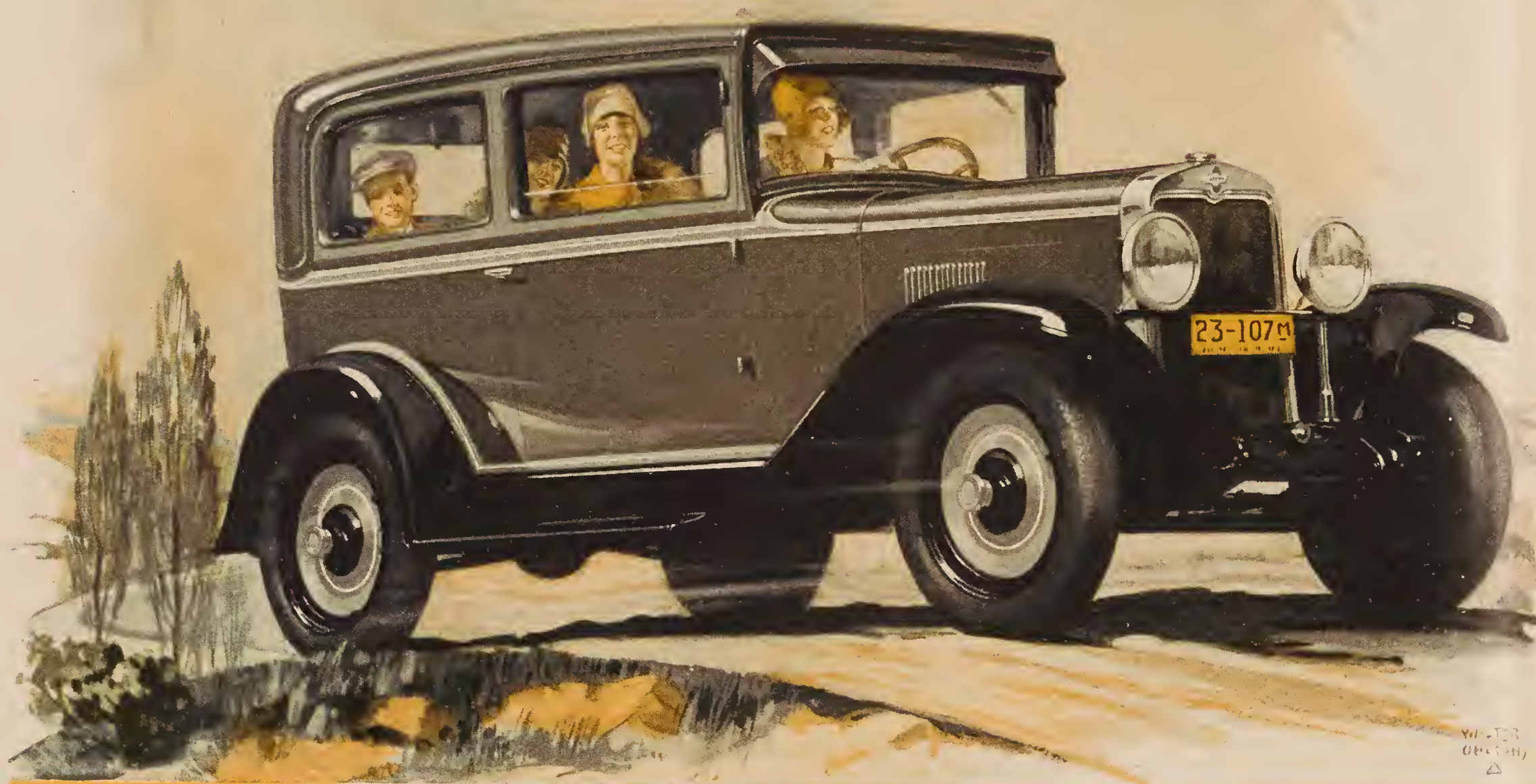
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brakes. Its operating efficiency is so pronounced that it delivers better than 20 miles to the gallon of gasoline! And its marvelous new bodies by Fisher offer outstanding beauty, delightful comfort and rugged hardwood and steel construction—a com-

bination not offered in any other low-priced car.

Here, in short, is an automobile whose power, strength, endurance and economy meet every driving requirement—and whose remarkable six-cylinder smoothness has never before been available in the price range of the four!

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The Sport Cabriolet . . . \$695

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Sedan Delivery . . . \$595

Light Delivery Chassis . . \$400

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Feet—\$11,000 to \$75,000 a pair!

Your feet are more than mere transportation equipment to carry you around your farm. Everybody knows how priceless they are from that standpoint, but their *cash value* is often overlooked.

If you had one of the standard accident insurance policies, you would find that it set a cash value on your feet, ranging from \$7,500 to \$15,000. And recent court decisions in cases of disabled feet, have awarded up to \$75,000 a pair.

That's how important your feet are to experts. And that is why "U. S." Blue Ribbon Boots and Overshoes have been so carefully designed. We appreciate the high cash value of your feet and have built new comfort and longer wear into our entire line.

These wonderful foot protectors are moulded to fit perfectly, so your feet don't feel nearly so tired at the end of the day. "U. S." Blue Ribbon footwear keeps your feet warm and dry. And these boots assure you longer wear because they are made of the finest Blue Ribbon rubber. Careful, skilled workmanship goes into every piece of Blue Ribbon merchandise, and the final step is an amazing series of tests in the Blue Ribbon Testing Laboratories. Be sure to read about these tests. They are far more severe than your every-day service requirements.

United States Rubber Company



This explains the longer wear

In the "U. S." Blue Ribbon Testing Laboratories a machine presses the sole against swiftly revolving emery—very much like holding a boot against a grinding wheel. The soles in some brands of rubber footwear chafe away at the rate of 4-5" per hour. The standard of "U. S." Blue Ribbon Rubber is 1-5" per hour. *No wonder many farmers say these amazing boots outwear others!*

The 300-Farmer Test

All told, Blue Ribbon footwear must pass 12 laboratory tests. On top of that, 300 farm workers help us check up Blue Ribbon



wear in the hard grind of actual service. They wear cross-mated boots—a "U. S." Blue Ribbon Boot on one foot and a competing boot on the other. By watching these results we make *certain* that Blue Ribbon Boots outwear others!

Make this test yourself

Twist a "U. S." Blue Ribbon Boot. Then let go and watch it snap back! It's as live and elastic as a rubber band. You can stretch a strip cut from the upper more than five times its own length! Where constant bending cracks inferior footwear *this rubber stands up!*



"U. S." Footwear for the Whole Family

1 "U. S." Blue Ribbon Boots are heavily reinforced against wear by from 4 to 11 layers of Blue Ribbon rubber. Gray soles and red or black uppers.

2 The "U. S." Blue Ribbon Walrus (all-rubber arctic) is the most useful shoe on the farm. Slips right over leather shoes. Kicks off in a jiffy. Washes clean like a boot. Gray soles, red uppers. 4 or 5 buckles.

3 "U. S." Blue Ribbon Giant Bootee. White upper, black extension outsole. 6 or 4 eyelets. Exceptionally well reinforced, shaped to the foot. Other bootees with red or black uppers and red, gray or black soles.

4 Gaytees is the trade-marked name of a line of new tailored overshoes made only by the United States Rubber Company. Beautifully designed. New styles, new patterns, new fabrics. Smart as a Paris slipper. Also a complete line of overshoes with Kwik-glide fasteners. Of course, for women's use around the farm, nothing will ever beat the trim "U. S." cloth-top, buckle galosh.

5 "U. S." Blue Ribbon boots, in three lengths—knee, medium, hip. Gray soles and red or black uppers.

6 "U. S." Portland (galosh) sturdy and good-looking, long-wearing gray or red sole, finest quality cashmerette upper. Fleece lining for warmth. 4 and 5 buckles.

7 "U. S." Blue Ribbon Rob Roy (high lace boot). A light weight, gray soled, red or black upper, high lace all-rubber boot. Plain vamp; corrugated toe. Made snug at ankle and snow excluding. 2 heights, 10" and 15".

8 "U. S." Rubbers are made in storm, high-cut, footholds—for heavy service or dress.

9 Keds are the most popular canvas rubber-soled shoes in America. They give bare-foot freedom—encouraging the feet to healthful exercise—yet afford the protection you want.

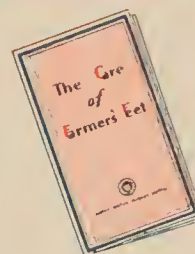


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Every farmer who wants comfortable, healthy feet should get this free book. Written by Dr. Joseph Lelyveld, Podiatrist, Executive Director of the National Association for Foot Health, it discusses such problems as bunions, corns, ingrown nails, chilblains, callouses, fallen arches, how to care for itching feet, and many precautions that lead to health and comfort for your feet.

It also tells how to greatly increase the life of your rubber footwear by following a few simple rules. Write for "The Care of Farmers' Feet." United States Rubber Company, Dept. 103, 1790 Broadway, N. Y.

"U.S." BLUE RIBBON heavy footwear



“Cheap” Paint like cheap seed is False Economy



If a smooth-looking “slicker” offered you seed corn or seed oats, or seed wheat at a ridiculously low price—

—and told you it would save you money and increase your crops—would you believe him? Of course not. You know that the only kind of seed worth planting is the best seed.

That same thing is true of paint. “Cheap” paint, selling at a low price per gallon, seems to be economical. But it isn’t.

It is “cheap” only because it is made “cheap.” It can’t be made of fine materials and sell at a low price. The makers would soon go out of business. And poor materials can’t do a good job.

What is Paint Economy?

To be economical a paint must have great covering powers—wonderful durability—and long-lasting colors.

Only superfine materials which are costly—a scientifically “balanced” formula—and skillful manufacturing can produce these three qualities.

Fine old SWP House Paint is made that way. It may cost slightly more in the can—BUT—it costs less on the wall.

For every 11 gallons of “cheap”

paint, only 7 gallons of SWP are required. That’s a difference of 4 gallons. Figure it up and you’ll find that SWP House Paint costs about the same as “cheap” paint by the job.

Then consider durability. SWP insures you good service on the wall for many years without repainting. “Cheap” paint soon begins to chip



The ballyhoo of the “unknown” canvasser is usually “cheap”

—peel—chalk—fade. Inside of only five years you will pay out two to five times your original cost for repainting. Fine old SWP saves that heavy expense for you.

The “Master Touch”

You may hear arguments as to formulas—meant to lead you astray.

But remember this: The SWP balanced formula has been openly printed for years. Yet the characteristic qualities of SWP have never been duplicated.

A good formula is useless without fine materials. Fine materials are useless without a good formula. And even a good formula and fine materials will not produce a paint to equal SWP without the “Master Touch” of Sherwin-Williams scientific experts. All three are needed.

When you see a “cheap” paint attempting to copy our formula

—remember that “off-grade” materials can be used with any formula. Don’t be misled. And remember, too, that the vital element in SWP, the “Master Touch” of the great paint scientists who make it, is an ingredient that can never be successfully copied. It is the spirit of Sherwin-Williams.

Use the best paint and save money

Before you paint your house or buildings again see “Paint Headquarters”—the local Sherwin-Williams dealer. Get his material estimate on SWP. Compare it with what “cheap” paint will cost you.



The amazing “bargain” offer is generally “cheap” paint

What is true of house paint and barn paint is also true of any other paint product for exterior or interior use. “Cheap” stuff is always the most expensive.

If you do not know your nearest Sherwin-Williams dealer, write us. We will send his name and a copy of the famous Sherwin-Williams Farm Painting Guide. It saves mistakes in painting.

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PAINTS
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New York Farm News

Young Farmers' Clubs Attend Farmers' Week

AN event of great importance at the Recent Farmers' Week at Cornell was a banquet for the young farmers' clubs of New York State bringing to a close a series of judging contests by teams from vocational agricultural departments of various New York State high schools. Practically all of these vocational high school departments have what is known as a young farmers' club whose members consist of students and former students in the agricultural department and these clubs are united in a state association. The attendance at the banquet on Friday evening totalled over four hundred and close to one hundred were unable to find seats in the banquet hall at Willard Straight and were obliged to adjourn to the cafeteria, coming back later to hear the program. Brief talks were given by Dean A. R. Mann of the College of Agriculture, Dr. C. H. Lane of the Federal Board of Vocational

first, second and third place and individual medals were given to the boys who scored the highest in each contest.

New York County Notes

Sullivan County—From 8 to 12 inches of snow fell on the 21st, the heaviest snowfall of the season. Judge George Smith is seriously ill at his home at Monticello with septic poisoning. At the Sullivan County Volunteer Firemen's Association meeting which is scheduled for March 28th at the Odd Fellows' Hall at Woodburne, the following are expected to give speeches: Chief Fisher, Harold Seagrave and A. M. Scriber. Dr. Parizot will also give suggestions on first aid. Court will be held at Monticello on March 4th and Judge Foster is to preside.—P. E.

Dutchess County—The first snow storm of the winter, 8 inches, fell the 21st and did not drift. It was very cold being 10 below zero. All are getting up wood and hauling manure. Prices—20% protein dairy rations \$2.50 per hundred pounds, 24% dairy ration \$2.75 per hundred pounds, bran \$2.25 per hundred pounds. There is no market for hay. Mixed hay sells from \$7 to \$10 a ton at the barn, potatoes \$1.00 a bushel retail, apples \$1.00 to \$1.50 a bushel for the best. Eggs are all prices from 30 cents to 45 cents a dozen, flour 24½ pounds \$1.00 to \$1.15 a sack. Hens are 35 cents a pound dressed, pork \$10 to \$15 per 100 pounds dressed, cows \$100 to \$150 each, yearlings \$75 each.—P. M.

Columbia County—The biggest snow storm of the season arrived here this week. Snow plows are at work all over the county. Girl scouts in Kinderhook are earning nursing badges. They practised at Hudson Hospital. Borden's have filled their ice houses at Copake. Ice harvesting is finished at North Claverack. A Boy Scout troop is to be formed in North Germantown. The children at Stockport are to receive Toxin-anti-toxin treatments and there will also be clinics at Rossmann and Stottville. Poultry raisers of Columbia County met at the Court House, Hudson, on Friday. The gathering was sponsored by the Farm Bureau. Manager Bucholz presided.—Mrs. C. V. H.

Rensselaer County—The county grange has space in the Thursday Troy Times for all the grange news for the week. This is boosting the granges of the county through publicity. A Farmers' Institute was held at Raymertown on February 18th under the direction of J. D. King, Farm Bureau Agent. The speakers were Jared Van Wagenen, Prof. L. M. Hurd from the State College at Ithaca and O. W. Sheldon from the G. L. F. The Home Bureau speakers were: Harriet Ackery, Rensselaer County Home Bureau Agent, and Anna Plunket, Health Nurse. Eggs are lower in price than at this time last winter, 45 cents at stores and lower every week. The weather is cold but no heavy snows yet.—F. F.

Ontario County—We have had good winter weather so far this month. The air has been very chilly. Wheat fields and meadows are well covered with snow just at present, but most of the winter they have been bare. Stock of all kinds have good appetites but very little are being fattened for market as feed is very high priced and market low for finished stuff. There were quite a number of auctions and several farms were sold, one of 150 acres bringing \$15,000.—E. T. B.

Steuben County—The weather is very cold with 10 inches of light snow. Several carloads of hay were recently shipped from Corning at prices of \$8 to \$13 per ton according to grade. There has been much sickness here and in some instances whole families were sick at the same time with grippe or flu. Eggs are low, selling from 35 cents to 45 cents, butter 50 to 55 cents.—H. I. D.

Allegany County—The ice harvest is nearly over and fine winter weather continues. Allegany county farm bureau and Dairymen's League President, A. F. Randolph of Alfred, spoke from station WGR, Buffalo, February 13th during the news hour on "A Program of Agriculture for Allegany County". Local radio fans heard him perfectly. Milton Karns of Canaseraga, a 4-H Club boy, won third prize on his potatoes at the State Vegetable Growers' Show recently held in Utica. The annual meeting of the Canaseraga Dairymen's League local was held February 12th and W. L. Sherwood of Tioga County was the speaker. 150 Hungarian partridges were recently released in this vicinity by the local Rod and Gun Club. The second trip of Allegany County farmers to the world's largest market in

New York City is planned for March 5th to 7th inclusive. Last year 21 farmers availed themselves of this opportunity.—Mrs. O. H.

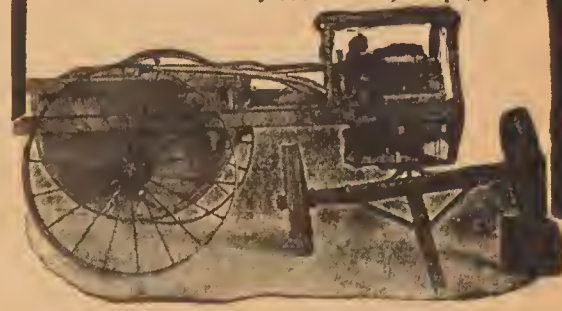
Chautauqua County—February has been a good stiff winter month with plenty of snow for winter jobs, but not too deep. Autos have been able to run on most country roads all winter. No ice has been harvested at this date, February 20th. A Farm Bureau unit was organized at Charlotte Center the first of the month and the members are buying fertilizer and lime in car lots at considerable saving. The use of lime is increasing every year. Many find it necessary to increase the stand of clover.—A. J. N.

Franklin County—Farmers have just finished filling their ice houses with good thick ice of a fine quality. We are having fine sleighing now and farmers are improving it in drawing out manure, hauling home their fuel and other team work. A good number of cows are freshening now. Milk has dropped some in price and feeds continue to go up. Many farmers will be short of hay this spring as the price runs from \$12.00 to \$14.00 a ton for a good quality. There is not much demand for potatoes and the price runs around 40 cents a bushel. Veal is 12 to 14 cents a pound, eggs 35 cents a dozen. There is not as much real estate changing hands as in some years in this section and also not as many auction sales. Taxes are very high which means a hardship to farmers. The T. B. retest is in progress now in Franklin County and there are not as many reactors as last year.—H. T. J.

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The proper fertilizer, high in potash, gives truck the profit-insuring qualities. After handling and shipping, a well-fertilized crop is fresh, bright, and firm, and not bruised, spotted, and wilted.

Potash overcomes loose texture, flabbiness, and helps control disease, taking your crop to market firm, meaty, well-flavored, and well-colored. Make sure that your fertilizer contains plenty of potash. It helps you to have a good year every year.



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POTASH

PAYS

Gov. Roosevelt to Talk from WGY March 7

ON Thursday evening March 7, radio station WGY will broadcast a half hour talk by the Hon. Franklin D. Roosevelt, Governor of New York. The Governor will discuss agricultural matters and we feel sure that our readers will wish to listen in on the program. The talk will be broadcast from 7:30 until 8 P. M.

Education at Washington, D. C., Director A. K. Getman of the State Department of Education at Albany, and Leigh Kirkland, chairman of the New York State Senate Committee on Agriculture.

The event of chief interest to the boys was naturally the announcement of the winners of the judging contest and awarding of various cups and medals. Professor W. T. Crandall announced the winners of live stock judging contest. First place was won by Alden High School, second place by Lowville Academy, and third place by Webster High School. The medal for the highest score in judging cattle went to George Gibbs of Forestville. The medal for the high score in judging horses went to a member of the West Winfield High School and a medal for high score in judging brood sows went to Ralph Steenberg of Franklin Academy, Malone, N. Y. The highest score in all classes of live stock judging contest was made by Wilbur Hermance of Webster High School.

Following is a list of various contests and winners:

POULTRY JUDGING CONTEST. In this contest the team consisted of one boy from each school. First place went to Skaneateles High School; second, Union Endicott High School; third, Westfield High School.

POTATO JUDGING CONTEST. The teams in this contest consisted of two boys from each high school. First place, Morrisville State School of Agriculture; second, Marathon High School; third, Trumansburg High School. The high score in this contest was made by Richard Crandon of Morrisville, second place by Earl Coates of Gouverneur.

FRUIT JUDGING CONTEST. The teams in this contest consisted of two boys in each high school. First place, Sodus High School; second, Trumansburg High School; third, Webster High School.

MILK JUDGING CONTEST. In this contest the team consisted of one boy from each school. First place, South Dayton High School; second, Newark High School; third, Canandaigua High School.

A new contest was added this year in judging plant diseases. This contest was won by Wolcott High School with Webster High School second. With the exception of this contest where the prize was books on plant diseases, a cup was given to the school winning

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With the A. A.
DAIRYMAN



(Continued from Page 14)

that business. It is equally true, however, that each interest must attend to its own business of getting its share.

This brings us to the one outstanding fact which producers should keep constantly before them. Centralization on one side of the milk industry must be balanced by centralization on the other. Centralized buying must be balanced by centralized selling. Otherwise the seller will get the worst of it, not because the buyers are dishonest or greedy, but because they are human—because “when self the wavering balance shakes ’tis rarely right adjusted.” It is important in this great industry that things be “right adjusted.”

There is only one way by which the balance between producing and distributing interests, each dependent on the other, can be maintained. That is by as effective organization, by as much business ability, on one side as on the other. All of which means that the greater the centralization of distributors the stronger the organization of producers must become if they are to prosper.

Let us recognize in time this tendency of modern business and the producer's relation to it. Let us understand the necessity for organizations broad enough to determine what is

Average Milk Yield Per Cow Per Year in Various Countries

Country	Year	Average yield of milk per year
Friesland (Holland)	1922	9632 lbs.
Switzerland	1923	6658 “
Denmark	1925	6279 “
Great Britain	1922	5562 “
Ireland	1922	4816 “
Germany	1919	4850 “
United States	1925	4500 “
New Zealand	1922	4421 “
Canada	1921	4003 “

Country	Year	Average yield of milk per year
France	1923	3599 lbs.
Norway	1920	3303 “
Sweden	1911	3600 “
Japan	1918	3339 “
Hungary	1914	2932 “
Australia	1916	2719 “
Italy	1914	2279 “
Chile	1916	1520 “
Siberia	1916	1192 “

De Laval Dairy Handbook.

equitable and strong enough to maintain it. However important such organizations have been in the past all signs indicate that they will be even more important in the future.—The Ohio Farmer.

Poor Separators Waste Butter Fat

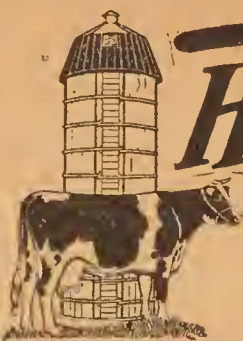
IMPROPER adjustment and lack of care on the part of the operators cause most of the losses. Testers in Dairy Herd Improvement Associations of thirty states find the loss from poor skimming one of the most serious problems of the industry.

Out of thirty typical cream separators recently checked by testers, only three were wasting less than \$20.00 worth of butter fat a year and five were leaving more than \$100.00 worth of butter fat in the skim milk annually. One new separator, only a month old, was found to be leaving one per cent butter fat in the skim milk, probably one-fourth of the total fat present.

In five hundred twenty-three demonstrations during the early part of 1928, a manufacturer of cream separators found that the average separator was wasting butter fat with a yearly value of \$79.61. Tests for 1927 gave similar results.

A South Dakota tester found that a spot of rust on the inside of a cream

(Continued On Opposite Page)



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Year after year the Unadilla turns home grown crops into sweet, succulent, money saving feed. Well cared for, a Unadilla will last a lifetime.

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“It Milks the Cows Clean”

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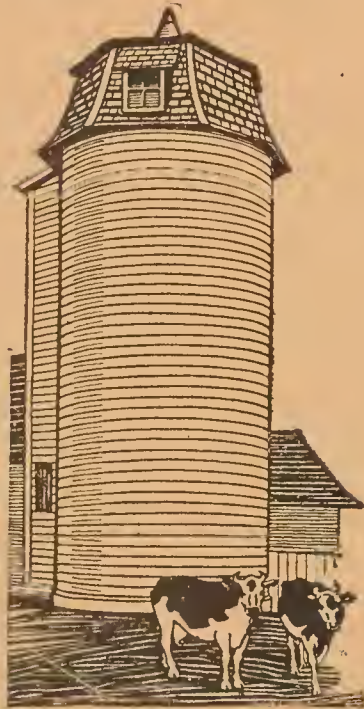
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(Continued From Opposite Page)

disc caused a loss of .12 of one per cent butter fat. After removal of the rust, the skim milk test was lowered to .02 of one per cent. Another separator was leaving .12 of one per cent butter fat in the skim milk because it was being turned too slowly. Turning the same machine at the proper speed lowered the test to .01 of one per cent.

Improper adjustments, irregular speed of turning and set-ups that are not level are the more common reasons for inefficient skimming. Old, worn out separators are frequent offenders. It has been conservatively estimated that 25 per cent of the separators in use are wasting butter fat. This loss can be prevented by proper observation of the manufacturer's direction booklet, or by getting the dealer, county agent or Dairy Herd Improvement Association tester to adjust the separator.

Raising Calves On a Minimum of Whole Milk

THE New Jersey State College has worked out a method of raising calves using a minimum of whole milk. In this system the calves are changed directly from whole milk to dry grain or roughage rather than to feed them a calf meal gruel.

The New Jersey station owns a cow, Rutgers Colantha Segis Grace, who at 2 years, 2 months and 9 days of age made a record of 18,961 pounds of milk and 629 pounds of fat. This heifer was raised according to the system already mentioned.

The first week the calf receives whole milk. The second and third week they are fed whole milk together with the dry grain and good alfalfa hay. The fourth week the milk is diluted until at 30 days of age the calf is getting only water, dry grain and alfalfa hay. The grain is increased until the calf is get-

Manurial Value of Feeds

Kind of Feed	One Ton Contains Pounds Nitrogen	One Ton Contains Pounds Phos. Acid	One Ton Contains Pounds Potash
Clover hay.....	39.4	11.	37.4
Alfalfa.....	50.	8.	24.
Timothy hay	18.8	6.6	28.4
Cowpea hay.	43.	10.	33.
Corn stover..	16.	4.	17.
Oat straw.....	12.	4.2	21.
Wheat straw	10.	4.4	12.6
Corn.....	33.	14.2	11.4
Wheat bran..	49.2	53.8	30.4
Oil meal.....	108.4	33.2	27.4
Cot.-s'd meal	130.	35.	56.
Oats.....	33.	16.	11.
Barley.....	40.	18.	11.
Rye.....	42.	20.	13.
Wheatshorts	48.	31.	20.

Note: About eighty per cent of the manurial value of feeds is returned in the manure provided it is protected against losses from the weather.

ting 6 pounds a day and this rate is continued until the calf is 6 months of age.

The dry mixture used consists of 100 pounds yellow corn meal, 150 pounds ground oats, 50 pounds wheat bran, 50 pounds linseed oil meal (O. P.), 50 pounds soluble blood flour, 4 pounds steamed bone meal, 4 pounds finely pulverized limestone and 4 pounds salt.

Since this ration has been recommended over 200 individual dairymen are feeding it with excellent results.

Feeding Value of White and Yellow Corn

Is there any difference in the feeding value of yellow corn and white corn?—C. H., New York.

SO far as the analysis is concerned there is little or no difference. However some tests made with pigs at the University of Illinois showed that better results were obtained with the yellow corn. The conclusions were that the white corn lacked Vitamin A. Where alfalfa and cod liver oil were added to the ration this deficiency was remedied. Where a ration for farm animals has sufficient variety we believe that as good results will be secured with white corn as with yellow. However we would prefer yellow corn for hens and with other animals if it made up a big part of the ration.

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Charlie
says—

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FOR more than 10 years our customer-friends have proven that 90% to 95% of a hatch can be saved: to grow up to be pullets laying at 4½ months and fat and sassy cockerels, dressing 2½ lbs. at 9 weeks. They know that Bull-Brand Chick and Poultry Feeds have always been most productive and profitable. Once they try B-B, they never change to another.

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Records like these are quite common: “During the years I have been raising poultry I have used all brands of poultry feeds. This year I decided to stick to Bull-Brand Feeds. I raised 415 chicks out of 424 hatched.

(Signed) “C. COUNTRYMAN,
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800 Hatched; 792 Raised

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(Signed) “A. M. BALTIHASER,
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FREE to You: Book on Care and Raising of Poultry.

Professor L. N. Gilmore, of Syracuse University, noted authority on poultry, has written a 64-page book on the scientific care and raising of chickens. It is called: “Making Poultry Pay a Profit.” It covers the subject from A to Z. How to select eggs for hatching, how to tell vigorous chickens, incubating problems, hatching schedule, brooding problems, increased laying records, diseases of chickens—a poultryman's encyclopedia. In addition, it gives you a complete system for keeping a poultry profit and expense record.

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Governor Roosevelt's Supplementary Message

Deals Primarily with Gasoline Tax and State Aid for Roads

ON February 25, Governor Roosevelt sent to the State Legislature a supplementary message dealing primarily with the gasoline tax and state aid for roads. The message was accompanied by bills for carrying his recommendations into effect through putting a two-cent tax upon gasoline and by giving additional state aid to counties, towns and villages for highway construction and maintenance.

Republican leaders in the Legislature have also introduced a bill calling for a two-cent tax on gas but providing for the disposal of the proceeds in a manner different from that proposed by the Governor.

The Republican program in addition to differences in methods of giving more state aid to highways, suggests removing the direct state tax on real estate while the Governor's plan proposes a 20 per cent cut in the state income tax. The Republican plan also provides for additional state aid to schools, a subject which was not treat-

ed in the Governor's message but which, it is expected, will be considered later.

Following is the Governor's message in full which carries out the suggestions made by the Agricultural Advisory Commission which the Governor appointed early last January.

STATE OF NEW YORK
EXECUTIVE CHAMBER
ALBANY

February 25, 1929.

To The Legislature:

On January 28, 1929, I transmitted to your Honorable Bodies the first constitutional state budget and in that document I stated that by a supplemental message I would suggest changes in taxation.

These changes are in my judgment made necessary because of certain inequalities in the tax burden under existing laws.

For some time it has been increasingly evident that the laws covering the methods of paying for county highways in the state highway system bear very unequally and unjustly on the great majority of

counties. This is because, regardless of property values, and regardless of density of population, the local contribution to building cost is fixed at a flat thirty-five per cent rate. The result is that whereas in some counties the tax burden for this cost of completing the state system is less than one dollar per thousand dollars of equalized valuation, in other counties it is over forty dollars per thousand dollars of such valuation. The counties principally discriminated against are those whose lack of economic prosperity forms a matter of grave concern to all citizens whether they be residents of city or of rural communities.

Highway System Benefits Entire State

We have reached a point in modern civilization where we realize that a carefully planned highway system for the whole state is of direct benefit to the whole state and is no longer a matter of mere local interest. We understand the value of such a system for pleasure and recreational purposes and we have come also to know the value of concrete roads for the purpose of the direct distribution of

milk, vegetables, farm products, of raw materials, and of manufactured articles. The large cities of the state are more and more dependent on the state-wide highway system.

It is obvious that unless we impose a higher burden directly on the wealthier counties the only way to relieve the present inequality is for the state to take over a greater share of the cost of highway building and maintenance. It seems to me that it is time to recognize the principle that the burden should be based primarily on the true value of the taxable property per mile of highway.

Accordingly, the proposed legislation which accompanies the supplemental budget proposes three measures of relief as follows:

1. Equalization of contributions to highway building by counties, by a requirement of not to exceed one-fourth of one per cent per one thousand dollars of equalized value per mile of highway, nor in any event more than the existing requirement of thirty-five per cent of the highway cost. This proposal is made to apply also to bridge construction. The additional cost to the state next year under this plan would be four million dollars. **No county would be called on for a greater contribution than under the present law and most counties would receive a substantial reduction.**

2. It is suggested that towns and incorporated villages be relieved from the present requirement of contribution for maintenance of state and county highways. This would add six hundred thousand dollars to the obligation of the state.

3. The present state and county system will not adequately be rounded out without the construction of additional lateral roads and these roads should be built under a careful plan of state supervision. It is time for the state government to cease making any further contributions from the state treasury to counties or other local governments unless the principle is firmly established that the state shall have the right and duty to approve and give general supervision to the actual expenditure within the localities. It is in the case of highways an extension by the state of the wise provision in the federal law which gives to the United States government the duty to designate the highway, approve the plans and check the expenditures in all federal aid highway projects. The proposed system of lateral roads should be planned with the utmost care so that it will become a component part of the existing system. Additional aid by the state to help the counties to carry this proposed system forward would cost four million two hundred thousand dollars the coming year.

New Source of Revenue Needed to Equalize Burden

The above three proposals involve the expenditure of \$8,800,000 and the executive budget heretofore transmitted to you shows an estimated surplus of only \$5,714,816.30. A sound business policy requires an estimated surplus of at least that amount and this is in line with the previous policy of the state.

An additional tax is, therefore, necessary if the highway tax burden is to be equalized as I have proposed.

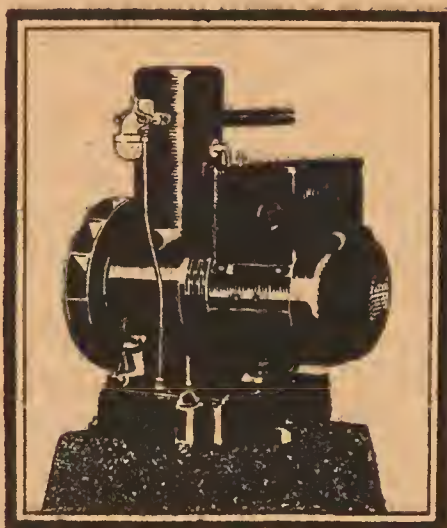
With the advent of new forms of necessary governmental expenditure brought about by changes of modern civilization, new forms of revenue have also been devised. I believe that public opinion and political opinion is substantially agreed that a gasoline tax is the best solution of the problem. It is a tax already levied in 46 states ranging from a minimum of two cents to a maximum of five cents. It costs little to collect. Further it is a tax levied against the users of highways in proportion to benefits received; and in pursuance of a sound tax policy it should be used solely for road building and maintenance. In the last analysis the gasoline tax costs the automobile owner little. It is an investment by him in good roads. His automobile lasts longer, the cost of operation is less, the tires will travel many more miles and the repair bills on his automobile will be very considerably smaller.

Program Requires More Than Returns from Gas Tax and License Fees

It is estimated that a tax of two cents a gallon on gasoline will yield this state \$22,000,000 a year in revenue. Adding to this the existing license tax, estimated to yield next year \$28,500,000 (the state's share) would give a total revenue of \$50,500,000 derived directly from owners and users of automobiles. As against these revenues the state would expend on

(Continued on Opposite Page)

For dependable electric service at a NEW LOW PRICE ... you can't beat this Westinghouse Combination



The new improved E-31
Westinghouse Light Plant

YOU have always looked forward to the day when you could afford to bring all the advantages of electricity to your farm.

That day is here! A new improved Westinghouse Plant, at a new low price, puts all the comfort and convenience of electric light and power within your reach.

Never before has there been a plant to compare with this for simplicity . . . for ease of operation . . . for economy . . . for trouble-free service and low maintenance cost.

Only a great electrical organization like Westinghouse could make such a plant at such a price. You'll agree with this statement the minute you lay eyes on the plant

and see how much it offers for the money. Let us give you all the facts and figures about this new plant. The coupon brings them. Just check and mail it today.

A New Lower Priced Replacement Battery

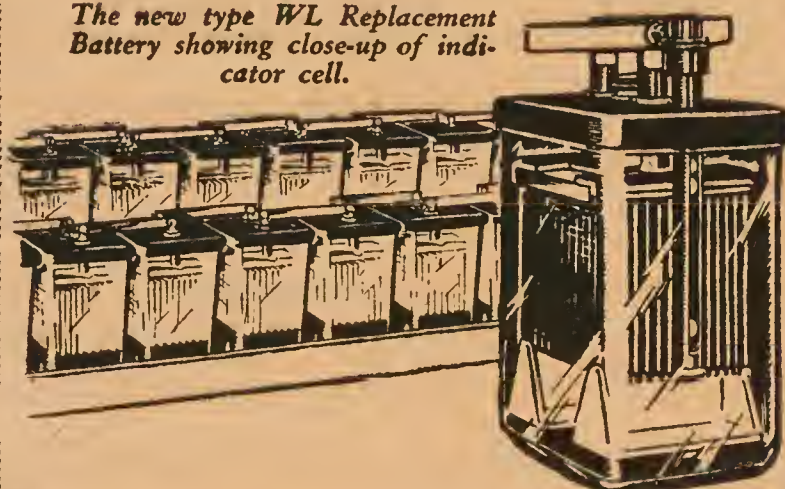
To insure 100% electric service from all types of light plants now in service, Westinghouse has developed a new replacement battery that is in a class by itself. An important improvement in this new type WL battery is an indicator cell which shows plainly the state of charge at all times. This improvement will be a valuable aid in taking proper care of the battery.

If you're bothered with dim lights . . . if you have to operate your plant more and more frequently . . . if you're running up bigger fuel bills all the time . . . you'd better investigate this new lower priced battery. The coupon below will bring you the information you want.

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Farm Light Division, East Pittsburgh, Pa.

Westinghouse FARM ELECTRIC PLANTS AND BATTERIES

The new type WL Replacement
Battery showing close-up of indi-
cator cell.



Westinghouse Electric & Manufacturing Company,
Farm Light Plant Division,
East Pittsburgh, Pa.

Please send me more information about:

- ☐ the new E-31 Light Plant
- ☐ the new type WL Battery

Name _____

Address _____

County _____ State _____

AA-3-9-29

(Continued From Opposite Page)

highways the sum of approximately \$47,500,000 as heretofore recommended by me, plus the sum of \$8,800,000 as now recommended, or a total highway expenditure of \$56,300,000. This shows clearly that the state would then spend on its highways \$5,800,000 more than the total of its revenue derived from automobile owners and users.

It is worth noting that the total of all expenditures in this state for streets and highways of all kinds is in excess of \$250,000,000 a year. On the other side of the picture, the amount now received from the license tax, including the one-fourth returned to localities, is about \$38,000,000. With the proposed gasoline tax, the amount received from motorists would be only \$60,000,000. The balance of street and highway cost amounting to nearly two hundred million dollars would, even with the new tax, be exacted of other taxpaying abilities and groups of taxpayers.

Gas Tax Not to be Applied to Tractor Needs

The justification of this tax being a charge against motorists according to benefits received, it necessarily follows that those using gasoline for industrial purposes, farm tractors and other machinery, airplanes and motor boats, etc., should be rebated in full for all taxes paid on gasoline so used. This is provided in the proposed bill.

I am recommending that the proposed gasoline tax go into effect June 1, 1929, and I do this because the tax receipts accruing during June will not be physically received by the state treasury until July. This gives to the budget figures an apparent sum of \$2,000,000 over and above the \$22,000,000 estimated for the fiscal year, but I believe it is good business practice to have actual cash coming into the treasury before actual expenditures start to go out.

Other Taxes May Be Reduced

The enactment of the proposed gasoline tax for highway purposes would automatically relieve receipts from other tax sources now being applied to highways. This relief would give to the state an estimated surplus larger than necessary at the close of the fiscal year ending June 30, 1930. I hold to the theory that no government is justified in taking from the pockets of its taxpayers money in advance of the time when it is actually needed for governmental use.

A reduction of an existing tax is, in my judgment, possible to the extent of between twelve and thirteen million dollars but it should be clearly understood that this reduction shall not be considered a permanent reduction to be applied of necessity in future years.

We know, for example, that during the fiscal year 1930-31 mandatory increases, such as that of about \$8,000,000 in the Department of Education, will have to be paid for, and I am, therefore, very clear that any tax reduction enacted this year should be regarded as a reduction which probably can not be continued in the succeeding year.

Proposed Reduction in Income Tax

Careful study leads me, therefore, to the conclusion that your Honorable Bodies should provide for a reduction of twenty per cent in the personal income tax law. This involves a decrease in the state's share of this tax in the sum of \$12,800,000.

Over half a million taxpayers now pay a direct personal income tax. Furthermore, this is one of the few remaining double taxes, inasmuch as the greater part of these people pay also a Federal income tax. Finally, the proposed reduction in the personal income tax is in its nature the most direct refund which we can give to the citizens of this state.

I, therefore, recommend:

First: The enactment of a gasoline tax of two cents a gallon beginning June 1, 1929, the entire proceeds to be applied to highway purposes.

Second: The appropriation of \$4,000,000 for the equalization of the cost of construction of highways and bridges forming a part of the State highway system.

Third: The appropriation of \$600,000 to relieve towns and villages of the cost of maintenance of highways forming a part of the state system.

Fourth: The appropriation of \$4,200,000 as additional aid to counties for the construction of lateral roads, with state approval and under state supervision, as a part of the general system.

Fifth: A reduction of twenty per cent in the personal income tax on incomes for the calendar year 1928 or a fiscal year ending in 1929.

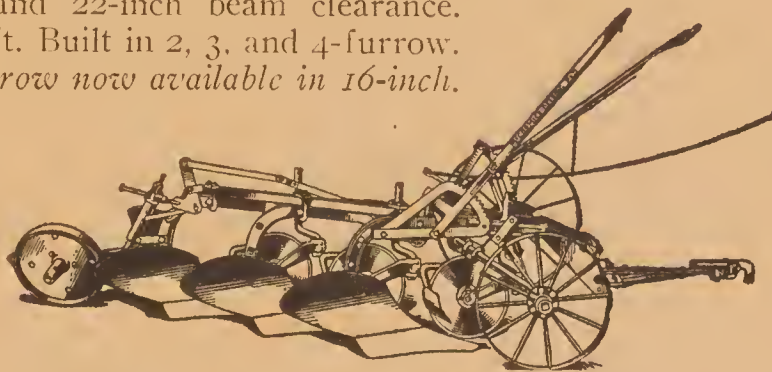
If these recommendations are enacted

McCORMICK - DEERING Tractor and Horse Plows

McCORMICK-DEERING LITTLE GENIUS PLOW. Has 21-inch fore and aft clearance between bottoms and 22-inch beam clearance. Improved power lift. Built in 2, 3, and 4-furrow. Two, and three-furrow now available in 16-inch.

Our 1929 Plow Catalog

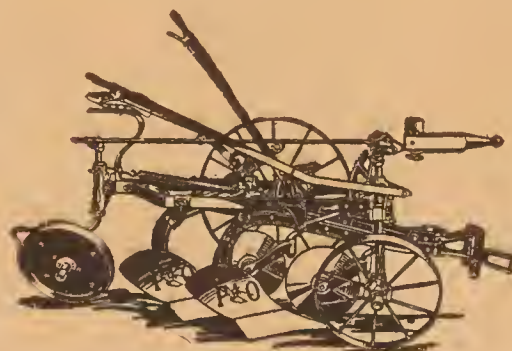
is now ready for mailing. A copy will be sent to you on request—without obligation.



McCormick-Deering Tractor Plows have a spring-release hitch that protects the beams and bottoms from damage. This hitch is standard equipment on the Little Genius and Little Wonder Tractor Plows.

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The McCormick-Deering line of horse-drawn plows includes types and sizes that do good work in any soil. Study the list below and examine the type suited to your locality at the McCormick-Deering dealer's store.



The McCormick-Deering Dealer in Your Town Will Show You the Plow Adapted to Your Farm

The McCormick-Deering Line

offers many types such as the

Little Genius Tractor Plow
Little Wonder Tractor Plow

also Tractor Disk Plows for all conditions

Horse Plows

Diamond High-Lift Sulky
Success, Sulky and Gang
Two-Way, Sulky Plow
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Walking Plows, a complete line
Special Plows for Special Plowing

HE has chosen his stocks from the McCormick-Deering line with your soil, crops, and climatic conditions closely in mind. He offers you a full line of McCormick-Deering P&O Plows, for horse or tractor—moldboard and disk types—with power lifts, accessible levers, quick adjustments, easily removable shares—a complete line that will give you the satisfaction you seek.

If you are interested in turning your soil in the shortest possible time and with the smallest expenditure of labor and money, we urge you to study the McCormick-Deering line of the old reliable P&O Plows.

Ask the McCormick-Deering dealer to point out the features of the plow best suited to your special needs.

INTERNATIONAL HARVESTER COMPANY OF AMERICA

606 S. Michigan Ave.

(Incorporated)

Chicago, Illinois

into law, the estimated free cash receipts as of June 30, 1930, will be \$8,014,816.30.

(signed) FRANKLIN D. ROOSEVELT.

A Visit With the Editor

(Continued from Page 5)

high plains and used to scare the old pioneers.

All rural dwellers can tell much about weather conditions by the way sound travels. Sometimes you can hear the distant locomotive whistle as clearly as if it were just a little way down the road, and again you will not hear it at all. When sound travels loudly, it is a sign that the atmosphere is heavy with moisture and indicates storm.

Some country creatures and wild life foretell coming weather, if you can interpret the signs. The lonesome calling of the whip-poor-will seems to mean rain next day. An old lady friend of my boyhood days used to say that the whip-poor-will really said "wet-my-foot, wet-my-foot."

A tree toad "hollering" at evening means rain, and the early passing southward of wild geese at autumn indicates the early coming of winter.

The prophets say also that a long,

cold winter is foretold by the way Nature dresses up its creatures in the fall; as for example, heavy, thick husks on corn, more fur and hair on animals, and thick fat on the hog's bladder at butchering time.

If the moon on evenings of the late fall seems to hang far in the South, some folks believe that this foretells an open and mild winter; but if on the contrary it is far in the North, then look out for cold and snow.

A good weather sign always has some real scientific reason back of it, although we might not always know the reason. But almost all of the old jingles about Candlemas Day and St. Swithin's Day and the ground hog and his shadow, etc., are in my opinion unreliable because there is no real reason back of them and for the same reason I do not take very much stock in weather signs based on the moon. Some farmers claim that if the change of moon is between midnight and two in the morning, there will be fair weather in summer and colder in winter; if between four and six in the morning, rainy weather; if between noon and two in the afternoon, very rainy.

Then of course there are all the old

beliefs about planting different things in the moon. I agree with the farmer who said he would rather do his planting in the good, rich earth!

Of course, all signs fail in dry weather or in wet weather, and none of them work all of the time. Also, I have lost confidence in many of the old weather signs of my youth which seemed to work where I was raised but never work in any other community. It is probable, too, that we notice them in particular when they come true, but seldom do when they fail. Anyway, they are interesting to think about and maybe the few I have suggested will recall dozens of others to your mind.

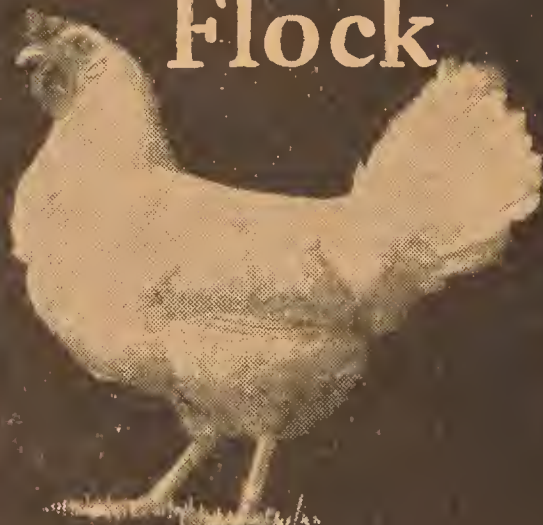
Some Points To Consider In Building A Roadside Market.

1. Attractiveness from an artistic standpoint.
2. Display possibilities.
3. Amount of protection it would afford from rain and sun to perishable products exhibited.
4. Convenience in handling goods.
5. Cost of construction.—Connecticut Bulletin 65.

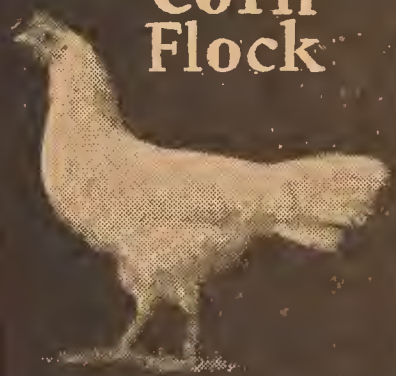
Breed to Lay? or Feed to Lay?

Grow Your Chicks
into Big, Strong,
Ready-to-Work
Pullets on Oatmeal
Mashes Prepared
by The Quaker
Oats Company

Oatmeal Flock



Corn Flock



OATMEAL, 626 EGGS; CORNMEAL, 72
In a test conducted at Liberty Villa Farm, fifty pullets raised on oatmeal feeds produced 626 eggs in their first 28 days of egg record. Fifty pullets raised on the same rations—except for the substitution of cornmeal for oatmeal—produced 72 eggs in the same period. Oatmeal builds pullets of the laying type; well-developed, healthy birds that want to work.

GIVE your baby chicks a chance to show what they can be! Give them an oatmeal career.

Start them on Quaker Ful-O-Pep Chick Starter, the scientifically prepared balanced ration with a base of pure, fresh oatmeal.

This famous ration builds healthy, well-formed, ready-to-work pullets and choice, heavy market birds. The cod liver oil it contains is potent and dependable. You get strong, large frames.

It contains cod liver meal, too, and this substance helps to eliminate chick sickness, to enable the birds to get more nourishment from their feed, and to build vigorous, healthy organs.

With all of its advantages—its ability to keep chicks alive, eager to eat and exercise—Quaker Ful-O-Pep Chick Starter is economical because it goes farther, and does more.

It is easy to use, too; place it before

the chicks just as it comes from the blue-and-white striped sack. No bother, less work, and certainty that your feeding is going to produce profitable results.

Give your baby chicks Quaker Ful-O-Pep Chick Starter; later, Quaker Ful-O-Pep Growing Mash. Follow the Ful-O-Pep method and you'll improve your stock at the same time you increase your profit and enjoyment.

At every mouthful of this thoroughly mixed dry mash the chick gets "something of everything." No picking apart, no waste, no residue.

It contains molasses for prevention of coccidiosis; also, valuable proteins, minerals, grains—in correct proportions as determined by scientific research and experiment.

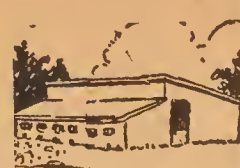
Near you is a Quaker Dealer who will be glad to fill your requirements. He has this fresh, pure line of feeds waiting for you. If you don't know your Quaker Dealer write direct.

Quaker FUL-O-PEP CHICK STARTER

THE QUAKER OATS COMPANY, Chicago, U. S. A.

BUY QUAKER FEEDS IN STRIPED SACKS

With the A. A.
POULTRY
FARMER



Incubators and Incubating

By L. H. HISCOCK

IT is so easy to blame an incubator for the eggs that don't hatch and the chicks we never get that I wonder sometimes there are so many different makes and models on the market. Yet, the outstanding fact behind all these different makes of machines is, that somewhere and sometime they have been successfully operated, or they would no longer be in the sales column of poultry and other agricultural papers.



L. H. Hiscock

What, then, are some of the reasons for failures in incubation? It would, of course, be impossible to enumerate or describe all the many ups and downs of individual incubator operators, but there are certainly some well defined reasons why incubators go wrong, and in this article I am dealing and thinking especially of small machines and capacities such as you might find on any farm the country over. In most cases failure is due, first, to faulty operation, and inability to carry out the manufacturer's directions; second, poor location of the machine; third, poor fuel and improper ventilation; and last, poor eggs and stock.

Most Incubators Well-Built

That really does not constitute such a heavy bill of indictment. Perhaps I should have added that some machines are better than others, BUT,—well, incubators are such a personal proposition that a successful hatch is almost always up to the man that runs the machine. If you do not follow instructions, you naturally cannot get chicks. Stick to the very letter of the law.

The factor that is most apt to ruin a perfectly good hatch, however, is location of any given machine. With small incubators you cannot take a machine and set it up any old place; the thermostat, which controls the range inside, has only a limited amount of play, and when you put your machine in a room where the thermometer may vary twenty-five or more degrees, depending on the outside weather conditions, you are asking too much. The best place to locate your machine is in a cellar where there is less chance for such fluctuations, or else put it in a well protected and insulated part of the house where temperature changes will be felt more gradually.

Ventilation Important

I have already placed fuel and ventilation under the same head of faults, and it seems to me that this is only fair. You cannot get eggs to hatch where the oil is of poor quality, especially if there is any chance of these fumes penetrating the machine, and if you use a poor oil, while it may not reach the inside of the incubator, yet if the room is small and without any means provided for carrying off the impurities from the burner or lamp, sooner or later they will foul the eggs to some extent. It is, therefore, very necessary to use good grade oil in order to cut the chance of foulness as low as possible, and it is equally essential to use ventilation or at least change the room air from time to time to cut the risk even lower.

As regards poor eggs and stock and their bearing on incubating results, I shall speak about them in another article.

There are many little things that often cause poor hatches. Chief among them is a faulty thermometer. Before you operate your machine, be sure that this one article is accurate. Likewise, before you put any eggs in the incubator at all run it empty for a few

(Continued on Page 28)

Baby Chicks

300,000 White-Brown Buff Leghorn **CHICKS**

Shipped C.O.D. Send No Money
PURE STRAINS—Tancred—Hollywood—Barron—American S. C. White Leghorns—Brown and Buff Leghorns—Eggs and Chicks Produced from some of the finest matings in Pennsylvania. Breeders Specializing in High Egg Production—Dependable Chicks for Commercial Poultrymen—100% Live Arrival—Send No Money—Chicks Shipped C.O.D.—Catalogue.

Pennsylvania Co-Operative Leghorn Farms, Box 314, Grampian, Pa.

BABY CHICKS

100% Live Delivery. Postage Prepaid.
Wh. and Br. Leghorns.....\$6.00 \$11.00 \$52.50
Buff and Bl. Leghorns.....6.00 11.00 52.50
Anconas.....6.00 11.00 52.50
Barred Rocks.....6.50 12.50 60.00
Wh. and Buff Rocks.....6.50 12.50 60.00
SC and RC Reds.....6.50 12.50 60.00
SC Bl. Minorcas.....6.50 12.50 60.00
Wh. and SL Wyandottes.....7.50 14.00 67.50
Buff Orpingtons.....7.50 14.00 67.50
All absolutely first, class purebred stock from culled flocks. Prompt shipments.
James F. Krejci, 9507 Meech Av. Cleveland, O.

STOP! LOOK! LISTEN!

Cash or C.O.D.25 50 100 500 1000
Wh. Wyandottes \$4.50 \$8.50 \$16.00 \$77.50 \$150
Rocks or Reds.....4.00 7.50 14.00 67.50 130
Wh. Leghorns.....3.50 6.50 12.00 57.50 110
Heavy Mixed.....3.50 6.50 12.00 57.50 110
Light Mixed.....2.75 5.00 9.00 42.00 80
From carefully selected free-range flocks. 100% arrival. Postpaid. Valuable illustrated 96-page booklet FREE. Telling all about poultry.

The Commercial Hatchery,
Box 75-A (The dependable plant) Richfield, Penna.

HIGH GRADE CHICKS

Blood Tested and Utility Stock

Leghorns, Rocks, Reds, Wyandottes, Anconas, Black Minorcas and Mixed. Also two and six weeks old chicks. Pekin Ducklings.

Write for circular and prices.

TAYLOR'S HATCHERY, BOX 12, LIBERTY, N. Y.

PENNA. "State Supervised" CHICKS



Flocks inspected by officials from the Penna. Dept. of Agriculture. Our 19th year. Get our low prices on Reds, Rocks, Leghorns and Minorcas. Member I.B.C.A.

Catalogue free.

THE KEYSTONE HATCHERY,
(The old reliable plant) RICHFIELD, PA.

200,000 CHICKS 1929

Goodling's Super Quality. Healthy, Strong and Vigorous
Single Comb, White Leghorns.....\$6.50 \$12.00 \$57.50 \$110
Barred Plymouth Rocks.....7.00 13.00 62.50 120
S.C. Rhode Island Reds.....8.00 15.00 75.00
Broiler Chicks, Heavy Breed.....5.50 11.00 52.50 100
Broiler Chicks, Light Breed.....5.00 10.00 47.50 90
Order direct. Prepaid 100% live delivery guaranteed. Circular Free.

THE VALLEY HATCHERY Box A, R. No. 1, RICHFIELD, PA.

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From Heavy Laying Free Range Flocks

S.C.W. & Br. Leghorns.....\$3.50 \$6.00 \$12 \$57.50 \$110
S.C.B. and Wh. Rocks.....4.00 7.50 14 67.50 130
Buff Orpingtons & Reds.....4.00 7.50 14 67.50 130
White Wyandottes.....4.00 7.50 14 67.50 130
Assorted Chicks.....3.00 5.00 9 42.50 80
100% prepaid safe delivery guaranteed.

Order from this ad. or write for circular

J. N. Nace Poultry Farm RICHFIELD, Pa.

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13 Leading Varieties—White Leghorns, Black Minorcas, Rocks, Reds, Wyandottes, Hamburgs, Speckled Sussex, Buff Orpingtons.

\$9.00 per hundred and up.

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Lantz Hatchery, Tiffin, Ohio

No Bluff Chicks

Just Real

Thousands of customers know. Order year after year. A satisfied customer my best advertisement. Join the old reliable plant. 16 years satisfactory service cuts down expensive advertising. My customer reaps the benefit by ordering from this small advertisement. S. C. White and Brown Leghorn SPECIALIST. 200 to 290 Egg Strain CHICKS \$13.00 per 100; 500 or more, \$11.00 per 100. Assorted chicks, \$8.00 per 100. FREE & 100% LIVE DELIVERY GUARANTEED.
HOUSEWORTH'S LEGHORN FARMS,
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CHICKS

Pure bred. Blood tested free range breeders. Leghorns, Anconas, 12c. Rocks, Reds, 14c. Wyandottes, Orpingtons, Minorcas, 15c. Black Giants, 20c. 100% live delivery. Valuable Chick Manual Free. Seidelton Farms, Washingtonville, Pa.



Don't let them die!

The small extra cost (less than $\frac{1}{2}$ c per chick) of feeding pure dried buttermilk will more than repay you in saving most of your baby chicks. Our big 64-page book tells how to feed and care for baby chicks—Send for your free copy.

Mr. R. L. Kirk, Clearwater, Florida, writes:
 "We are using your buttermilk in all of our mash feeds, and we have just sold a lot of chicks we raised from day old, to two pounds in seven weeks, they were sold as milk fed fryers at \$1.00 each, we raised 101 out of 105 and they all had lots of Collis' Buttermilk."

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 Please send me your Free Poultry Book.

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HILLPOT Quality Chicks

Leghorns-Rocks-Reds-Wyandottes

Have This Important Book Before You
When You Order Chicks This Year

This beautiful free book should be in the hands of every man and woman interested in making money with poultry which is one of the most fascinating means of increasing your income or of achieving financial independence.

The book, which is finely illustrated in four colors, describes my breeds fully; tells of my careful methods of mating and rearing; discusses the

W. F. HILLPOT, DEPT. 129, FRENCHTOWN, NEW JERSEY

most profitable sizes for flocks; contains house plans, construction details and concise and easily-followed Feeding and Rearing Charts. It is a book that you will find full of suggestions and inspirations and which you will want to keep handy for frequent reference. Some of my customers claim that they owe to it their first steps toward the comfort and peace of mind that come with an assured income.

BABY CHICKS

Delivery After February 15th.
Free Range Bred Full count and quality guaranteed
White and Brown Leghorns.....\$3.25 \$6.25 \$12 \$58.75 \$115
Anconas and Black Leghorns..... 3.25 6.25 12 58.75 115
White and Barred Rocks..... 3.75 7.25 14 68.75 135
Rhode Island Reds..... 3.75 7.25 14 68.75 135
Mixed chicks all breeds..... 2.75 5.25 10 48.50 95
Order direct from ad and save time. Catalog free.
Hatchery Chicks for Greater Profit
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25 50 100 25 50 100
Barred Rocks.....4.00 7.50 14 S.C.W. Leg.....3.50 6.50 12
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500 Lots 1/2c less. 1000 Lots 1c less.
Free Range Flocks. Live Delivery.
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BOS QUALITY CLASS A CHICKS
From healthy heavy layers. Several varieties. Low prices. Special discounts. No money down. Pay 10 days before shipment or C.O.D. 100% live delivery postpaid. Catalogue free.
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Single Comb White Leghorns trapnested and pedigreed since 1904. Orders for chicks and eggs booked now. Catalogue on request.

WYCKOFF AND TANCRED STRAIN

100% Arrival Prepaid to your office.
100 500 1000
White Leghorns.....\$12.00 \$57.50 \$110
THE RICHFIELD HATCHERY, Box E, RICHFIELD, PA.

WYCKOFF

Strain leghorn chicks. Postpaid
100 500 1000
White Leghorns.....\$11 \$52.50 \$100
Barred Rocks..... 8 57.50 110
Mixed Chicks..... 2 40.00 80
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ATHENEON CHICKS

EXHIBITION QUALITY—BRED TO LAY
Atheneon Blue-Blood Chicks Best Investment In Poultry Field Today

Our matings from the world's finest egg laying strains. Pedigreed males from 300 egg dams. Every chick an actual Blue Blood. GENUINE TOM BARRON PEDIGREED MALES direct from the famous Tom Barron Farms of England head our Special Matings. Large 2-year-old dams of proven high egg production. Late moulting. Heavy layers of winter eggs.

MODERATE PRICES—COMPLETE SATISFACTION

You take no chances in buying Atheneon Bred-To-Lay Chicks. They grow faster, lay earlier and produce an easier profit than ordinary chicks due to careful and scientific breeding. Consider these high quality strains in our matings: Regal Doreas W. Wyandottes, 200 egg pedigreed line direct; Holterman's Aristocrat; Park's Bred-To-Lay Barred Rock, egg pedigreed line direct; TANCRED WHITE LEGHORNS and OWEN'S S.C. REDS. Similar Atheneon quality in 14 Popular Money Making Varieties.

PRICES ON GRADE A CHICKS

	100	500	1000
S.C. Wh., Bl., Brn. Leghorns—Anconas	\$13.00	\$62.00	\$120.00
Barred & White Rocks—S.C. and R.C. Reds	15.00	72.00	140.00
White Wyandottes—Buff Rocks—Campines	16.00	78.00	150.00
Bl. Orpingtons—Wh. Minorcas—Sil. Wyandottes	17.00	82.00	160.00
Selected Heavy Breeds, Odd Lots	12.00	60.00	110.00

FOR GREATER PROFITS BUY HATCHERY CHICKS FROM
ATHENS CHICK HATCHERY
ATHENS Box 96 OHIO

Athens Chick Hatchery,
Box 96, Athens, Ohio.
Send me FREE your illustrated Catalog, complete price list and Special Combination Offers.

Name
Address

(Continued from Page 26)

days to make sure that you understand it and that it operates successfully. Don't supply moisture unless you are told to do so. Take good care of the lamp wick and nick the corners from time to time to keep the flame from running up. Operate with a medium flame and take care of the lamp once a day. Cool and roll the eggs as directed. Every incubator has a capacity; overfilling it will do more harm than good. It is a wise thing to remove infertile eggs at the end of a week; your machine will operate more uniformly if you do.

In conclusion, just a word about the various kinds of eggs. Hens' eggs and turkey eggs require about the same conditions of hatching. To those who wish to attempt duck eggs, I should advise that you communicate with the manufacturer for special instructions, for duck eggs require more moisture and greater humidity. The best way to hatch geese is under hens or in machines where results are absolutely guaranteed.

A Bad Winter to Keep the Henhouse Dry

I am writing to see if you can tell me what is the matter with my flock of 100 white Leghorn hens. I have been feeding about 28 quarts of oats, buckwheat and barley mixed in equal parts. They have sweet separator milk before them all the time, also water. The hen house is 14x28. It has a board floor. In spite of removing a whole 5-foot window, it is very damp. Straw has to be changed every day to keep it dry. What causes this damp condition? My hens molted in August and now are going into a molt again. What causes this?—C. P., New York.

THE weather this past winter has been unusually bad for keeping poultry houses dry. Where the weather is uniform and not too warm it is possible with muslin curtains and open windows to keep the house comparatively comfortable.

About all that you can do outside of supplying artificial heat, is to keep as many windows open as possible and to change the litter as frequently as needed. There is a chance of course that water is coming up through the floor. If it is a concrete floor and if there is no insulating layer of tar paper in the floor, it is quite possible that this is causing part of your trouble.

An out of season molt is usually caused by some break in the usual routine of feeding or management. Discontinuing the use of lights will cause it or sometimes a radical change in feed. Not knowing all the conditions surrounding your flock we are unable to tell the exact cause except that it is doubtless the result of some change to which the hen has been subjected.

AVENARIUS
TRADE MARK
CARBOLINEUM
The Standard Insecticide for 53 Years
applied ONCE A YEAR
in Poultry houses
**Kills Mites
Blue Bugs**
Write for Circular OR MONEY REFUNDED
CARBOLINEUM WOOD PRESERVING CO.
MILWAUKEE, WIS Dept. 26

CHICKS S.C. Barred Rocks \$12 for 100; \$55.00 for 500. Tancred S.C.W. Leghorns \$11 for 100; \$50 for 500. Heavy Mixed 10c; Light 8c. 100% Guaranteed. Free circular.
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QUALITY CHICKS S.C. White Leghorns per 100—\$11. S.C. Barred Rocks \$13. Light mix \$9 per 100. Heavy \$11. Special prices on larger lots. 100% live delivery, postpaid. New circular free.
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SPECIAL FALL prices for breeding Turkeys, Geese, Ducks, and Guinea. Write your wants and for mailing list. **PIONEER STOCK FARM, IELFORD, PA.**

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For many years, our S.C. White Leghorn breeders have been mated by a licensed poultry judge. Now, they're certified by the American Poultry Association. That gives you double assurance. Remember too, that you are dealing with the "Oldest Hatchery in the United States" with 37 years' experience in turning out better and better baby chicks. There'll be quality, too, of the same high quality. Seven leading breeds, all carefully mated.

Write for Free Folder and prices.
PINE TREE HATCHERY,
Box 55, Stockton, New Jersey
Jos. D. Wilson, Founder and Owner
Since 1892

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FINGER LAKE REGION BABY CHICKS

with an official record. Ask for our Baby Chick Book describing our Pedigreed Cornell Chicks from stock that has laid from 200 to 312 eggs in their pullet year and mated to breeders that have averaged over 200 eggs in their pullet year. Also describes our 144,000 egg hatchery with 22 years' experience in hatching Baby Chicks, Leghorns, Reds, Rocks, Wyandottes, Minorcas, and Giants.
The home of better Chicks at lower cost.
THE DERROY TAYLOR CO.,
NEWARK, NEW YORK

Green Forest Husky Chicks

English and Tancred Strain
Ship C. O. D. 25 50 100
S. C. White Leghorns.....\$3.25 \$6.25 \$12
S. C. Barred Plymouth Rocks..... 3.75 7.25 14
Mixed Chicks..... 2.75 5.25 10
Leghorns are out of hens with trapnest records of 291-300 eggs. We pay parcel post and guarantee 100% good, strong chicks on arrival. Free circular.
GREEN FOREST POULTRY FARM
J. W. Amig & Son, Props. Star Route Richfield, Pa.

White Leghorn Baby Chicks a Specialty

Per 50 100 500 1000
S. C. W. Leghorns.....\$6.50 \$12.00 \$57.00 \$110.00
Barred Rocks..... 7.50 14.00 67.50 130.00
R. I. Reds..... 7.50 14.00 67.50 130.00
Heavy Mixed..... 6.50 12.00 57.50 110.00
Light Mixed..... 5.00 9.00 42.00 80.00
Our White Leghorn Cockerels: Sire—from hen that laid 312 eggs per year. Hens—254-290 eggs. Actual 365 day trap nest record. All chicks Postpaid to your door. 100% live delivery guaranteed. Order direct or write for free circular.
PENN HATCHERY, Dalmatia, Penna.
Formerly Sunshine Hatchery

BABY CHICKS

25 50 100 500
White Leghorns.....\$3.00 \$5.25 \$10.00 \$45.00
Barred Rocks and Reds..... 3.50 6.25 12.00 57.50
Heavy Mixed..... 3.00 5.25 10.00 45.00
Light Mixed..... 2.75 4.75 9.00 42.50
Pekin Ducklings..... 8.00 15.00 28.00 130.00
Mixed Ducklings..... 6.50 12.50 25.00 115.00
John Shadel Hatchery McAlisterville, Pa. Route 2.

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\$12 to \$25 per 100
Barred and White Rocks, White and Columbian Wyandottes, R. I. Reds, Jersey Black Giants, Black Minorcas, White and Brown Leghorns, Mottled Anconas. 20,000 Weekly. Finest purebred, heavy producing, free range stock, under State inspection. 100% Safe delivery guaranteed. Catalog free.
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White Leghorn Eggs—Chix—Pullets—18th year—Large Type—Prolific—Trap Nested—Blood Tested. "The Early chick does the Trick." "Our Stock will put the FIT into PROFIT for you." "We treat you [] the year O."
Write for interesting circular.

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"Duck News" Free.
ROY PARDEE,
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Hampton's Black Leghorn Day Old Chicks. Circular free. **A. E. HAMPTON, Box A, Pittstown, N.J.**

BABY



CHICKS

CHERRY HILL CHICKS

100
S.C.W. Leghorns—Wyckoff Strain.....\$12.00
S.C. Everlay Brown Leghorns.....12.00
Barred Rocks—Wm. Nace's select.....14.00
S.C. Rhode Island Reds.....15.00
Mixed or Broiler Chicks.....9.00
1/2c less in 500 lots. 1c less in 1,000 lots.
25 chicks add 2c. 50 chicks add 1c. Full count.
100% live arrival guaranteed. Parcel Post prepaid.
Bank reference. Order direct from this ad or write
for free circular.
CHERRY HILL POULTRY FARM,
WM. NACE, Prop. McALISTERVILLE, PA.



Lone Oak Poultry Farm

A breeding farm where nothing but our own production and rearing is sold.

Chicks of Known Ability

Breeders used this season were sired by males whose dams' production records ranged from 200-278 eggs. This same blood is being intensified still more in the present flock matings. Make sure of the production ability of your future flock by securing chicks from these choice matings.

Choice breeding cockerels, priced right.

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5 Lb. Leghorns

The old reliable Heavyweight stock. Produced High Up on Pennsylvania's healthy mountain top. Get your chicks from certified record strains above 300 eggs. R.O.P. Hollywood, Tancred, Barron Matings. Hatch weekly pure white eggs up to 24 ounces per dozen. Beautiful Color Plate Leghorn Catalogue Free.

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RED BANK,

NEW JERSEY

18TH YEAR

breeding White Leghorns for size, vigor and heavy production of large White EGGS. 8,000 LAYERS are housed on our farm.

Our Chick Guarantee

100% satisfactory arrival on the exact date we promise shipment. Every chick sold by us is hatched from eggs laid by breeders on our own farm.

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Leghorns-Reds-Rocks-Wyandottes

"WELL BRED FROM WELL BREEDERS"

You can't fool the neighbors, and most of our output is sold to our neighbors. If you want really "better chicks" with some real breeding behind them, to make MORE MONEY for you, take advantage of our years of breeding. New England Accredited Stock. All breeders. 100% White Diarrhea free. Official Contest records. Circular.

Hall Bros. Poplar Hill Farm, Box 59 Wallingford, Conn.

BABY CHICKS

	25	50	100	500	1000
S.C.W. Leghorns.....	\$3.25	\$6.50	\$12	\$57.50	\$110
Bd.Rocks & S.C. Reds	3.75	7.25	14	67.50	130
Heavy Mixed.....	3.25	6.50	12	57.50	110
Light Mixed.....	2.50	4.75	9	42.50	80

A Special Discount on orders placed in advance Will ship C.O.D.

PINECREST POULTRY FARM & HATCHERY

Herbert Miller, Prop. Box 12 Richfield, Pa.

HERE: NEARLY EVERYONE RAISES FULL BLOODED "AMERICAN" QUALITY CHICKS



	50	100	500	1000
American or Eng. SC. Wh. Leghorns.....	\$6.75	\$13.00	\$62.00	\$120.00
Hollywood Wh. or Brown or Buff Legs.....	7.25	14.00	67.00	130.00
Tancred Wh. Leg. Anconas—Barred Rocks.....	7.75	15.00	72.00	140.00
RC or SC Reds, Wh. Rocks, Parks Rocks.....	8.25	16.00	77.00	150.00
Wh. Wyandottes, Buff Orp., Blk. Minorcas.....	9.25	18.00	87.00	170.00
Brahmas, Col. Rocks, Blue Andalusians.....	11.25	22.00	105.00	200.00
Light Mixed \$9.00 a hundred. Mixed any breeds our selection \$10.00. Heavy Mixed \$12.00 a hundred.				

Get our NEW CATALOGUE—It proves to you the SUCCESS our Customers have with our chicks—Breeders culled and Bred for High EGG PRODUCTION in Winter when eggs are demanding large premiums. Reference, Curwensville National Bank—100% Live Arrival—Dependable Service. Order Early.

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Hatched by men with 19 years experience, from culled flocks. 100 per cent live delivery guaranteed by Prepaid Parcel Post at the following prices:
S. C. White Leghorns.....11c each—\$100.00 per 1000
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Barred Rocks.....12c " 100.00 " 1000
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S. C. Black Minorcas.....14c " 130.00 " 1000
Mixed Broilers.....9c " 80.00 " 1000
Order now for spring delivery. Capacity 60,000 eggs. \$1.00 will book your order. Catalogue free.

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are bred to make money for you. Strong, healthy, vigorous from the world's best and heaviest laying strains such as—Tancred, Ferris, Owen Farms, Daniels, Thompson, Martin, Shepard, Fishel and others. Free range flocks, scientifically culled and supervised. Smith Hatched. 100% live delivery guaranteed. 16 breeds 9c and up. Postpaid. Members International Baby Chick Association. Send now for free poultry book and prices. Buy Hatchery Chicks for Greater Profits.

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THEY LIVE because they are bred from healthy, free range breeders that have thrived and gained in vigor for generations. They LAY because they are from selected and tested high egg power stock. White, Brown and Buff Leghorns, Barred and White Rocks, R. I. Reds, Anconas, Black Minorcas, Buff Orpingtons, White Wyandottes. \$2c and up. 100% live delivery guaranteed. Postpaid. Member International Chick Assn. Write today for FREE Chick Book.

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100% Live Arrival	100	500	1000
Ferris Strain White Leghorns.....	\$12	\$57.50	\$110
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White Rocks.....	14	67.50	130
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Mixed Chicks.....	9	42.50	80

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BABY CHICKS C. O. D. Send only \$1
Don't miss this chance to get a start with Wolf's extra quality pure-bred high producing stock. Every breeder produced on free range and health of chicks is safeguarded. Get Our Catalog and Price List
Tells about prizes won by our birds. Read about Mary Heneel who made over \$1000 profit in one year with birds of our breeding. All leading breeds—prices very attractive. Write today. Chicks shipped C.O.D. Toe picking stopped instantly with Wolf's "No-Pick." Order box today. \$1.00 postpaid. Satisfaction guaranteed or money refunded.
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hatched by the best system of incubators from high class bred-to-lay stock. White, Brown, Buff Leghorns, Anconas \$14.00 per 100; Barred, White Rocks, Minorcas, Reds \$16.00 per 100; White Wyandottes, Buff Orpingtons \$17.00 per 100; Giants \$20.00 per 100; Heavy Broilers \$12.00 per 100; Light Broilers \$10.00 per 100; Pekin Ducklings \$30.00 per 100. Add 25c on orders for less than 100. Safe delivery guaranteed by parcel post.
Nunda Poultry Farm, Desk H, Nunda, N. Y.
Member of the International Baby Chick Ass'n, and the N. Y. State Co-operative Chick Producers Ass'n.

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The Key to Success and Greater Profits with Production Bred Poultry Today is Through the Purchase of High Grade Stock, Eggs or Chicks from Members of the

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500,000 SUPER-QUALITY CHICKS FOR 1929

Insure next winter's poultry profits by ordering NATIONAL "SUPERBRED" CHICKS NOW

We breed and hatch 13 of the leading Breeds. Send for our FREE illustrated catalog with prices on our utility and special mated chicks. All chicks sent prepaid. We guarantee 100% delivery of good lively chicks. Member of International Baby Chick Ass'n. You will save money by writing us now.

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When we say RELIABLE—we mean RELIABLE in every way. Breeding stock of highest quality of 19 years of careful development. Special attention paid to health of flocks and records kept.

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CHICKS

	Will ship C. O. D.	25	50	100
S. C. Reds.....	\$4.00	\$7.50	\$14.00	
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White Leghorns.....	3.50	6.50	12.00	
Heavy Mixed.....	3.50	6.50	12.00	
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500 lots 1/2c less, 1000 lots 1c less.
Free range. 100% Delivery. Circular.

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	25	50	100	500	1000
Barred Rocks.....	\$4.00	\$7.50	\$14	\$67.50	\$130
S.C.W. Leghorns.....	3.50	6.50	12	57.50	110
Heavy Mixed.....			11	52.50	
Light Mixed.....			10	47.50	

These chicks are from free range and heavy egg producing flock. 100% live delivery guaranteed to your door. Write for Special Mating prices.

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S.C. White Leghorns.....	\$11.00	\$52.50	\$100.00
Barron and Wyckoff Leghorns.....	12.00	57.50	110.00
Barred Rocks and R.I. Reds.....	14.00	67.50	130.00

Light Mixed, \$9.00 per 100; Heavy Mixed, \$12.00 per 100, for March and April. 100% live delivery. Postpaid. New circular free giving full details of all breeds.

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There is always something new that will lighten labor, save time or make a difficult job more easy to do. By keeping in close touch with the world's markets these stores are able to help you keep your farm and farm home on the most efficient and comfortable working basis and to show you new ways of saving money and increasing your profits. It pays to keep in touch with your local "Farm Service" Hardware Store for they are the farmers' headquarters in every community.

P. S. When making plans for your summer repairs and improvements, be sure to consult us about the hardware you'll need. We will help you save on costs.

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Where prices are lower because you get personal help in the selection and maintenance of your purchases.



**Prevents Rust
Cleans and Polishes**

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Stove and Nickel Polish

*Absolutely Fireproof, Dustless ~
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New FREE book quotes Reduced Factory Prices. Lower terms—year to pay. Choice of 5 colors in new Porcelain Enamel Ranges. New Circulating Heaters—\$33.75 up. 200 styles and sizes. Cash or easy terms. 24-hour shipments. 30-day Free Trial. 360-day test. Satisfaction guaranteed. 27 years in business. 700,000 customers. Write today for FREE book.

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PAPER YOUR HOME
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PER ROOM

You can paper the average room with high-grade, artistic wall paper for as little as 90 cents—by buying direct at lowest wholesale prices. Send for big free catalog. Not the usual small mail order catalog but a large book showing scores of artistic designs for ceilings and borders as well as walls. Write today.

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WOOL BLANKETS, and Colonial Coverlets. BATTING. Made from your own wool. ROBES. Also sold direct from the mill if you have no wool. Beautiful goods that gives satisfaction and long wear. Write for catalog and samples. Prices reasonable. **WEST UNITY WOOLEN MILLS, DEPT. G, WEST UNITY, OHIO.**

Canton Wins at Ithaca

Dramatics Contest Includes Five Districts

AGAIN has the northern district of New York taken the fifty-dollar prize offered by AMERICAN AGRICULTURIST to the group winning first place in the state contest in dramatics at Farm and Home Week at Ithaca. Last year Redfield Grange of Oswego County took first honors; this year first place fell to the Canton Home Bureau of St. Lawrence County. The play was "Cabbages", written by Edward Stradt and directed by Mrs. Frank Fox. The characters were as follows:

Mrs. Wilhelmina Grossmeier, Ruth Peacock
Gus, her husband.....Lyman I. Achenbach
Tildy, their daughter.....Thelma Flack
Mrs. Lena Fisher.....Mrs. Harry Bell
Mr. Jenks, a reporter.....Kenneth Nipe
Mr. Markle.....D. P. Church
Elizabeth, the maid.....Mrs. Sherman Flack

They typified a Pennsylvania Dutch farm family who had become suddenly rich when oil was discovered on their farm. Mrs. Grossmeier was socially ambitious and her efforts to keep up with the "Sam Brownses" created many very laughable situations. The homely philosophy of Mr. Grossmeier was that they, after all, were only a plain cabbage-kind of people and events seemed to prove that he was right. Mr. Achenbach's acting in the character of Grossmeier was almost professional in its finish.

A very close second was "Between the Soup and the Savoury", written by Gertrude Jennings and presented by the Williamsville Home Bureau of Erie County under the direction of Mrs. Chas. H. Williams. The scene of this play is an English kitchen during the hour when dinner is being served to "im" and "er" with their guests upstairs. The parts were Marie, the cook, Ada, the parlormaid, and Emily, the kitchenmaid, taken by Clara Shisler, Ruth Byrne and Rose Philipson, respectively. All took their parts easily and naturally and the movement of the play was smooth from start to finish.

Another play which was a very real contender for first place was "Our Minister's Bride", written by Evelyn Watson, played by Wilton Village Home Bureau of Saratoga County under the direction of Rev. Chester Finch. The cast was:

Elizabeth Sutton,
Mrs. Leslie H. Van Rensselaer
Martha Truhart.....Mrs. Edwin Varney
Samantha Truhart.....Mrs. Howard Fowler
Mrs. Sneer.....Mrs. Neil J. Parker
Mrs. Pry.....Mrs. Chas. H. Van Rensselaer
Mrs. Placid.....Mrs. Ernest Woods
Mrs. Soberly.....Mrs. Ellis Brown
Sally.....Mrs. Chester Finch

The wonderful old-fashioned costumes worn by the members of this cast were charming and their acting of the various parts was well delineated.

"The Teeth of the Gift Horse", written by Margaret Cameron, played by the Prattsburg Home Bureau of Steuben County and directed by Mrs. Otis Waldo took fourth place. The cast was:

Aunt Marietta Williams,
Mrs. Herbert Cincebox
Richard Butler.....Burdette Edmonds
Florence Butler.....Mrs. Charles Clark
Anne Fisher.....Mrs. Helen Cook
Devlin Blake.....Philo Harris
Katie.....Mrs. Warren Andrews

The other play presented was "Too Busy", by Bertha E. Wallace. It was

played by Elmira Home Bureau of Chemung County under the direction of Mrs. William Curtiss. The players were:

Mrs. Mary Newcomb,
Mrs. Floyd Campbell
Mrs. Martha Miller.....Mrs. E. R. Compton
Mrs. Abbie Potter.....Mrs. S. Smith
Emiline Potter, Emmie.....Jane Dryer
Nina Wilcox.....Mrs. William Curtiss
Esther West, a school teacher,
Mrs. William Boyd

Each play had won first place in its own district contest held during the

For the Dainty Miss



PATTERN 2695 affords a charming one piece design for the little lady's "best" frock, whether it be of crepe de chine, batiste, organdie, dotted swiss or sprigged dimity. It cuts in sizes 1, 2, 4 and 6 years. Size 4 requires 1½ yards of 40-inch material with 3 yards of lace and binding. PRICE 13c.

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last few months to determine who should represent the district in the state contest at Farm and Home Week. Each group not winning first prize received a twenty dollar bonus. These contests were organized as a project of the Rural Social Organization Department of the New York State College of Agriculture with Miss Mary Eva Duthie directly responsible for their management. Every organization, grange or home bureau of the sixteen counties competing deserves credit for taking interest, time and trouble to take part in the plays. No doubt, all feel repaid for their efforts, regardless

(Continued On Opposite Page)



A dramatic moment in the play "Cabbages" which won first place in the state dramatics contest at Farm and Home Week.

When writing Advertisers
Mention American Agriculturist

Aunt Janet's Counsel Corner

A Change Is Often a Rest and Prevents Going Stale on the Job

OFTEN it takes a change of scenery and people to make us see things in their right proportion. The story of the man lost in a forest who couldn't see the woods because the trees were in his way makes me think of us all when we are doing a job continuously. It does us good to leave it once in a while just to see how it looks from afar. It is a great freshener for a woman to go to a club or home bureau meeting, to a movie, to visit a friend—or if she wants a real treat—to Farm and Home Week at her state agricul-

thinkers along educational lines present their ideas or to talk with men and women who are doing a successful job widens our horizon for us. Then too it is comforting to find that we are not alone in our struggles. We find other visitors who are having a hard time to make things go or who have been wondering if it really was worth the struggle just to hang on a while longer. Altogether such a trip is worth saving and planning for during a whole year. We can go back home and some of the most irritating problems have shrunk to their right proportion—we have had our sense of values adjusted.—AUNT JANET.

Suggesting Princess Lines



2720

Canton Wins at Ithaca

(Continued From Opposite Page)

of the fact that all could not win prizes. It is a very definite enrichment of life for us who live in rural sections to have such wholesome pleasure—and work—as these dramatic contests promote.

The Cornell Dramatics Club co-operated most helpfully providing stage properties, stage hands and a crew for making up the casts. The plays were judged by Mrs. Grace Watkins Hockett, Household Editor of AMERICAN AGRICULTURIST, and Professors A. M. Drum-

mond and Bristow Adams of Cornell University. The same score-card was used in judging the state contest as was used in the districts. It is as follows:

Selection: Total 30.

Direction; Setting 8, Costuming and make-up 8, Tableaux 12, Tempo 12; Total Direction 40.

Acting; Reading 10, Personal Acting 10, Group Acting 10, Total Acting; 30.

The State Community Dramatics Committee were: R. H. Wheeler, Chairman, Miss Mary Eva Duthie, Miss Dorothy Delany, Bristow Adams, Alexander M. Drummond, all of the New York State College of Agriculture. Ex-Officio—Mrs. Edward Young, Home Bureau Federation, C. R. White, Farm Bureau Federation, and Fred Freestone, Master of State Grange.

Keep Baby Warm

WHEN you take the baby to town or to church and in cold weather, fill the hot water bottle with hot water and place inside the blanket around the baby and he will be warm for two or three hours. On cold nights just put the hot water bottle filled with water in his crib.—Mrs. C. D. W., Ill.

Interesting Flare



2722

PATTERN 2720 with its suggestion of the Princess silhouette is a popular model for spring with its graceful silks and feather-weight woollens. The clever scalloped collar, the side closing and flaring skirt are all unusual touches. The pattern cuts in sizes 16, 18 years, 36, 38, 40 and 42 inches bust measure, and made with 3½ yards of 40-inch material with ¾ yard of 36-inch contrasting with 6¼ yards of binding in the 36-inch size. PRICE 13c.

tural college. Practically every state has such a week and a special program is made to help farm women with their every day jobs. Best of all perhaps, is the complete change of environment, the contact with the keenest minds of the day and the opportunity to branch out into more than just food or clothing, or other absolute necessities. I have just seen how eager New York state women were to hear the specialists talk on best ways to train right habits into children or on what clothes do to a person, or how to set a table simply and attractively.

Furthermore, an illustrated lecture on bird life or the attractive small garden brought the women in flocks. These lectures were somewhat, in the nature of soul food, since they do not constitute necessities in the sense that food is necessary. The need of pretty things and the interest which birds and flowers bring to a country dweller cannot be measured. Such a lecture not only gives pleasure for the time it is given, but opens the way for hours of future enjoyment.

The chance to hear the foremost

PATTERN 2722 with its becoming neckline, buttoned jabot frill and smartly diagonal skirt flounce makes a beautiful daytime dress, especially if a pretty printed silk is used. Every detail of the dress is appropriate for the joyousness of the spring season. The pattern cuts in sizes 16, 18 years, 36, 38, 40 and 42 inches bust measure and is made with 3½ yards of 40-inch material in the 36-inch size. PRICE 13c.

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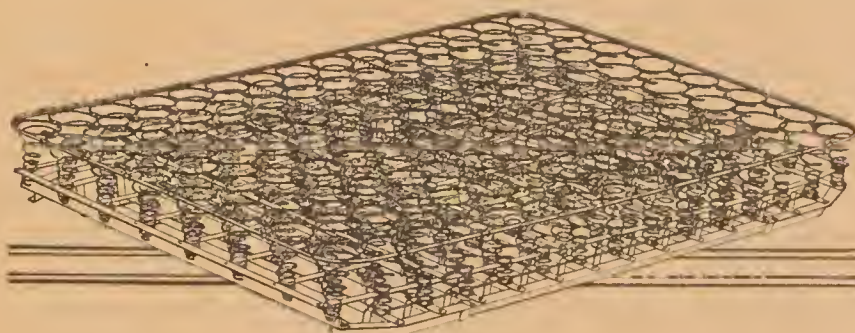
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Foster Ideal Springs are not sold in every furniture and department store and you may be urged to buy something alleged to be "just as good or superior" to a Foster Ideal. But—if you are interested in proper spine support and want real rest, you'll seek out the Foster Ideal Dealer in your city and you'll buy a genuine Foster Ideal Spring, that bears the Foster Trade Mark.

The Little Shepherd of Kingdom Come *By John Fox, Jr.*

"I've knowed him sence he was a chunk of a boy, but I don't rickollect ever hearin' his last name afore. I nuver knowed he had any."

"Well, I heard him call one of his men Jake—and he looked exactly like you." The giant pulled in his horse.

"I'm goin' back."

"No, you aren't," said Dan; "not now—it's too late. That's why I didn't tell you before." Then he added angrily: "You are a savage and you ought to be ashamed of yourself harboring such hatred against your own blood-brother."

Dan was perhaps the only one of Morgan's Men who would have dared to talk that way to the man, and Jerry Dillon took it only in sullen silence.

A mile farther they struck a pike, and, as they swept along, a brilliant light glared into the sky ahead of them, and they pulled in. A house was in flames on the edge of a woodland, and by its light they could see a body of men dash out of the woods and across the field on horseback, and another body dash after them in pursuit—the pursuers firing and the pursued sending back defiant yells. Daws Dillon was at his work again, and the Yankees were after him.

Long after midnight Chad reported the loss of his prisoner. He was much chagrined—for failure was rare with him—and his jaw and teeth ached from the blow Dan had given him, but in his heart he was glad that the boy had got away. When he went to his tent, Harry was awake and waiting for him.

"It's I who have escaped," he said; "escaped again. Four times now we have been in the same fight. Somehow fate seems to be pointing always one way—always one way. Why, night after night, I dream that either he or I—" Harry's voice trembled—he stopped short, and, leaning forward, stared out the door of his tent. A group of figures had halted in front of the Colonel's tent opposite, and a voice called sharply:

"Two prisoners, sir. We captured 'em with Daws Dillon. They are guerillas, sir."

"It's a lie, Colonel," said an easy voice, that brought both Chad and Harry to their feet, and plain in the moonlight both saw Daniel Dean, pale but cool, and near him, Rebel Jerry Dillon—both with their hands bound behind them.

XXIV

A RACE BETWEEN DIXIE AND DAWN

BUT the sun sank next day from a sky that was aflame with rebel victories. It rose on a day rosy with rebel hopes and the prophetic coolness of autumn was in the early morning air when Margaret in her phaeton moved through the front pasture on her way to town—alone. She was in high spirits and her head was lifted proudly. Dan's boast had come true. Kirby Smith had risen swiftly from Tennessee, had struck the Federal Army on the edge of the Bluegrass the day before and sent it helter-skelter to the four winds. Only that morning she had seen a regiment of the hated Yankees move along the turnpike in flight for the Ohio. It was the Fourth Ohio Cavalry, and Harry and one whose name never passed her lips were among those dusty cavalymen; but she was glad, and she ran down to the stile and, from the fence, waved the Stars and Bars at them as they passed—which was very foolish, but which brought her deep content. Now the rebels did hold Lexington. Morgan's Men were coming that day and she was going into town to see Dan and Colonel Hunt and General Morgan and be fearlessly happy and triumphant. At the

Major's gate, whom should she see coming out but the dear old fellow himself, and, when he got off his horse and came to her she leaned forward and kissed him, because he looked so thin and pale from confinement, and because she was so glad to see him. Morgan's Men were really coming, that very day, the Major said, and he told her much thrilling news. Jackson had obliterated Pope at the second battle of Manassas. Eleven thousand prisoners had been taken at Harper's Ferry and Lee had gone on into Maryland on the flank of Washington. Recruits were coming into the Confederacy by the thousands. Bragg had fifty-five thousand men and an impregnable stronghold in front of Buell, who had but few

For once the subtle Colonel made a mistake. Perhaps the girl in her trembling happiness and under the excitement of the moment might have welcomed him, as she was waiting to welcome Dan, but she drew back now. "Oh! no, Colonel—not on that ground."

Her eyes danced, she flushed curiously, as she held out her hand, and the Colonel's brave heart quickened. Straightway he began to wonder—but a quick shadow in Margaret's face checked him.

"But where's Dan? Where is Dan?" she repeated, impatiently.

Richard Hunt looked puzzled. He had just joined his command and something must have gone wrong with Dan. So

The Story Thus Far

CHAD leaves "Lonesome" with his dog "Jack." His foster parents care both dead from the plague and plans have been laid to bind Chad out to a hard fisted neighbor. After the funeral, Chad collects a rifle, some powder, and shot and a haversack and with "Jack" by his side, starts out for unknown parts. He meets the sons of Joel Turner from over the mountain who take him home. Chad's cleverness at school gains the admiration of Caleb Hazel, the schoolmaster. They become close friends. Hazel tells Chad of the "Bluegrass Country" beyond the hills. Logging operations take Chad to a distant city where he gets lost and starts home on foot. He is picked up by Major Calvin Buford. It appears that Chad is also a Buford and is believed to be a kinsman of his new found friend, who takes him to his home in Lexington in the heart of the "Bluegrass." Chad accepts the Major's offer of a home and an education. Chad enters into the social life and becomes very popular at school. He falls in love with Margaret Dean, daughter of General Dean, neighbor of the Bufords. Meanwhile feeling grows bitter between North and South and war clouds gather. Chad joins the Union forces under Grant. His command takes him back to Lexington.

men more—not enough to count a minute, the Major said.

"Lee has routed 'em out of Virginia," cried the old fellow, "and Buell is doomed. I tell you, little girl, the fight is almost won."

Jerome Conners rode to the gate and called to the Major in a tone that arrested the girl's attention. She hated that man and she had noted a queer change in his bearing since the war began. She looked for a flash of anger from the Major, but none came, and she began to wonder what hold the overseer could have on his old master. She drove on, puzzled, wondering, and disturbed; but her cheeks were flushed the South was going to win, the Yankees were gone, and she must get to town in time to see the triumphant coming of Morgan's Men. They were coming in when she reached the Yankee head-quarters, which she saw, had changed flags—thank God—coming proudly in, amid the waving of the Stars and Bars and frenzied shouts of welcome. Where were the Bluegrass Yankees now? The Stars and Stripes that had fluttered from their windows had been drawn in and they were keeping very quiet indeed—Oh! it was joy! There was gallant Morgan himself swinging from Black Bess to kiss his mother, who stood waiting for him at her gate, and there was Colonel Hunt, gay, debonair, jesting, shaking hands right and left, and crowding the streets, Morgan's Men—the proudest blood in the land—every gallant trooper getting his welcome from the lips and arms of mother, sister, sweetheart, or cousin of farthest degree. But where was Dan? She had heard nothing of him since the night he had escaped capture, and while she looked right and left for him to dash toward her and swing from his horse, she heard her name called, and turning she saw Richard Hunt at the wheel of her phaeton. He waved his hand toward the happy reunions going on around them.

"The enforced brotherhood Miss Margaret," he said, his eyes flashing, "I belong to that, you know."

he lied swiftly.

"Dan is out on a scout. I don't think he has got back yet. I'll find out."

Margaret watched him ride to where Morgan stood with his mother in the midst of a joyous group of neighbors and friends, and, a moment later, the two officers came toward her on foot.

"Don't worry, Miss Margaret," said Morgan, with a smile. "The Yankees have got Dan—and have taken him away as prisoner—but don't worry, we'll get him exchanged in a week. I'll give three brigadier-generals for him."

Tears came to the girl's eyes, but she smiled through them bravely.

"I must go back and tell mother," she said, brokenly. "I hoped—"

"Don't worry, little girl" said Morgan again. "I'll have him if I have to capture the whole State of Ohio."

Again Margaret smiled, but her heart was heavy, and Richard Hunt was unhappy. He hung around her phaeton all the while she was in town. He went home with her, cheering her on the way and telling her of the Confederate triumph that was at hand. He comforted Mrs. Dean over Dan's capture, and he rode back to town slowly, with his hands on his saddle-bow—wondering again. Perhaps Margaret had gotten over her feeling for that mountain boy—that Yankee—and there Richard Hunt checked his own thoughts, for that mountain boy, he had discovered, was a brave and chivalrous enemy, and to such, his own high chivalry gave salute always.

He was very thoughtful when he reached camp. He had an unusual desire to be alone, and that night, he looked long at the stars, thinking of the girl whom he had known since her babyhood—knowing that he would never think of her except as a woman again.

So the Confederates waited now in the Union hour of darkness for Bragg to strike his blow. He did strike it, but it was at the heart of the South. He stunned the Confederacy by giving way before Buell. He brought hope back with the bloody battle of

Perryville. Again he faced Buell at Harrodsburg, and then he wrought broadcast despair by falling back without battle, dividing his forces and retreating into Tennessee. The dream of a battle-line along the Ohio with a hundred thousand more men behind it was gone and the last and best chance to win the war was lost forever. Morgan, furious with disappointment, left Lexington. Kentucky fell under Federal control once more; and Major Buford dazed, dismayed, unnerved, hopeless, brought the news out to the Deans.

"They'll get me again, I suppose, and I can't leave home on account of Lucy."

"Please do, Major," said Mrs. Dean. "Send Miss Lucy over here and make your escape. We will take care of her." The Major shook his head sadly and rode away.

Next day Margaret sat on the stile and saw the Yankees coming back to Lexington. On one side of her the Stars and Bars were fixed to the fence from which they had floated since the day she had waved the flag at them as they fled. She saw the advance guard come over the hill and jog down the slope and then the regiment slowly following after. In the rear she could see two men, riding unarmed. Suddenly three cavalymen spurred forward at a gallop and turned in at her gate. The soldier in advance was an officer, and he pulled out a handkerchief, waved it once, and, with a gesture to his companions, came on alone. She knew the horse even before she recognized the rider, and her cheeks flushed, her lips were set, and her nostrils began to dilate. The horseman reined in and took off his cap.

"I come under a flag of truce" he said gravely, "to ask this garrison to haul down its colors—and—to save useless effusion of blood," he added, still more gravely.

"Your war on women has begun, then?"

"I am obeying orders—no more, no less."

"I congratulate you on your luck or your good judgment always to be on hand when disagreeable duties are to be done."

Chad flushed.

"Won't you take the flag down?"

"No, make your attack. You will have one of your usual victories—with overwhelming numbers—and it will be safe and bloodless. There are only two negroes defending this garrison. They will not fight, nor will we."

"Won't you take the flag down?"

"No!"

Chad lifted his cap and wheeled. The Colonel was waiting at the gate.

"Well, sir?" he asked, frowning.

"I shall need help, sir, to take that flag down," said Chad.

"What do you mean, sir?"

"A woman is defending it."

"What!" shouted the Colonel.

"That is my sister, Colonel," said Harry Dean. The Colonel smiled and then grew grave.

"You should warn her not to provoke the authorities. The Government is advising very strict measures now with rebel sympathizers." Then he smiled again.

"Fours! Left wheel! Halt! Present—sabres!"

A line of sabres flashed in the sun, and Margaret, not understanding, snatched the flag from the fence and waved it back in answer. The Colonel laughed aloud. The column moved on, and each captain following, caught the humor of the situation and each company flashed its sabres as it went

(Continued on Page 33)



AMERICAN AGRICULTURIST

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(See Page 34)

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EXCEPTIONALLY FINE MAMMOTH Bronze Turkeys. Hardy, vigorous, free range stock with massive frames and finest markings. Eggs 10-\$7.50. Infertiles replaced. MAPLE DRIVE FARM, Dansville, N. Y.

LIVESTOCK ADVERTISING

After the issue of March 30th advertisements for livestock (cattle, swine, sheep, horses and goats) will not be accepted for the classified page.

All livestock advertising will be grouped together on one page under the heading "LIVESTOCK - BREEDERS". A special reduced rate of 50c per agate line, or \$7.00 per column inch, will be given this type of advertising.

In figuring the cost of your advertising seven words of type will average a line. Make some allowance of space for proper display.

This action is taken for the convenience of readers and also to make livestock advertising of greater value in the columns of AMERICAN AGRICULTURIST. This display advertising, while producing better results for advertisers will, in most instances, cost no more than classified.

MINIMUM SPACE—Four lines averaging 28 words costing \$2.00 for each insertion is the smallest order accepted.

COPY must be received eleven days prior to the issue in which the advertisement is to appear.

TERMS—Cash must accompany all orders for less than \$10.

REFERENCES either from your bank or from two reputable business men in your community are required from new advertisers. These references are required for the protection of both our readers and other advertisers.

For further information in regard to livestock advertising write—Advertising Department, AMERICAN AGRICULTURIST, 461 Fourth Ave., New York City.

SEEDS—NURSERY STOCK

PEACH AND APPLE TREES \$5; \$7.50 per 100 and up. Complete assortment fruits, berries, vines, ornamental trees, vines, shrubs, evergreens. Catalog in colors free. TENNESSEE NURSERY COMPANY, Box 102, Cleveland, Tenn.

PEACH AND APPLE TREES \$5 per 100 and up. Fruits, ornamental trees, vines. TENNESSEE NURSERY CO., Box 202, Cleveland, Tenn.

HIGH GRADE SEED Potatoes—Russets. Green Mountain, Gold Coin, Cobbler, Banner, Walter Raleighs and Carman No. 3. Prices right. Catalog free. THE KEYSTONE POTATO FARMS, Richfield, Pa.

100 MASTODON EVERBEARING \$1.85. 300, \$5. Illustrated Plant, Seed Catalogue free. CHAMPION ORIGINATOR, New Buffalo, Michigan.

CERTIFIED GREEN MOUNTAIN Seed potatoes. Nearly free from disease. Priced right. GLENN CARTER, Marathon, N. Y.

CERTIFIED SEED POTATOES. Smooth and Russet. Buy direct from one of New York's Premier growers, car lots or less. A. A. WEEKS, Locke, N. Y.

Additional
Classified
Advertising

On
Page
34

HANDY ANDY Says "Here's How"

How to Make Good Concrete

By Ray Inman





Livestock



Breeders



CATTLE

CATTLE



Build Up A High Producing Herd

Life is too short to waste time on inferior dairy cattle when a herd of high producing cows may be developed at very low cost. The Department of Agriculture estimates that the average production of dairy cows in America is 180 lbs. of butterfat. In 1927 all registered Jerseys officially tested for 365 days averaged 528.90 lbs. of butterfat and 9,925 lbs. of milk.

For free illustrated booklets on Jerseys and dairying, write

The American Jersey Cattle Club
324E West 23rd Street New York, N. Y.

FISHKILL FARMS offer the following BULL CALVES

sired by that highly bred bull—KING PIEBE 19th, a grandson of the great K.P.O.P.

FISHKILL DEKOL JENNIE PIEBE
FISHKILL VEEMAN PIEBE

both born January 25, 1929

FISHKILL DEKOL JENNIE PIEBE is out of Fishkill Jennie DeKol, she being a granddaughter of that famous sire Dutchland Colantha Sir Inka, on her dam's side, and a great granddaughter of the same sire on her sire's side.

FISHKILL VEEMAN PIEBE is out of Fishkill Inka Veeman DeKol, another granddaughter of Dutchland Colantha Sir Inka on her dam's side, and a great granddaughter of the same eminent sire on her sire's side.

It will be difficult indeed to find a better buy than we offer here, considering the high breeding and price of each

\$100.00
F.O.B.

Offered
subject to
prior sale

For full details of pedigree, terms of sale, etc., write

FISHKILL FARMS HENRY MORGENTHAU, JR., Owner
461-4th Ave., New York, N. Y.

6 COWS, 11-12 year old heifers, 6 bulls 3 to 18 months old. 4 calves 3 months old, 2 registered guernsey calves 3 months old TB Tested.
SPOT FARM, TULLY, N. Y.

WANTED—Three Grade Holstein or Guernsey Cows, TB tested, under 6 years old, to freshen in March. Write to LOEB HOME, East View, N. Y.

SWINE

Pigs From Reliable Stock

Buy where quality is never sacrificed for quantity. We sell only high grade pigs, fast growers, that will prove a good investment—thrifty and rugged, having size and breeding. Will ship C.O.D.

Chester and Yorkshire—Berkshire & Chester
7 to 8 weeks old, \$3.75
8 to 10 weeks old, \$4.25

Satisfaction guaranteed, or money refunded. 10 days trial allowed. Crates supplied free. A. M. LUX, 206 Washington St., Woburn, Mass. Tel. Wob. 1415.

BEST GRADE Chester, Berkshire and Poland China Pigs. 3 months old, \$12.00 each; 6-8 weeks old, \$7.00 each. (Express Paid). Bred Sows and Boars. C. E. BOSSERMAN, York Springs, Pa.

When writing Advertisers
Mention American Agriculturist

Additional Classified Advertising

WANTED TO BUY

WANTED—HAY, GRAIN, Potatoes, Apples, Cabbage, Carloads. Pay highest market prices. THE HAMILTON CO., New Castle, Pa.

WANTED TO BUY old bags. We pay excellent prices. Write for prices. We pay freight. OWASCO BAG CO., Rochester, N. Y.

FARM EQUIPMENT

ROOFING PAPER, 3-ply, \$1.35 per roll, 100 sq-ft. Prepaid. Asphalt shingles, roofing, paint. Send for price list. WINIKER BROS., Millis, Mass.

EXTENSION LADDERS, 20 to 32 ft. 25c per ft. 32 to 40 ft. 27c per ft. Freight prepaid. ARTHUR L. FERIS, Box A, Interlaken, N. Y.

BUY—DAIRY BARN Equipment direct from Factory; also other farm needs. Address HERBERT J. MILLER, Box 112, Skaneateles, N. Y.

PRINTING—STATIONERY

MAPLE LABELS—Four sizes: \$1.85, \$2.30, \$2.75, \$3.00 per 1000, postpaid. Samples! HONESTY FARM PRESS, Putney, Vermont.

250 BUSINESS ENVELOPES printed postpaid \$1.50 calling cards 10c. WALTER G. COLLINS, Cohocton, N. Y.

GUMMED MAPLE LABELS—Positively stick to tin, beautifully printed in colors. Maple price lists. Samples free. PRINTER HOWIE, Bechenplain, Vt.

Holstein Bull Calves

From high producing Dams. Our herd size five nearest yearly—tested Dams average 12.22 lbs. Butter, 28,000 lbs. milk. BOULDS & CAMFIELD, Nicholville, N. Y.

REGISTERED GUERNSEY HEIFER calves and Shetland ponies. STEPHEN KELLOG, Burdette, N. Y.

SWINE

FARMERS BUY FROM FARMERS

Let us suggest to you as breeders the best kind of a pig to start to raise is a good one. You save time and money. We sell all pigs with a trial of two weeks, and then if dissatisfied, return pigs and we will return your money.

7-8 wks. old, \$4.00 ea.; 8-10 wks. old, \$4.50 ea. Breeds—Chester and Yorkshire cross, and Berkshire and Chester cross. Crating free. These prices F.O.B. our depot. Will ship any number C.O.D. or send check or money order.

MISHAWUN STOCK FARM,
MISHAWUN ROAD, WOBURN, MASS.
P. S. No pigs sold at the farm; only by appointment.

PIGS FOR SALE OLD RELIABLE STOCK

Heavy legged, square backed, Chester and Yorkshire crossed, Poland China and Chester crossed, Barrows, boars or sows—8 to 10 weeks old, \$4.00 each. Fancy Berkshires, also Chester Whites, 2 months old Sows and unrelated Boars, \$5.00 each. 10 days trial or your money back. Shipped C.O.D. Crating free of charge. Yours for quality hogs.

ED. COLLINS, 35 Waltham Street, LEXINGTON, MASS.

WOOL—HIDES—FURS

WANTED—RAW FURS, Rabbits, Especially good Muskrats, \$1.75. Also want live Rabbits, Muskrats, Minks, Foxes, Raccoons, STERNS FUR CO., New Brunswick, N. J.

TOBACCO

HOMESPUN TOBACCO: Chewing 5 lbs. \$1.50; Smoking 5 lbs. \$1.25. Fifty cigars \$1.75. Pay when received. Pipe free. FARMERS UNION, Paducah, Ky.

HOMESPUN TOBACCO Chewing 5 lbs. \$1.50, Smoking 5 lbs. \$1.25. Pipe free, pay when received. FARMERS ASSOCIATION, West Paducah, Kentucky.

LEAF TOBACCO—Good sweet chewing, 3 lbs., 90c; 5, \$1.25; 10, \$2.00. Smoking, 3 lbs., 60c; 5, 90c; 10, \$1.50. UNITED FARMERS, Mayfield, Kentucky.

CIGARS—From factory, trial 50 large Perfectos, postpaid \$1. SNELL CO., Red Lion, Pa.

WOMEN'S WANTS

PATCHWORK 7 POUNDS Percal, Gingham Assorted colors \$1; 4 lbs. Creton Sample pieces \$1; 4 lbs. Blanket Remnants \$1; 4 lbs. Silk and Cotton rug strips \$1; 3 lbs. Silks beautiful colors \$1; Pay postman plus postage. Large package silks 25c postpaid. NATIONAL TEXTILE CO., 661 Main St., Cambridge, Mass.

FOR SALE: Switches, etc., Combing made up. Booklet. EVA MACK, Box 298, Ithaca, N. Y.

The Little Shepherd of Kingdom Come

(Continued from Page 32)

by, while Margaret stood motionless.

In the rear rode those two unarmed prisoners. She could see now that their uniforms were gray and she knew that they were prisoners, but she little dreamed that they were her brother Dan and Rebel Jerry Dillon, nor did Chad Buford or Harry Dean

American Agriculturist, March 9, 1929 dream of the purpose for which, just at that time, they were being brought back to Lexington. Perhaps one man who saw them did know: for Jerome Conners, from the woods opposite, watched the prisoners ride by with a malicious smile that nothing but impending danger to an enemy could ever bring to his face; and with the same smile he watched Margaret go slowly back to the house, while her flag still fluttered from the stile.

(To be Continued Next Week)

Additional Classified Advertising

SEEDS—NURSERY STOCK

CERTIFIED SEED POTATOES, Irish Cobblers and original strain Carman No. 3. Buy direct from grower. Write today for prices. N. A. BAKER & SONS, Fairport, N. Y.

CERTIFIED HEAVYWEIGHT POTATOES, N. Y. State test 99.5 free from disease, yield 324 bushels per acre. RATH BROS., Pittsford, N. Y.

HARDY ALFALFA SEED 93 per cent pure, \$10. bushel; Sweet Clover 95 per cent pure, \$4.50. Return seed if not satisfied. GEO. BOWMAN, Concordia, Kansas.

CERTIFIED LATHAM AND HERBERT RASPBERRIES, Howard 17 and Mastodon Strawberries, Washington Asparagus. Other leading varieties Raspberries, Strawberries, Blackberries, Fruit trees, Shrubs, Evergreens, etc. Prices low. Everything guaranteed. Send for price list. BERT BAKER, Hoosick Falls, N. Y.

C. O. D. FROST PROOF Cabbage plants. Leading varieties now ready. 500, 65c; 1000, \$1.00; 5000, \$4.50. FARMERS PLANT CO., Tifton, Ga.

CERTIFIED BERRY PLANTS, Columbian purple also Kansas, Cumberland, Plum Farmer, Black Caps. Prices 60c doz. \$3. hundred delivered. CHAS. WHEELER, Mannsville, N. Y.

SEND NO MONEY. C.O.D. Frost proof Cabbage and Onion plants. All varieties now ready. 500, 65c; 1000, \$1.00; 5000, \$4.50. STANDARD PLANT CO., Tifton, Ga.

CABBAGE PLANTS, NOW Ready. My frost proof Cabbage plants will head three weeks earlier than home grown plants. Varieties: Jersey and Charleston Wakefield, Succession, Flat Dutch, Golden Acre and Copenhagen Market. Prices by parcel post postpaid: 500, \$1.25; 1000, \$2.25. Express: 100, \$1.00; 5000, \$4.50; 10,000, \$7.50. Bermuda Onion plants same prices as Cabbage plants. Roots wrapped in moss and shipped promptly. Satisfaction Guaranteed. P. D. FULWOOD, Tifton, Ga.

STRAWBERRY, BLACK, PURPLE and Red Raspberry plants, let us mail you our circular, giving description and prices. Our plants are strictly fresh dug from new fields. F. G. MANGUS, Maple View, N. Y.

CERTIFIED SEED POTATOES, Smooth rural type. High yielding strain, grown by APPLETON BROS., Canandaigua, N. Y.

FREE SAMPLE CLARAGE SEED CORN—Clarage produced world's highest yields. Write Dunlap & Son, Williamsport, Ohio.

PAY THE POSTMAN. Send No Money. Frostproof Cabbage and Onion plants. Leading varieties, 500, 65c; 1000, \$1.00. ALBANY PLANT CO., Albany, Ga.

GLADIOLUS BULBS, inch up, blooming size. 100 delivered by post \$2. Send for list of newer named varieties. J. F. MUNSELL, Ashtabula, Ohio.

DAHLIAS—25, \$2.00; 75, \$5.00; not labeled. 20, \$2.00; 60, \$5.00; labeled. Perennial phlox, mixed, mammoth scarlet cannas, 15, \$1.00; 50, \$2.00. MRS. HOWARD HOLSINGER, Denton, Md.

SEED POTATOES, Fillmore Certified Rurals, a few first generation Michigan Russets. Grown in high New York altitude. \$3.50 per bag of 2½ bushels, subject to prior sale. 30% deposit required. CALEY'S COOPERATIVE CO., Cortland, N. Y.

EARLY VEGETABLE PLANTS. Frostproof Cabbage: Wakefields, Copenhagen, Golden Ace, Flat Dutch, Bermuda Onions, Beets, Lettuce. Postpaid: 100, 40c; 500, \$1.25; 1000, \$2.25. Collect: 1000, \$1.00; 5000, \$4.50. Tomato Plants: Earliana, Bonny Best, Baltimore. Postpaid: 100, 50c; 500, \$1.50; 1000, \$2.50. Collect: 1000, \$1.75; 5000, \$7.50. Write for prices on Potato, Pepper, and Egg Plants. Carefully Packed, Varieties Labeled, Delivery Guaranteed. PIEDMONT PLANT CO., Albany, Ga.

FARMS FOR SALE

ON STATE ROAD in Albion, Orleans County, N. Y. 132 acres, 76 tillable, 30 acres muck. 7 room house, barn 60x40 with silo. Buildings just newly shingled. 8 acres apple orchard. Here is an opportunity for one with available capital to buy right both as to price and terms. Write Geo. A. Miller, Albion, N. Y.

EXCELLENT DAIRY and alfalfa farm for sale. ½ mile from improved road. 165 acres, 115 tillable. Land just slightly sloping. Large fields, easily worked with heavy machinery. Large house, cow barn, silo, several hen houses. Excellent dairy farm. 100 tons hay sold this year. Easy terms and at low price. Interest 5% on mortgage. Inquire of D. M. Snyder, Auburn, N. Y.

LIVE GOOD WHILE MAKING A GOOD LIVING ON THE DEL-MAR-VA PENINSULA. Low-priced, productive land. Town and waterfront homes. Three to ten hours to largest Eastern markets by motor or Pennsylvania Railroad. Very little snow and freezing. Finest concrete highways. Good Schools, low taxes. Handsome descriptive booklet, FREE. Address 164 Del-Mar-Va Building, Salisbury, Md.

TO SETTLE ESTATE 157 acres dry, level, highly cultivated land. Fruit, water, wood, good buildings, basement for 40 cows, silo. Six miles from city, near R. R. station. A. D. ROBSON, R.D. 7, Rome, N. Y.

AMERICAN AGRICULTURIST Classified Ads get results. Try one.

MISCELLANEOUS

USED CIVIL WAR ENVELOPES with flags, designs, etc., \$1 to \$15 paid. Other stamps on envelopes before 1871 bought. W. RICHMOND, Cold Spring, N. Y.

PURE HONEY. Satisfaction guaranteed. 5 lbs. clover, \$1; 10, \$1.90; buckwheat \$1.65. Prepaid. C. N. BAL-LARD, Valois, N. Y.

WANTED USED BAGS any quantity and grade. Highest prices and freight paid. HOFFMAN BROS. BAG CO., 39 Gorham St., Rochester, N. Y.

FARMERS' "EVERY-DAY-PAY-DAY-PLAN." You can make \$30 to \$150 weekly distributing Whitmer Products to your friends. Experience unnecessary. We teach you how free. Earn while learning. Team or car needed. Write today for Farmers' "Every-Day-Pay-Day-Plan." THE H. C. WHITMER CO., Columbus, Indiana, Farm Dept. 12.

LEARN AUCTIONEERING at home. Every student successful. SCIOOL, Box 707, Davenport, Iowa.

FOUR HUNDRED BEE hives, new and used, Bournville type. One four basket reversible honey extractor. International three ton truck. Hydraulic hoist, pneumatic tires, in good shape. ARTHUR POLLOCK, Sprakers, N. Y.

CANARIES, CLOSING OUT Sale. THERESA HILLAND, Andover, N. Y.

BARRELS OF SLIGHTLY damaged crockery—Hotel chinaware — Cookingware — Glassware — Pottery. E. SWASEY COMPANY, Portland, Maine.

SUPERIOR GRAFTING WAX for Successful grafting. 1 lb. 50c; 3 lbs. \$1.25 postpaid. D. VICTOR MFG. CO., So. Weymouth, Mass.

KODAK FILMS DEVELOPED 5c roll. Prints 3c each. Trial offer. Beautifully mounted 8x10 enlargement 40c. Overnight service. YOUNG PHOTO SERVICE, 409 Bertha St., Albany, N. Y.

OUR 1929 CATALOG just from press. 84 pages showing Largest Line of Poultry Supplies in the world (Over 350 items). Write today for your copy FREE. BROWER MFG. CO., Dept. H 1, Quincy, Ill.

PIGEON BANDS, SAMPLE and prices free. JOHN HATHAWAY, 20 Rutland St., New Bedford, Mass.

SURE POP RICE, Pop corn, 10 lbs. \$1.50 delivered 3rd. zone. GEO. BOWDISH, Esperance, N. Y.

KILL THE LICE. Battenkill Farm Louse Powder almost 100% active ingredients. Two large boxes for \$1. Satisfaction guaranteed. BATTENKILL FARM, Greenwich, N. Y.

FARMS WANTED

WANTED LARGE DAIRY and general farm fully equipped to work on shares by experienced farmer with own help. Write fully what you have to offer. AMERICAN AGRICULTURIST, Box 25.

FARM WANTED. A farm of about 100 acres, on good road. Equipped for dairy farm, must be reasonable, and small down payment, preferably central or south Jersey. Send full details in first letter and photo if possible. J. S., e/o American Agriculturist.

HELP WANTED

RELIABLE MEN WANTED to sell guaranteed trees, shrubs and roses. Steady work. Pay weekly. Start now for Spring business. Wholesale and retail. WEBB NURSERY CO., Rochester, N. Y.

EVERY HOME A PROSPECT. Make big money. Employ crew. Take orders trees, shrubbery. Work entire year. All or part time. Complete cooperation. Landscape service. Com. paid weekly. We deliver, collect. Apply WILLEMS, SONS' NURSERIES, Desk A, Rochester, N. Y.

AGENTS WANTED TO sell roof-coating. Reliable product, easy to sell. Large profits. WINIKER BROTHERS, Millis, Mass.

EXPERIENCED FARMER FOR general farm work. Must be good cattle man. P. O. Box 4, Schenectady, N. Y.

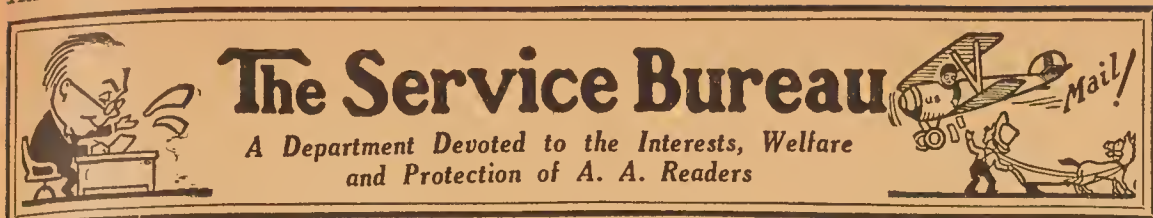
AGENTS—Make \$25-\$100. weekly, selling Comet Sprayers and Autowashers to farmers and Autoists. All brass, throws continuous stream. Established 35 years. Particulars free. RUSLER CO., Johnston, Ohio. Box C 12.

AGENTS: \$16 day and New Buick Auto Free. Sell groceries. Over 400 items used daily every home. Steady all year job. Your own groceries about half price. Send for samples. HARLEY COMPANY, Dept. C-2255, DAYTON, OHIO.

\$50 WEEKLY. MEN wanted to demonstrate and take 10 orders daily direct from motorists. Amazing Magnetic Trouble Light. Sticks anywhere! More orders, bigger pay. Write for demonstrator and particulars. MAGNO, Beacon Bldg., Dept. 173, Boston, Mass.

SITUATIONS WANTED

DO YOU NEED FARM HELP. We have Jewish young men, able-bodied, some with, but mostly without experience, who want farm work. If you need a good, steady man, write for an order blank. Ours is not a commercial agency. We make no charge. THE JEWISH AGRICULTURAL SOCIETY, Inc., Box 4, 301 E. 14th Street, New York City.



Law Requires That Traps Be Tagged

"Some time ago a boy set some traps on my farm for skunk. These traps had no tags and I told the boy to either tag them or pull them. He told me he didn't have to as my farm was not posted. Is this so?"

ACCORDING to the New York State Conservation Law, all traps set or used for the purpose of taking any wild animal shall be stamped with the name of the owner in such a manner that the name shall be legible at all times. The fact that a man does not have

far, to allow the half-rate to apply on less than carload lots of pure-bred live stock.

When the claim was filed with the Pennsylvania Railroad Company, they immediately settled as the following letter received from our subscriber will show:

"On February 16 I received from the Pennsylvania Railroad Company \$11.00 for the adjustment on freight rates on my Percheron stallion. If it had not been for the AMERICAN AGRICULTURIST I never would have been able to collect it. I am very much pleased with your service, and a friend of the AMERICAN AGRICULTURIST.

"I have been a reader of the AMERICAN AGRICULTURIST for a long time and expect to be one in the future. I enclose many, many thanks for your service rendered."

Pennsylvania State Police Have Radio Station

THE following information has just come to us from the Pennsylvania State Police and we are publishing it with the thought that this might be of interest to our readers:

"It might be of interest to you to know that Station WBAL operated by the Pennsylvania State Police broadcasts on 1540 kilocycles, is a 500 watt broadcasting station, and daily at 10:30 A. M., 1:30 P. M., 4:00 P. M., and Monday and Wednesday evenings at 7:00 broadcasts information of much value to farmers. This station is maintained for educational and police purposes only. Therefore, we are able to devote more of our time to the purpose than the average station. We thought this might be of interest to you."

his land posted does not give the man a right to hunt or trap there without permission. However, it is a good idea to post your farm as this would make anyone's presence there for hunting or trapping purposes, a violation of the law.

Does J. H. Towle Co. Owe You Money?

"I am sending you a protested check for \$108.09 from J. H. Towle Company of Boston, Mass. At Christmas time I shipped them 224 lbs. of turkeys and in due time received this check which was protested due to insufficient funds. Can you help me?"

AT present we hold two protested checks against this firm, and our letters remain unanswered. Inquiry through the Boston Better Business Bureau reveals that the J. H. Towle Company went into bankruptcy January 18, 1929. This company started business about May or June, 1928, but Towle had previously been in business for seventeen years under the name of Towle and Hilliard. The case is in the U. S. Bankrupt Court in Boston under the name of J. H. Towle & Company and if any of our subscribers should desire to file their claims with them it should be done immediately.

Subscriber Gets Freight Rebate On Purebred Stallion

"I purchased a purebred Percheron stallion in Mt. Holley, N. J. and had him shipped to Great Meadows, a distance of only 95 miles. I am informed that some railroads have a special freight rate on breeding stock. Will you please collect one-half of what they charged for me?"

WE are informed by one of the breed associations that the half-rate on livestock for breeding purposes applies on all railroads within the state of New York as that state comes within what is known as the Trunk Line Territory. The states of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island and Connecticut are included in what is known as the New England Freight Association territory and no railroads within this territory have agreed so

Have You Claims Against Eppolito Bros.

THE New York State Department of Agriculture and Markets has announced that Eppolito Brothers, formerly commission merchants doing business at 92 West Market Street, Buffalo, New York, have gone out of business and that anyone who has consigned produce to them on commission should file a verified statement of their claim with the Commissioner of Agriculture and Markets at 122 State Street, Albany, New York, before April 24, 1929. We urge any of our subscribers who have sent produce to this firm to send the statement to the Commissioner at the earliest possible moment.

Wiring Inspection is Important

"I signed a contract to have my house wired. After the house was wired it was to be inspected by the Board of Underwriters. When my last payment was made I was to get a certificate to show that the wiring was all right. My last payment was made in June and I have received no certificate. Will you please see what you can do?"

FORTUNATELY, this was simply due to an oversight on the part of the electric company and upon receipt of our letter giving them the facts of this complaint, they immediately sent the

Protection

THE Service Bureau censorship of advertising in American Agriculturist is primarily to protect readers against frauds, catch-penny offers and extravagant claims.

It also protects advertising. Censorship prevents HONEST advertisers from being subjected to the fraudulent competition of DISHONEST advertisers.

certificate as originally agreed. Trouble in getting a certificate of inspection can usually be avoided by insisting that it be delivered before final payment is made.

Little Opportunity for Amateur Music Writers

"I am an amateur, but I have just written a waltz tune with the lyric to it and I think it full worthy of copyrighting and publishing and I would like to know how to go about it."

WE are very sorry to be discouraging, but we are unable to assist in locating someone who would publish the song and music. All large music houses have their own writers and use very little, if any, outside material. Some concerns advertise to give assistance to song and music writers but our investigations show that they are mainly interested in getting an advance deposit.

The name WEED on every hook

Look for the RED connecting hook

Get the Grip of Steel...

When you buy WEED Tire Chains be sure to ask for "WEED". Then you will get the grip of steel. You will get chains that bite deep into mud for traction—like tractor cleats.

Genuine WEED Chains have red connecting hooks, and the name "WEED" is stamped on every cross chain. WEED Tire Chains are made by the world's largest manufacturer of tire chains... have been for over 25 years.

AMERICAN CHAIN COMPANY, Inc.
Bridgeport, Conn., U. S. A.

World's largest manufacturers of chains for all purposes

WEED CHAINS

Bargain Offer!

GENUINE WEATHERPROOF UNBREAKABLE

FLEX-O-GLASS

Pat. Pen. T.M. Reg.

3, 5 and 10 yard Cuttings—At Half Price

POSTPAID NOW ONLY **29¢** GUARANTEED

For 10 yards or more (formerly 50¢ a yard)

Extra eggs or chicks saved pay for this Flex-O-Glass Scratch Shed in a few days.

Ideal for enclosing porches, health rooms, covering screen doors, etc.

Flex-O-Glass hotbeds grow plants quicker and much stronger.

Easily nailed on barn, chicken coop, hog house and garage windows.

Here's your chance to buy genuine Flex-O-Glass, the best, strongest, most durable Ultra-Violet Ray filter made, for half its regular price. Here's your chance to put Flex-O-Glass in your poultry house windows, hot beds, on your screen porches and screen doors or to replace glass windows in your house, garage or barn—at a big saving. The Flex-O-Glass offered at 29¢ a yard is fresh and new, fully guaranteed in every way. The only difference between this and the Flex-O-Glass sold at twice the price is the length. Comes only in 3, 5 and 10-yard lengths which are the left overs from longer cuttings from our standard rolls. The supply is limited. Order today!

Lets In Healthful Ultra - Violet Rays

Keeps baby chicks warm and healthy indoors. Prevents rickets (weak legs) diseases and deaths. Gives hens June sunshine full of egg-making Ultra-Violet Rays, all winter long, while prices are high. Makes plants grow much stronger and faster when used in place of glass on hot beds. Transforms porch into a warm dry, sunlit health-room in which to work, read, rest—or ideal children's winter playroom. Saves fuel and doctor bills. Approved by thousands of users and all leading authorities. Just cut with shears and nail on ordinary window frames. Lasts for years.

ACT NOW—SAVE MONEY

Don't wait! Don't hesitate! Our stock of these 3, 5 and 10 yard lengths at 29¢ a yard is limited. Order now while the supply lasts. Enclose check or money order for number of yards wanted. We pay the postage on 10 yards or more. If your order totals less than 10 yards add 3¢ per yard for postage. Your money back if not satisfied. 24 hour service. Free book "Prevention of Poultry Diseases" comes with your order.

FLEX-O-GLASS MANUFACTURING CO.,
1451 N. Cicero Ave., Dept. 685 Chicago, Ill.

Mail This Guarantee Coupon Now

FLEX-O-GLASS MFG. CO., Dept. 685,
1451 N. Cicero Ave., Chicago, Ill.

Find enclosed \$.....for which send me.....
yards of Flex-O-Glass 36 inches wide by pre-
paid parcel post. If I am not absolutely satis-
fied after using the Flex-O-Glass 15 days I may
return it and you will refund my money with-
out question.

Name

TownState.....

The Measure of Washer Value!

On the Farm
-Everywhere



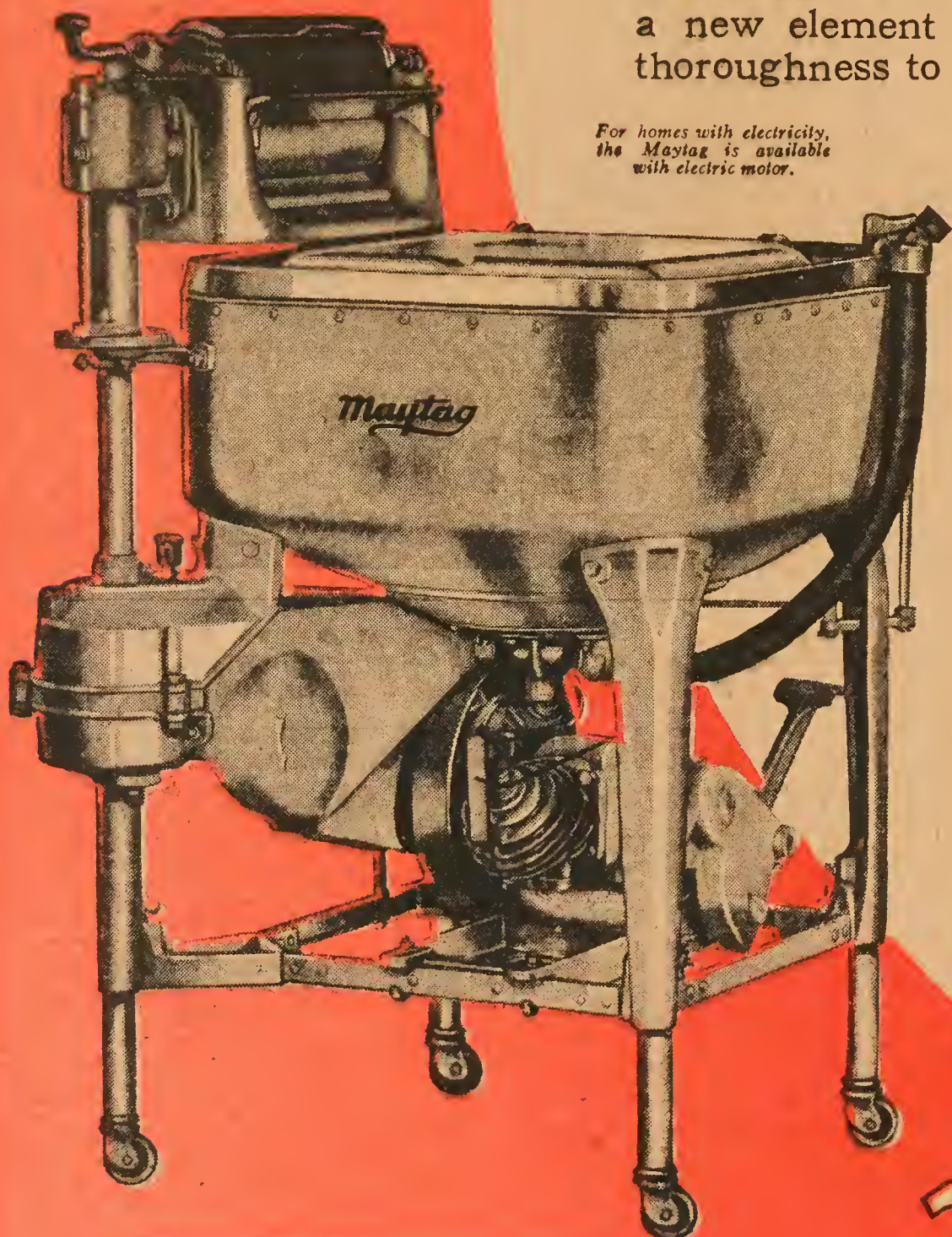
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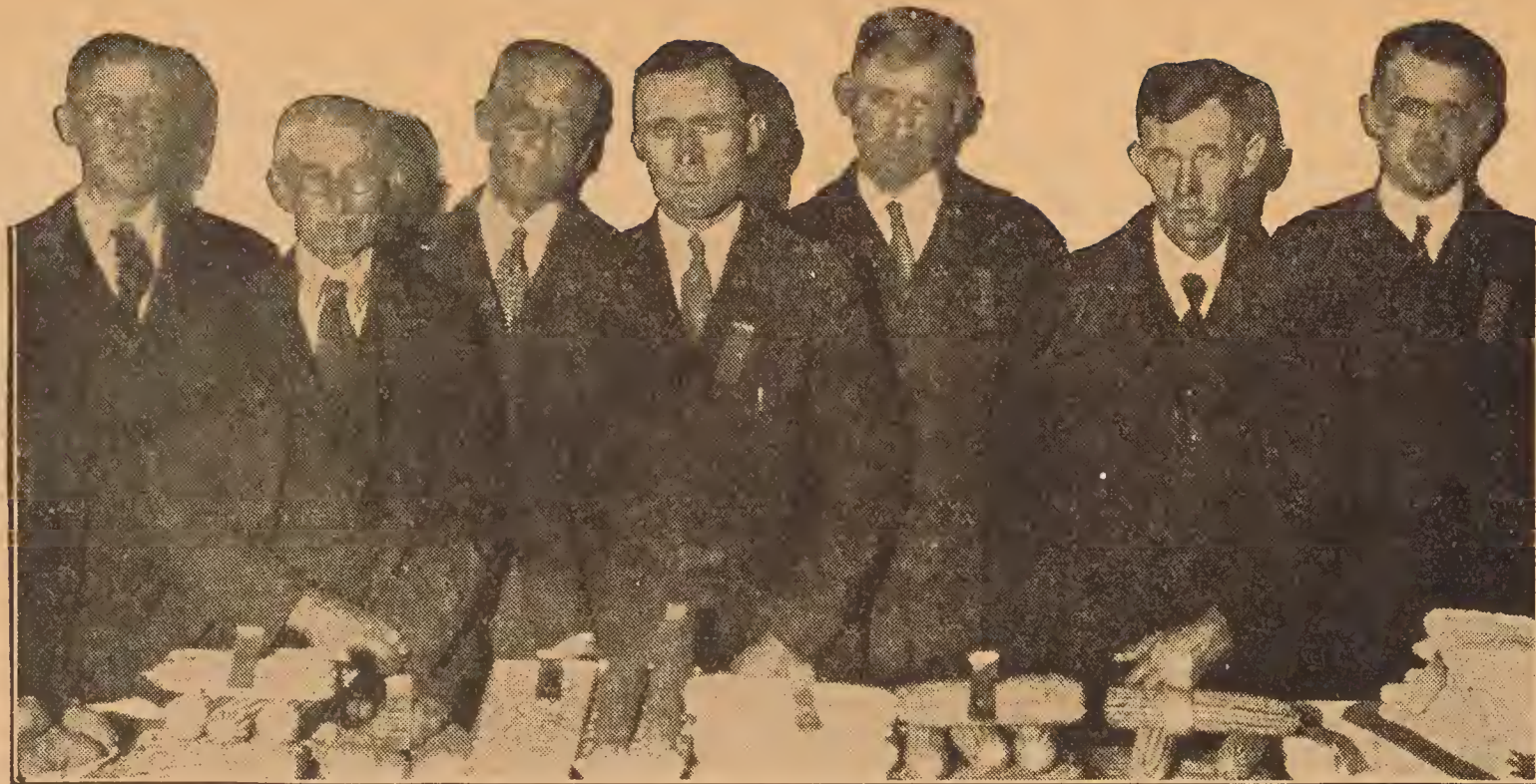
March 16, 1929

Published Weekly



Reminiscent of Pleasant Boyhood Memories of the First Big Sap Run

Use the Axe on Unprofitable Apple Trees — Page 3



These growers were prize-winners at the Midway Community Products Show, Midway, Washington Co., Pa., with crops grown with "AA QUALITY" Fertilizers. Left to right, they are Messrs. Edward Simpson, N. M. Culley, R. M. Donaldson, James Neal, J. P. Bailey, George Windsheimer, and J. D. Bamford.

PRIZE-WINNING crops prove superior crop-producing power of "AA QUALITY" Fertilizers

HERE is unique proof of the superior crop-producing power of "AA QUALITY" Fertilizers. The farmers shown above made practically a clean sweep of the prizes at the recent Midway Community Products Show, Midway, Washington Co., Pa. All of these farmers used "AA QUALITY" Fertilizers.

Such outstanding results are by no means unusual where "AA QUALITY" Fertilizers are used. For instance, Mr. Guy Beattie, of Watervliet, Albany Co., N. Y., tells in the following letter of a record yield of 1,100 bu. of spinach last season from a 1½-acre crop. Mr. Beattie says:

My field of 1½ acres is a record crop of spinach; it yielded 1,100 bu. baskets that brought me top-market prices. No manure was used. Nothing but your AGRICO for Truck ("AA QUALITY").

I have been growing all kinds of market-garden crops continuously for over 30 years on the same land, and during that time have used many different makes of fertilizers and analyses. But, for the past 15 years I have used "AA QUALITY" Fertilizers, because I found that your goods are the best. Since the introduction of your AGRICO brands, not only I, but the majority of the market-gardeners of Albany and Troy, have seen most marked results on all kinds of market-garden crops. Nov. 11, 1928. GUY BEATTIE.

Mr. Edward W. Haseley, of Sanborn, Niagara Co., N. Y., got his cauliflower to market *four weeks* earlier than the other growers in his section last year. And he got \$900 for his crop of 350 bushels (from one acre). Other growers averaged 100 bu. of cauliflower to the acre—and sold their crops for about \$1 per bu.

Mr. Haseley's use of "AA QUALITY" Fertilizer paid him an *extra* profit of \$800 on one acre of cauliflower. Mr. Haseley says:

In the Spring of 1928, I planted one acre of cauliflower, from which I harvested and sold \$900 worth of very choice cauliflower. The crop matured 4 weeks ahead of the average, and enabled me to obtain the highest market prices. Buyers called for my cauliflower. This crop was grown with "AA QUALITY" Fertilizer. The mechanical condition of your goods is always perfect. EDWARD W. HASELEY. Oct. 29, 1928.

Every farmer who wants to make the most profit out of his crops should act on these facts. "AA QUALITY" Fertilizers con-

tain the choicest plant-food materials, scientifically blended, mixed and cured to assure perfect mechanical condition.

Larger yields of better-quality crops—and bigger profits—make "AA QUALITY" Fertilizers by all odds the cheapest you can possibly buy.

See the nearest "AA QUALITY" dealer at once or write us for quotations.

What other Growers say:

Potato yield increased 50%. . . . Mr. Duke Prince, of Freeville, Tompkins Co., N. Y., writes:

I have been raising certified seed potatoes for several years, and "AA QUALITY" Fertilizers have always given me satisfactory results. I have tried other fertilizers and am convinced that the "AA QUALITY" is the best.

This year (1928) I used AGRICO for Potatoes ("AA QUALITY") on part of my crop and obtained good results, with a gain of 50% per acre. Sept. 30, 1928. DUKE PRINCE.

18½ tons of silage corn per acre, averaged 14 ft. high. . . . Mr. A. A. Phelix, of Brasher Falls, St. Lawrence Co., N. Y., writes:

For many years I have used and sold "AA QUALITY" Fertilizers. I have yet to have my first dissatisfied customers. I believe I had the champion cornfield of this section; as I challenged any agent selling any other make of fertilizer to produce or show a silage corn field that equalled it. It was not produced.

My 12-acre field will average 14 ft. high and a large percent has two matured ears to the stalk. Occasionally a man has told me he could buy goods cheaper. But usually one year's experience with "cheap" goods brought him back a full-fledged "AA QUALITY" user. Oct. 5, 1928. A. A. PHELIX.

Our "Agricultural Service Bureau," under the direction of Dr. H. J. Wheeler, formerly Director of the Rhode Island Agricultural Experiment Station, will be glad to answer inquiries about crops, soil or fertilizers. Send for our Booklets. Please state the crops in which you are interested.

"AA QUALITY" FERTILIZERS



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The QUESTION BOX

EDITOR'S NOTE: The editorial staff of AMERICAN AGRICULTURIST is always ready to aid readers by answering questions on farm problems. Questions are answered by personal letter. Only questions that are of general interest to readers are printed so it is necessary that all letters be signed with your full name and address.

Soybeans Should Be Inoculated

Is inoculation important for growing soybeans?—F. G., New York.

THE cost is so small that we certainly advise inoculation unless it is absolutely known that the legume to be grown has produced a successful crop on the soil recently. A recent test showed soybeans that were inoculated produced two and a half tons of hay and the same seed which was not inoculated produced only three-quarters of a ton. The difference in this case may be greater than would ordinarily be expected, yet we believe that in all cases the increase will be more than sufficient to pay for the cost of inoculation.

Organic Mercury Com- pounds for Vegetable Seeds

"Do the organic mercury compounds which are being advertised increase crops of vegetables when seeds are treated with them?"—W. N., New York.

THE New York State Experiment Station at Geneva has been working for some time to see just what effect such treatment with organic mercury has on vegetables. They report that supposedly healthy seeds of cabbage, radish, peas, corn, cucumbers, tomatoes and string beans gave a remarkable increase in stand when treated with organic mercury preparations and planted early in the season. This improved stand was not so noticeable when plantings were made later in the season and early plantings of lettuce and spinach did not respond as the other vegetables did. Increased yields also followed seed treatment in the case of peas, string beans and corn.

Amount of Fertilizer for Gardens

"Most of the recommendations for using fertilizer mention the amount of fertilizer to be added per acre. Can you give us any information as to the amount to add on a garden?"

WHEN we speak of adding 500 pounds of fertilizer to an acre, a plot 9x10 feet square should receive 1 pound of fertilizer. It will be very easy to figure the square feet in a garden and from this to know how much fertilizer to add. 500 pounds per acre would not be a heavy application for a garden and twice this amount might be profitable especially if applications are put on several times during the season. The amount used will of course depend on the kind of fertilizer; the more concentrated the fertilizer the less is needed in order to get good results.

Apple Trees in Production

"Are there any figures to indicate the number of apples trees in production at the present time compared with the number of trees in years past. Does the change in the number of trees agree with the change in barrels of apples produced?"—S. D., New Jersey.

THE U. S. Department of Agriculture states that the number of apple trees in the U. S. has been decreasing since 1910. For every 100 trees in the country in 1910 there were 70 trees in 1920 and 64 trees in 1925. At the same time there has been no shortage of apples and commercial production seems to be increasing. It would seem that the percentage of non-bearing trees has been reduced and that apple production has become more specialized in certain regions than it used to be.

Use the Axe On Unprofitable Apple Trees

One Way to Increase Profits--A Suggestion by One Who Has Tried It

By MALCOLM HITCHINGS

DURING the 1926-7 apple season, due to overproduction and consequent low prices and since due to poor crops and only average prices, with some notable exceptions, New York State apple growers have been searching for some path to better profits. Surveys have been made by the Farm Bureau, the Horticultural Society, the State College and various other agencies. Many plans have been devised and partially carried out that are a positive benefit to the industry. One phase that is often talked about has not in my opinion been stressed effectively enough or brought home to the good, bad, or indifferent grower. This phase is: 1. Elimination of unprofitable trees of all varieties because of age, disease, or unfruitfulness. 2. Elimination of unprofitable varieties. 3. Elimination of old uncared for trees on untenanted farms and wild trees wherever located. 4. Removal of fillers and crowding trees.

There are too many old apple trees in western New York and other sections of the state. Any tree that has not turned in a profit in the last two or three years and that is over forty years of age, should be made into firewood in the near future, the sooner the better. Those fifty to sixty years old that are not showing profitable crops should have been cut out five to ten years ago. Diseased or weak trees must go at once. There is no room for antiques in this age of new competition for young trees. All unfruitful trees should be closely examined and if vigorous, healthy, and well located might be top-worked. If not they should be removed. Many growers attach too much sentiment to the

relics of bygone days. One can travel through many counties in New York State and see farm after farm with old uncared for orchards from 40 to 100 years of age partially or completely unprofitable and in many cases barren of fruit for a period of years. Everyone would benefit

Willing to Follow His Own Advice

SOMEONE has said that "suggestions for farm relief" should head the list of products of which there are a serious surplus. Many such suggestions, however, deserve serious consideration, especially when they come from a producer. Mr. Hitchings is not only a producer, but he has the courage of his convictions and has already put his recommendations into effect in his own orchards. The Hitchings' Orchards in Onondaga County, New York are noted as an outstanding example of the successful use of sod in place of cultivation. We will be glad to have our readers comment on these suggestions.—*The Editors.*

from their removal from a disease and insect control standpoint if nothing else. This is not a plea for wanton destruction of apple trees. It is a plea for removal of all unfruitful, diseased, crowded and unprofitable trees in as short a space of time as possible.

Regarding unprofitable varieties one can check the New York City daily market reports since 1925 and make up his mind what to cut in a hurry. Such varieties as: Sutton, Rambo, Hubbardston, Fallawater, Spitzenburg, Winesap, Red Canada, Wagner, King, Seek-No-Further, Grimes, Gravenstein and many others must give

way to a few modern standard sorts or the grower will suffer. Alexander, Wolf River, Duchess, Astrachan, Jonathan, Pound Sweet, Transparent, Ben Davis and others should not be planted extensively and should be listed as varieties to be removed by growers unless they have a profitable market for them. Conditions would be greatly improved in New York if growers adopted several standard sorts such as: Baldwin, Greening, Spy, Wealthy, McIntosh, Delicious, Cortland, Rome and perhaps one or two other modern sorts for which one has an established trade.

There are many abandoned farms in New York State where the owner is merely paying taxes and is giving no care or attention. Apples grown on these farms are either taken by others, sold for cider stock or allowed to rot. These trees generally speaking do no good but do positive harm to commercial growers. Wild trees wherever located may be similarly classed. Both are insect and disease breeders of the most virulent sort, and the worthless apples produced are a constant discouragement to increased consumption. Removal might be arranged by owners cutting the trees for wood themselves, letting the cutting on shares or giving the wood away. Interested growers can oftentimes arrange for cutting both types by cooperative effort or individual action.

Probably one-half of the orchards planted prior to 1915 were planted too close together, or were planted with fillers some of which have never been removed or have been partially

(Continued on Page 11)

A New Development In Raising Baby Chicks

Battery Brooders Lessen Labor and Improve Sanitation--An Interview with Mr. P.N. Nutt

By AMOS KIRBY

MANY interesting changes have come to the poultry industry in the last few years. It is not so long ago that the task of hatching eggs and brooding chicks was left to the setting hen. Then came the incubator and the brooder stove and the old order of things was completely changed. The perfection of these conveniences had hardly become the universal way of doing things when along comes the battery brooder and another revolutionary system is likely to replace the old way of raising chicks.

This newer method of brooding chickens has probably thrown into discard more of our old ideas of poultry management than any other single factor since the perfection of the incubator. Even three years ago we used to think that the only way to grow big, strong and healthy birds was to get the chicks out on the ground where they could have plenty of space to exercise, an abundance of green food and ample room to scratch. We used to think that the chicks must be on the ground in three days and on grass in a week, otherwise we were in for a spell of trouble with leg weakness, toe picking and a host of other troubles.

We are now told by those who have had experience that we can grow a thousand chicks in a darkened cellar where the sunlight never shines. It has been demonstrated that healthy chicks can be grown under electric light. We are informed that a perfectly normal pullet can be grown without ever letting her walk upon the ground and that it is not necessary to use green feed if cod liver

oil is supplied. There are no secrets to this method as it is being used in hundreds of plants in other sections of the United States.

Despite the reports of some unfavorable experiences in the past with the battery brooder, the results of last year show that it has passed the experimental stage and is now as adaptable to the small flock owner who puts out only a thou-

sand chicks, as it is to the big broiler producer who puts them out by the tens of thousands.

Many of the difficulties encountered by the operators of battery brooders during the last two years are being rapidly overcome and indications now point towards the fact that baby chicks can now be grown as easily in a battery as under a brooder stove or with the help of the old hen.

At this point let us emphasize the unanimous opinion of battery brooder operators. Even the largest and most successful are not convinced that the time will ever come—at least it is not here as yet—when the baby chicks can be placed in the battery and left there until they are ready to market as two pound broilers or as pullets for the laying house. Practically all who have been trying out the batteries believe that after a chick has reached five or six weeks of age, it should be put out on the ground under more normal surroundings. While it has been demonstrated that it is possible to keep chicks under close confinement for twelve or fourteen weeks it is not practical under average farm conditions.

The two outstanding advantages of the battery brooder are that a more complete control of disease can be secured during the first few weeks of the chick's life and double the number of chicks can be reared in the same space and with the same amount of heat as with the brooder stove. With the proper use of cod liver oil in a properly balanced ration the chick can be reared as successfully under the

(Continued on Page 18)



This illustration explains better than words, the battery system of brooding chicks. This system saves labor and space and the chicks grow more rapidly because of complete sanitation.

Editorial Page of the American Agriculturist

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No. 123 March 16, 1929 No. 11

More Pay Will Bring More Milk

A PECULIAR, and from the standpoint of eastern dairymen, a dangerous situation exists in the New York milk market. It was thought when November was passed that the milk shortage problem was over for this year, but strange to say a big shortage developed again in February, with the result that the city authorities were forced again to give some consideration to the policy of extending the boundaries of the milk shed in order to insure a larger supply of milk during the short period. We all know what this would mean to dairymen in this territory. The question is, what to do about it.

There certainly is no doubt that if our dairymen here are to preserve this market they must do so by increasing their supply of milk during the short period. The Milk Stabilization Committee, organized to work on this problem of milk shortage, in a recent statement said: "The only ways to get more milk next fall are to retain cows that will be giving milk in the fall and that otherwise would be discarded; to ship in cows that will give milk in the fall; to delay the breeding of cows that are to freshen in the winter; to feed and care for cows so that they will give more milk in the fall; and to feed and milk three times a day in the fall. Plans should be made now to insure ample pasture or other feed in the latter part of the summer."

All of which is good advice, but again we must state that most farmers are not going to all of this extra work and expense unless they can be assured a long time in advance that it is going to pay them. *The way to get more milk during the short periods is to pay for it.*

Professor H. A. Ross of Cornell well covers this point when he says:

"Regardless of what caused the low production in November, 1928, it is obvious that fall prices have not been sufficiently high in recent years to encourage farmers to breed more cows for fall freshening, while prices have been sufficiently high at other seasons to obtain abundant supplies of milk. As a dairy region comes under the influence of a city market there is a tendency for winter dairying to increase. This normal trend has been checked in the New York milk shed because of the changed relation of winter and summer prices.

"From 1922 to 1927, the average production increased rather steadily but no progress was made toward a better seasonal adjustment of production. By stimulation of production during the entire year, more milk was obtained

in November, but for each additional can so obtained, approximately two and one-half cans were added to the June surplus.

"It is estimated that a daily supply of from 7,000 to 10,000 cans in excess of the November, 1928 production will be needed to meet the November, 1929 requirements. On the basis of 55,000 approved dairies in the New York milk shed, this means an increase of from 11 to 15 pounds per day per dairy. Such an increase is not at all impossible but to obtain it will require greater effort and more effective measures than have been employed in the past. If the effort is successful, the New York milk shed will still be faced with the necessity of making some seasonal adjustment of production if the market is to be supplied without bringing in western cream. A price policy is needed which will encourage dairymen to breed enough cows for fall freshening to just supply the fall demand without causing a surplus at that season."

"The King Is Dead! Long Live the King!"

A MERICA has just retired a successful President at his own request and is replacing him with a new one who has all the qualifications for making good on the biggest job in the world. Probably not in a generation has one President succeeded another in such an era of good feeling on the part of the people toward both of them as existed when Coolidge moved out of the White House on March 4th and Hoover moved in.

Calvin Coolidge did a good job. He earned the respect and gratitude of his people and now retires with their best wishes for a long and happy life as a private citizen. President Hoover comes into office with a training and experience equaled by few other Presidents.

One of the fine things about this country of ours is that we can fight hard for the candidate for public office that we like best, but when the fight is over we forget our partisanship in the larger knowledge that we are all American citizens. To most of us, therefore, Hoover is neither Republican nor Democrat. He is instead our President, to whom we all look for leadership, and whom we will support in confidence.

Which Is More Important?

I T is not so many years since the battle over woman suffrage waged hot and furious. Today, it seems strange that the issue was ever contested, for women have not only taken their place at the polls but also prominently in practically every walk of human endeavor.

In farming, woman's place has always been equally important with that of the man, for the home is an inseparable part of the farm business. Some time ago we announced a little contest on the subject, "Who makes the greatest contribution to the success of the whole farm enterprise, the man or the woman?" We have already received quite a few letters, but are calling attention to it again.

Just as a matter of small encouragement, we will pay \$3 for the best letter, \$2 for the second best, and \$1 each for all the others we can find room to publish. Letters should not be long and should be written plainly on one side of the paper. The contest closes March 30.

Increased Federal Indemnities

W E are glad to call attention to the announcement of the Bureau of Animal Husbandry of the United States Department of Agriculture that they have increased the maximum indemnities that may be paid by the federal government for grade and purebred cattle condemned for TB. The maximum federal share in indemnity payments for grade cattle is increased from \$25 to \$35, and the amount for purebred cattle has been raised from \$50 to \$70. This new scale became effective February 19, 1929.

We have always held that the federal government was better able to pay these indemnities than were the states and that one effective way

to bring farm relief to dairymen and cattle owners was for the federal government to increase its indemnities. These new increases will help some.

With possibly one or two exceptions, New York State leads the Union in the large payments for dairy cattle condemned for TB. Full indemnities to cattle owners are right and just, for if a farmer ever needs help it is certainly after he has lost his cattle because of TB.

What Boulder Dam Means to You

P ROBABLY many of you, when you read about the recent controversy in Congress over the big Boulder Dam in Colorado, paid little attention to it, thinking that it meant little to you. We will guarantee that you would have thought about it more if you had realized that this dam will cost something like \$116,000,000 and that one-fourth of this vast sum will be paid by the taxpayers of New York State. More than this, when Boulder Dam is completed, it will put 4,000,000 more acres into cultivation which will enter in competition with the products which you grow.

Here is another inconsistency of the federal government, which is talking about farm relief by overcoming the surplus and at the same time provides for greater irrigation enterprises which will materially increase the surplus of farm products.

Late Hay and Milk Production

W HEN one thinks of the many problems with which modern farmers have to contend, he realizes how complicated and difficult farming has become and why it takes so much skill to make a success of the business.

For example, milk production fell off very rapidly during November and December of this year, causing a big shortage in the market. One of the reasons why production declined was the feeding of late cut hay of very poor quality. Last year, as you will remember, the haying season dragged on pretty much through the entire summer. This late cut hay was put on top of the mow and was the first hay to be fed to the cows during the fall. Mixed hay cut early contains approximately 8 per cent protein and is tender and palatable, while late cut hay contains less than 4 per cent protein and is woody.

Eastman's Chestnut

D O you remember the little story in a recent issue about friend "Ridy" Hewitt, County Agent of Chemung County, New York, and his girl who complained that after she had walked several miles to the county fair with "Ridy" she finally did not get to see the fair because she was too tired to climb over the fence? Well, here's what "Ridy" has to say about it:

DEAR ED:

I have always believed in the "treat 'em rough" policy. Now if I had paid out my spondulix for a horse, then the fifty cents admission, say she wouldn't be Mrs. Hewitt now. You see, she is Scotch, too.

In speaking of Scotch stories, I think the one told by our friend, Jared Van Wagenen, is pretty good, which is as follows:

Three brothers, all industrious, were engaged in farming in the highlands of Scotland and prospered as all good Scotch men do. One of the brothers decided to go to America and try his luck. Here again he prospered and after due course of time he decided to visit the old farmstead.

Walking up the lane he observed that everything was well kept, the hedges trim, the buildings painted, the stock fat and sleek, and he thought to himself, "My brothers have also prospered."

Much to his surprise, when his brothers came out of the house to greet him, their beards were grown until they reached the waist lines, and in surprise he asked what had happened that they had so neglected their person. They answered in one voice:

"Brother, do you not remember, when you went to America you took the razor with you?"

Sincerely,
RIDY.

Readers' Opinions and Comments

On Renting Farms--Old Time Customs--Fighting Farm Fires

THE last (1925) census indicates that one-seventh of all the farms in New York are operated by tenants. Approximately one-third of the tenant farms are rented for cash, and two-thirds on shares. Most of these tenant farms are operated under a one-year agreement between tenant and landlord. About 50,000 tenants and landlords in the state are now going through a bargaining process to determine what modifications, if any, should be made in their farm rental contracts for 1929.

The old hide-bound system of renting farms on shares has changed but little since its origin. In drawing up the rental contract, precedent and custom have had more than their share in the consideration of terms. Wages, machinery costs, probable selling prices, organization of the business, and the maintenance of land and buildings have not received the emphasis they deserve. Satisfactory contracts should provide for keeping the farm in a productive state and for dividing the returns fairly.

Conditions Have Changed

The half and half share system is the most common way of renting farms in New York. The tenant often furnishes the work animals and equipment, pays for all the labor, and one-half of the current operating expenses. The landlord usually pays the taxes, insurance, expenses for farm improvements and one-half of the operating expenses. Tenants and landlords have equal shares of the receipts and increases in inventories.

The basis for this half and half share agreement is the assumption that the annual value of the use of land and buildings is the equivalent of the value of the labor and equipment necessary to operate the farm. Such a relationship may have existed some time in the past but certainly does not hold now. Land values are now 30% higher than they were in 1910, while machinery costs have doubled and farm wages more than doubled during this same period.

If the landlord, the tenant and the farm are to prosper the first and most important consideration in drawing up the new contract should be a sound organization of business. A definite long-time program should be outlined with approved cropping systems, economical fertilizer practices, wise marketing methods, and with the combination of enterprises that pays best on the farm. The better the organization of the business and the more efficiently it is operated, the greater the possibilities for favorable returns.

The second point is to have a mutual understanding of what each party is to contribute to the various enterprises of the business. For example: Who shall furnish the equipment, cattle, horses, or other livestock; the fertilizers, lime, spray materials, fuel and oil; and who shall pay the taxes, insurance, expenses for seeds, feeds, machinery repairs and purchases, building repairs and farm improvements?

The third consideration is a fair division of returns. At the present time where tenants are furnishing all of the labor, the horses and tools, and paying one-half of the current operating expenses they are contributing about three-fifths of the total costs of such crops as cabbage, potatoes and apples. For the hay and small grain crops, they are contributing one-half of the costs. Even though the tenant may own none of the dairy cattle, they are contribut-

ing more than half of the cost of producing milk.

Some Owners Have Made Concessions

During the past few years landlords have made some concessions in sharing items of expense which tenants formerly paid. Some landlords have succeeded in keeping good tenants by contributing part of the labor cost and taking over the payment of taxes and other items which were formerly shared. Relatively few changes have been made in the division of returns. If a fair division of returns is desired, one way of getting this would be to share the returns from each enterprise on the basis of each party's contribution to that enterprise. If tenants are contributing three-fifths of the costs of the intensive cultivated cash crops, they should have three-fifths of the returns. If they contribute only two-fifths, they should get only two-fifths of the returns. A good organization of business is often difficult to build up because of the insistence on a 50-50 split on all enterprises.

Generous cooperation between landlord and tenant is necessary in the matter of sound organization of business, reduction of costs, wise marketing of crops, and the adoption of equipment and practices that present production demands.—J. F. HARRIOTT, *New York State College of Agriculture.*

* * *

Farm Memories

THE article in AMERICAN AGRICULTURIST by Jared Van Wagenen, Jr., takes me back to my boyhood days sixty-five to seventy years ago. I am now eighty-one years of age. How time does fly!

I remember plowing with an ox team when I was not tall enough to lift the yoke on the neck of the ox. I would rest the yoke against the ox's neck and then put the bow on his neck, and then hold up the yoke for the other ox to come under, and then finish. I have often thought what the young boys today would think of plowing with an ox team.

Regarding how many acres of grain a man could cut a day, I do not know for I never measured what I cradled in one day. The boys of today do not know what it is to get up in the morning, go out and mow until noon. I did it a good many years before mowing machines came. The first one we had was the Dodge four-foot cut.

What a changed country in sixty years! A good many farms have been cleared up since

then. I live at the foot of Elk Mountain, on the north peak. The government has erected a fire tower on the highest point in eastern Pennsylvania.

We used to go down to the west of Carbondale after coal. I got a load of chestnut coal for ninety cents. It was an individual mine. The coal was dumped on an iron grate, broken up with sledges by men, and screened by a horse going around on a sweep power. I have heard others tell of getting all the lump coal they could put on their sleighs for one dollar.

How many have helped their mothers with their weaving? I used to spool the warp for woolen cloth that she wove. She made bobbins of straw paper wound around the spindle with paste to make it stick together. She would put a skein on the swifts and I would put a quill on the spindle of the quill wheel and fill the quill. This was put into the shuttle for the filling cloth. My mother used to spin flax for thread and linen cloth.

What a difference there is now. They made their own cloth for pants and underclothes, also for woolen dresses. Now they go to the store and get any garment they want.—M. D. G. W., *Pa.*

* * *

We Thank You!

MR. MORGENTHAU and yourself deserve and are fully entitled to our fullest meed of praise for the AMERICAN AGRICULTURIST as it is today under your splendid, progressive management. It is constructive and clean, and the entertaining department of chestnuts links the past with the present.

With sentiments of highest regard for your entire staff and with wishes for your abundant prosperity, I am W. D. R., *Pa.*

* * *

Fighting Farm Fires

YOUR letter by H. R. T. in the February 2nd issue prompts me to mention a plan that is used in some sections here to reduce the loss from fires in rural communities which seems to be on the increase.

Taking a town as a unit they purchase fire apparatus at town expense and have it located in some central village where good roads are available to nearly all parts of the town. By this plan a fire can be reached in a few minutes nearly any time of year and while the building which is burning may not be saved other buildings nearby usually are.

I would think it best to make the community large enough to purchase fairly good large chemical apparatus rather than too small to be effective. Our nearby village usually sends its equipment to farm fires but it is more particularly fitted for water protection which is lacking in most rural sections. If the town owned the apparatus all would feel an interest in it and free to call on it for protection. As an officer in an insurance company we are anxious to decrease our losses which have been increasing for a year or two.—W. G. C., *New York*

* * *

Filled With News and Stories

I AM very much pleased with the paper. It is the first farm paper that I ever got interested in. Lots of good news and good stories. I will always take it as long as I live.—F. W. D., *New York.*



Pa Abraham Gibson, 85, of Rossville, S. C. issues the following defy to the world. Pa has 18 children—so to speak—ranging from 61 years to 16 years, nine of whom are boys, and of course, the other nine are girls. Says Pa, he'll back his sons as a base-ball team against any team of brothers in the country, and he'll back his family basketball team of five of his girls against any basket ball team of sisters. And, while challenging the world, Pa will himself meet any man over fifty in a joust at checkers, or at heel cracking. Pa can jump into the air and crack his heels twice before he returns to earth.

KING CORN

*must not
be dethroned*

IN MANY sections where he has reigned for years, the King of Money Crops is facing a struggle for supremacy.

Too many stunted and barren stalks. Too many nubbins. Too many disease-stricken and soft ears. Too much of the crop that doesn't grade. Too much profit lost through poor quality and low yield.

What's the trouble? Depleted soils. Insufficient plant foods. Unbalanced rations. Slow, faltering growth. Not enough nitrogen, phosphorus and potash to start the plant quickly and rapidly bring it to the silking stage, sturdy and strong. Not enough to force the early setting of a long, full-grained ear. Not enough to plump up the cells and develop a healthy, disease-resisting plant. Not enough hours to mature the undernourished crop before the days grow short and the sun's rays lose their magical summer warmth.

Unfavorable crop results follow whenever proper steps are not taken to replenish soil minerals that constant crop-growing takes away.

We have long studied these things; maintained close co-operation with farmers and agriculturists, and have perfected means, through scientifically balanced fertilizers, to improve fertility and restore crops to former quality and heavy yields.

Armour's *Big Crop* High Analysis Fertilizers are offered with the confident assurance that they will meet your needs. High analysis is stressed to lower your buying cost—for it is plant foods you want most, not bulky tonnage-making, bag-buying, freight-increasing filler. Timely and complete availability are assured through plant foods carefully selected. Proper ratio is exactly determined. Excellent mechanical condition is provided to assure uniform application. Plants can't thrive from an overabundance of one plant food and a dearth of others—a condition often resulting from uneven mixing, lumpiness and poor drillability.

Armour dealers are prepared to help you in the selection of the most suitable *Big Crop* Fertilizer analysis for your particular soils. You can command their services freely. If you do not know who your Armour dealer is, write us.

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President

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A.A.'s Western New York Farm and Home Talk

Diseases and Insects Must Be Controlled

IN the production of good fruit nothing is of more importance than the effective control of insects and diseases. Therefore spraying is an essential operation in fruit growing, and for spraying that produces the desired control,

By M. C. BURRITT

shoot out their seed pods each of which



M. C. Burritt

knowledge of what one is spraying for, the right materials, timeliness and good equipment are necessary.

Entomologists tell us that there are from 365 to 500 insect pests which affect the apple. In addition, there are many diseases. The cumulative effects of spraying have eliminated all but a very few of these pests, as serious ones. Persons who think that spraying may be unnecessary or ineffective should reflect on what might have been, had all these numerous pests been permitted free development. As it is, our spraying practice has limited the really serious insects and diseases which affect apples in New York and most parts of the northeast to three: apple scab, codlin moth, and rosy aphid. In some localities there must be added bud moth, leaf roller and perhaps red mite. But where the regular spray schedule of lime sulphur, 2½ gallons, arsenate of lead, 2½ pounds, nicotine sulphate, one pint, with water to make 100 gallons, has been consistently followed, especially in the delayed dormant, pre-pink and calyx sprays, scab, codlin, moth, and aphid will usually be found to be the only serious pests yet to be dealt with. In some localities bud moth and leaf roller have become so bad, either through neglect or improper control measures, that they must be dealt with by extra or special treatments.

EDITOR'S NOTE: A large proportion of the eggs of the leafroller and red mite can be killed by using an oil spray just before the buds open.

The research work of college and experiment station men brought to us by farm bureau extension service, leaves growers little excuse for not knowing just what to spray for, its life history and vulnerable points, and how to deal with it effectively. We had such a local community meeting attended by 75 growers here this past week which was addressed by Professor Mills of the College, on Diseases, and Professor Parrott of Geneva, on Insects. I want to review briefly some of the things they said about our principal pests. In another issue I want to discuss the question of control measures and timeliness.

Apple scab winters over mainly on dead leaves. In the spring, when moisture and temperature conditions are right the old scab spores open and

contains normally eight fruiting bodies. As one leaf may have 2000 to 3000 spores on it, it will be seen that the air may be literally filled with millions of these seeds of scale when conditions are right. This is usually after a continued rain if it is warm enough. The cooler it is the longer it requires to open and shoot the spores. For example at a temperature of 44 degrees it would require about 15 hours of continuous wetting, while at 60-70 degrees four hours would do the trick. These scab seeds or spores are blown through the air great distances and settle down over the leaves and young fruits. Here they root again if conditions of moisture and heat are right.

Spray Must Cover

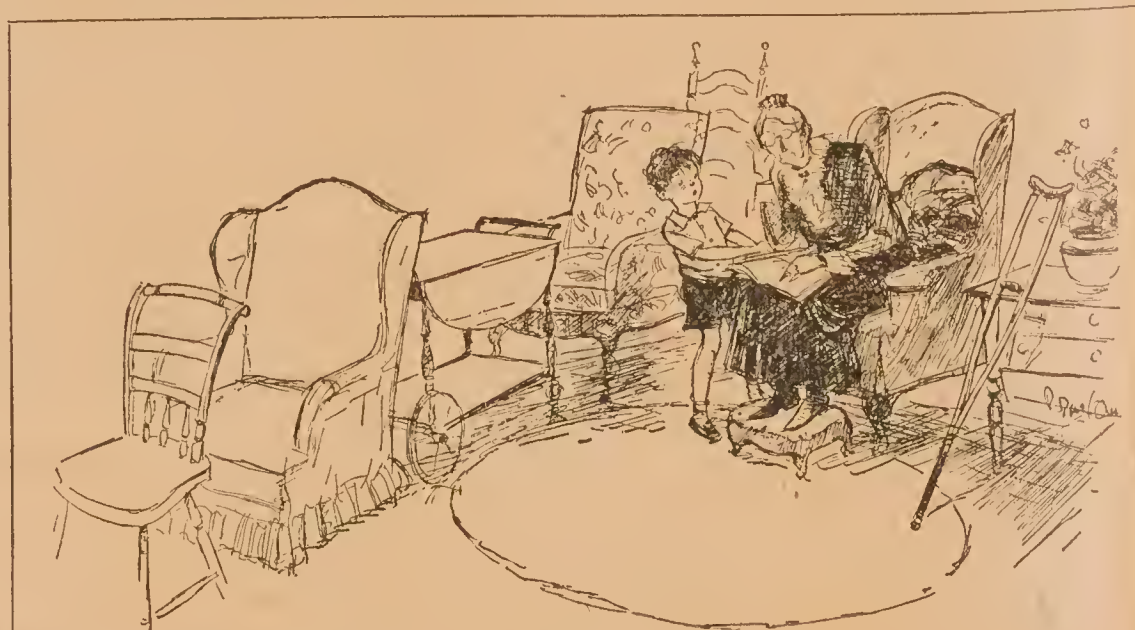
The whole point of spray control is having a coating of lime sulphur over the leaf and fruit surface where the seed lands so that it will be killed before it can root. The greatest danger is in the so-called delayed dormant, through the pre-pink, to the calyx periods, as practically all the scab spores (90% at least) have been shot by about May 15th. That is why these sprays are so important. Unless it is controlled at this time, infection and scabby fruit cannot be prevented. Spraying does not eliminate scab once it is established. Then it can only prevent its further spread. As the scab on the new leaves grows it develops a new crop of seed. But the seeds are held on stems which are only loosened by water and splashed by rain to other leaves and fruits. They are not wind-blown like the early shooting spore seeds. Every reader will see at once how vital this knowledge of apple scab is to intelligent spraying.

Sources of Help

I see that my space will not permit of a similar rough sketch of the life history of the insect pests so I must leave them for another time. I hope that many readers have and are using Geneva Circular 109 on Bud Moth and Bulletin 561 on Leaf Roller. The Annual Report of the Horticultural Society with its up-to-date information, its practical questions and answers, which will soon be coming from the Secretary, is one of the best sources I know of to get just the information a good fruit grower ought to have.

March came in with a touch of spring in the air. The first real thaw since the Christmas holidays took off most of the snow. A robin or two has been heard. It won't be long now—to the season of renewed life.

Sweet clover plowed under for wheat increased the yield of wheat nearly one half in experiments on the Northeastern Ohio Experiment Farm at Strongsville, Cuyahoga County.



"Now, Grandmother, let's have your chair. It's going to be the locomotive."—LIFE.

Your feed dealer

*his profits depend on you
your profits depend on him*

THE progressive feed dealer is a man who believes in the partnership principle of modern business. He knows that he must consider you as a partner and act as a partner if he is to make money.

Good feeds are as essential to your profits as hens are to eggs. And your profits are essential to his success. So your feed dealer *must* supply you with the very best in feeds—feed that he knows is good, feed that will yield you a handsome profit.

He must do so because his business is at stake. The business that he has spent time and thought and care in building...the business that has become a part of him. But there is an even more powerful reason than mere necessity behind the fine service he renders you. He supplies you with good feed because he *wants* to.

He knows you personally and takes a personal interest in your success—the interest of a friend. His advice, his wealth of practical experience and his store of theoretical knowledge—all are at your service. He does everything that he can, either by word or action, to further your success.

All his special knowledge is called into play when he selects his feeds. Naturally, he chooses feeds that have been thoroughly tested, both for formula and purity, both in the laboratory and on the farm. His experience tells him that feeds of this type will earn greater profits for you.

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All seeds are new and fresh and have been grown especially for us. Our money back guarantee protects you against risk. The collection consists of: Beans, Peas, Beets, Lettuce, Cabbage, Tomato, Radish, Onion, Cucumber, Parsnips, Endive, Sweet Corn, Turnip, Egg Plant, Parsley, Pepper, Squash, Flower Seeds: Nasturtium, Asters, Snapdragons, Cosmos, Zinnia, Marigold, Morning Glories, Four-o'clocks, Sweet Peas. Each packet is guaranteed to be regular full 10c size, thereby making this a very sensational offer. Order today while the supply for this introductory bargain offer lasts—Act at once, because this bargain is sure to be snapped up by many readers of this magazine.

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Write for catalog and prices.



With the A. A.
Vegetable and
Crop Grower

Growing Radishes in Hotbeds

In making hot beds of lime and straw instead of manure, in what quantity do you use lime with straw for a 3x6 sash to get good heat for raising tomato plants.

I am thinking of raising radishes in hot water heated hot beds for winter market. What is the usual method of planting radishes in a hot house, in rows or broadcast and how thick?—Mrs. L.R.H., New Jersey.

I HAVE never heard of the use of lime and straw instead of manure for hotbeds and I doubt if this method would be feasible. Some attention has been given to the making of artificial manure from straw by keeping it wet and by adding superphosphate and perhaps other chemicals to the compost pile. I doubt if this would ferment vigorously enough to heat hotbeds very well. I am inclined to believe that you could have better satisfaction with the use of hot water heat as you propose for your radishes.

Hot house radishes are usually planted in rows 3 to 5 inches apart. A stand of 12 plants per foot seems to be about right. This means sowing the seed perhaps 15 or 18 per inch. You might find it profitable to sift your radish seed in the interest of an even stand and even maturity. A screen with 10 meshes to the inch or with 1/10 inch openings seems to be about right. This will take out a larger proportion of some lots of seed than of others.—PAUL WORK.

Spray and Dust for Blight

I want to know if a potato sprayer or a duster is the best for the blight. I was thinking of getting a three-row duster. Do you think the material they sell ready mixed is all right? I was wondering if the three-row would do the work.

THERE is a considerable difference of opinion over the relative merits of spraying and dusting. From all of the reports that come to us it seems that the best possible method of controlling insects and disease is to have both a sprayer and duster and use whichever seems best depending upon weather and circumstance. The advantage of dusting is that the work can be done rather quickly and where water is scarce dusting is a big advantage. However, best results from dusting come from putting it on early in the morning when the dew is still on the leaves.

Some growers get very good results from dusters and say that they will never spray again and some have exactly the opposite experience. We suggest that you talk with neighbors who have tried both of them out and get their experience before you decide which you will buy.

Growing Hubbard Squash in Sweet Corn

I am thinking of planting Hubbard Squash as an inter-crop in my sweet corn fields this year. Do you think this is practical? The New York market demands Hubbard Squash but there are so many different strains and types that I am at a loss to know which to plant. Perhaps you can advise.

Do you see any reason why pepper plants purchased from Maryland should not be as satisfactory as plants purchased from northern New York. Have you any information on the storage of peppers, cucumbers, or egg plants? I am now referring to a cold storage with temperature about 32 degrees.—D.C., New York.

I SEE no reason why you should not grow Hubbard squash and sweet corn on the same ground, although I think I would confine my trial to fairly early corn as the shade might be objectionable later on, and I would not plant the corn too thickly. This is a thing which you had better try out on a small scale, as I do not know of any one who has followed it through very closely.

We have not had many strains of

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Champion SPARK PLUGS

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Hubbard squash in our trials and I do not believe that I can do better than to recommend some of our good market garden seedsmen with whom you are already acquainted. You might consider the Green Hubbard, the Blue Hubbard and the Kitchenette. The Blue Hubbard is considered by many to be of somewhat better quality than the ordinary type. The Kitchenette is a considerably smaller Hubbard than the ordinary and I think is very desirable from the standpoint of grocery trade.

Southern Grown Plants Satisfactory

I know of no reason why pepper plants from Maryland should not be just as satisfactory as those grown in northern New York, provided they are good plants. This means that they should be grown from good seed, should be free from disease and insects and should be short stocky plants. There has been a good deal of uncertainty regarding plants secured from southern growers, but if you know a reliable concern, there is no essential reason why you should not receive satisfaction. It is important that the shipper of the plants make a good job of packing them.—PAUL WORK.

Vegetable Varieties for New Jersey

Vegetable varieties best adapted to home gardens and commercial plantings in New Jersey have just been announced by the department of vegetable gardening, New Jersey Agricultural Experiment Station. The complete list follows:

ASPARAGUS:

Washington Strains, Reading Giant, Palmetto.

BEANS:

Bush, Green: Stringless Green Pod, Bountiful, Black Valentine.

Bush, Yellow: Improved Golden Wax, Currie's Rustproof.

Pole, Green: Kentucky Wonder, or Old Homestead.

Pole, Yellow: Golden Cluster.

Bush Lima: Fordhook.

Pole Lima: King of the Garden, Challenger.

BEET:

Early: Crosby's Egyptian, Early Wonder.

Late: Detroit Dark Red.

SWISS CHARD:

Lucullus.

CABBAGE:

Early: Jersey Wakefield, Copenhagen Market, Golden Acre.

Mid-season: Succession.

Late: Danish Ballhead, Flat Dutch.

CARROT:

Chantenay, Danvers Half Long.

CAULIFLOWER:

Snowball.

CELERY:

Golden Plume.

SWEET CORN:

Early: Whipple's Early White, Vanguard.

Second Early: Howling Mob.

Late: Late Mammoth, Long Island Beauty, Country Gentleman.

Yellow: Golden Bantam, Whipple's Early Yellow.

CUCUMBER:

Davis Perfect, White Spine, Early Fortune.

EGGPLANT:

New York Improved, Black Beauty.

LETTUCE:

Spring: Black Seeded Big Boston, Unrivalled, White Big Boston (Joslin Strain).

Fall: Improved Big Boston.

MUSKMELON:

Early Knight, Hearts of Gold, Fordhook.

PARSLEY:

Dark Moss Curled.

PARSNIP:

Hollow Crown.

PEAS:

Little Marvel, Laxtonian, Telephone, World's Best.

PEPPERS:

Ruby King, Squash, World Beater, California Wonder.

TOMATO:

Early: Earliana.

Second Early: Bonny Best, Chalk's Early Jewel, Marglobe.

Late: Greater Baltimore, Matchless, Stone.

Pink: Acme, Globe.



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4. Smooth grain pan which causes the chaff to rise to the top as the grain moves toward the sieves. Here the chaff is easily blown off. An exclusive Case feature and a great aid to fast and thorough cleaning.

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Our Golden Bantam Corn Is Extra Early
Whipple's Giant Golden Corn of Delicious Quality
Early Morn and Pioneer Peas Unsurpassed for Family Use

Feb. 25, 1929, I find Early Morn and Improved Telephone peas the standby for our market—Your Gregory Tomato made quite a hit here—They prove all you claim for them. Geo. S. Wilson, Maine.

Jan. 25, 1929, Mrs. J. M. Miller, Jr., Lexington, Vt.—Your Gregory Tomato is the only tomato that ever ripened on the vines in our garden in Northern Vermont.

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A FARMER out our way

... decided not to feed his stock. Look at the money he'd save. Figured it all out ... so much per week per head. A great idea!

The day before the last one died they took the farmer off to a big house over the hill. Wife says they let her go to see him every Tuesday. Thinks he's beginning to show a little improvement now.

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With the A.A.
Crop Grower



Better Potatoes, Profitably Produced

EDITOR'S NOTE:

The following discussion of our potato marketing problem is part of a talk given by Professor Hardenburg, over Radio Station WHAM of Rochester. We will be glad to have our readers comment on the program suggested by him.

By E. V. HARDENBURG
New York State College of Agriculture

planted, up to 20 bushels per acre; more general use

EVER since last October regional potato conferences have been held in various parts of the country to provide ways and means for most economically and profitably handling this year's big potato crop. Resolutions have been passed by both grower and shipper organizations urging a reduction in acreage for 1929; better grading, in order that only first quality potatoes shall be shipped to market; passage of both national and state potato grading laws; more extensive use of cull potatoes for livestock feeding; and calling attention of the public to the food value of the potato in the diet. Such measures as these are unquestionably appropriate for a year of overproduction. However, they neglect the fact that these are likely to result in only a temporary response to meet a current emergency and the necessity of a more forward-looking program which will help stabilize the industry in the future.

Growers Plan to Reduce Acreage

Intentions to plant, as already reported for the southern and southeastern states, indicate a reduction of almost 30 per cent in acreage for 1929. If such a reduction is made in the northern late-crop potato states and actually materializes in the southern states, a year of unfavorable growing conditions would almost surely result in potato prices so high in the fall of 1929 as to cause a reaction in the opposite direction, resulting in overproduction and ruinously low prices in 1930. These facts merely point the need for a more constant potato acreage throughout the important potato states.

Competition among our leading potato states for our large eastern markets has now become so keen that profit or loss in potato production is contingent principally upon two factors; namely, low cost of production per bushel and good market quality. The Empire State has many initial advantages in potato production over such competing states as Maine, Idaho, Minnesota and Michigan. The finest potato markets in the world are almost at our doorstep, hence it is a fact that these competing states are able to put their product on the same markets in increasing volume because of better market quality alone. The New York grower may seriously ask himself whether the potato as a cash crop, which has for many years ranked with milk, eggs and fruit, shall continue in his scheme of farming. If his answer is in the affirmative, then he must immediately address himself to the proposition of meeting competition through the adoption of recommended practices and offer his product to the market in such form as will leave no room for criticism on the basis of quality.

Looking Ahead

The New York State College of Agriculture after carefully considering the present status of potato growing in New York, has this year outlined a simple, forward-looking, long-time potato extension program which, in essence at least, takes for its slogan, "Better Potatoes Profitably Produced."

Among the recommended practices which are absolutely essential, both to the reduction of cost and improvement of market quality, are the use of standard varieties only; shorter rotations with legume or other green-manure crops; the use of disease-free, high-yielding seed; more efficient seed treatment; better storage and curing of seed; an increase in the amount of seed

of high grade fertilizers properly applied; more efficient spraying or dusting for blight control; and more efficient cultivation. Experienced potato growers will at once recognize the fact that no program of efficient potato production can possibly omit the use of good seed properly treated and the growing crop efficiently sprayed or dusted. As a chain is no stronger than its weakest link, so it would hardly profit a grower to invest in expensive seed without insuring its protection against disease and insects.

Poor Quality Hurts All Producers

At this point it is well to state that there are many potato growers in New York who annually struggle with 1 to 5 acres of this crop under conditions quite impossible from the standpoint of efficiency or profit. Such growers are commonly located on poorly adapted soil and because of their small volume of business can not afford modern potato machinery and other equipment which successful production demands. Yet these growers are a potent factor in our total production and too often they are producing, at a loss, inferior potatoes which act as a 'drag' on the more progressive growers by adding inferior goods to an already overstocked market. The elimination of these less efficient growers should benefit both themselves and the industry at large.

The program outlined above is being carried to the grower mainly through the farm bureau organizations throughout the state. Several of the important potato counties have appointed potato project committees as a part of the farm bureau organization and it is through these committeemen that an attempt is being made to enroll hundreds of growers to adopt recommended practices, perhaps for the first time in 1929.

Potato Grading Law Proposed

Many growers feel that a state potato grading law would help solve our present troubles in respect to poor market quality. A bill to provide such a law will probably be introduced in the legislature in February, similar to that which was introduced in 1927 and 1928. Such a law would undoubtedly involve many difficulties so far as its administration is concerned. Sentiment of potato growers in western New York is particularly keen for the possible advantages which might accrue from such legislation. Growers should inform themselves of the provisions of this bill and having done so, make their desires known to their representatives in the legislature through the State Farm Bureau Federation or otherwise.

On January 22nd, at the annual meeting of the State Vegetable Growers' Association at Utica, N. Y., 11 Premier Potato Growers were awarded gold medals by the Empire State Potato Club. These awards were well earned as a result of success in a potato growers' contest, based upon cost of production per bushel, yield of U. S. No. 1 grade potatoes and total yield per acre. The Empire State Potato Club, in completing its first year, has honored these 11 growers for successfully doing exactly what every potato grower in New York might well attempt to do. A part of the lesser informed public has frequently criticised our colleges and experiment stations for their encouragement of better production practices on the basis of a preconceived notion that the ultimate result is overproduction. Such criticism, ill founded as it may be, is now being met by our present state potato program and the aims of the Empire State Potato Club through the slogan, "Better Potatoes Profitably Produced."



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K-R-O can be used about the home, barn or poultry yard with absolute safety as it contains **no deadly poison**. K-R-O is made of Squill, as recommended by U. S. Dept. of Agriculture, under the Connable process which insures maximum strength. Two cans killed 578 rats at Arkansas State Farm. Hundreds of other testimonials.

Sold on a Money-Back Guarantee. Insist upon K-R-O, the original Squill exterminator. All druggists, 75c. Large size (four times as much) \$2.00. Direct if dealer cannot supply you. K-R-O Co., Springfield, O.

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And you get the right fruit because both we and the Massachusetts Fruit Growers' Association certify the Kelly tree to be "True-to-Name."

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KELLYS'
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True to Name Fruit Trees

DEPENDABLE

Fruit Trees, Grape Vines, Berry Plants,
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APPLE TREES

Baldwin, Cortland, Delicious, Greening, McIntosh Red, Northern Spy, Wealthy, 2 yrs., 4 to 5 ft., 25c each. \$20.00 per 100.

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Elberta, Hale, Rochester, Yel. St. John, 3 to 4 ft., 20c each; 2 to 3 1/2 ft., 15c each; \$10.00 per 100.

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2 yrs., 15c each, \$8.00 per 100

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Many other items at special prices. All stock offered strictly first-class, fresh dug and guaranteed absolutely true to name. Catalog free.

THOMAS MARKS & CO.

Nurserymen and Fruit Growers
"The Home of Good Nursery Stock"
Wilson, Niagara Co., N. Y.

Use the Axe on Unprofitable Apple Trees

(Continued from Page 3)

removed. A grower can increase the value and profitableness of his orchard greatly by cutting fillers and crowding trees *before* they crowd. Left too late the fillers weaken the permanents materially in a very few years. If there is doubt about cutting fillers it is best to err on the removal side and cut them because the supposed reduction in yield will never take place if two or three years are averaged. Orchards of Baldwin, Spy, Greening and other spreading sorts set 20 to 25 feet apart are huge mistakes. It is more butchery to let them stay in a crowded condition than it is to cut them. Trees of this sort should be 35 by 40 feet apart, at least after reaching 25 years of age. A method of removal of filler or crowding trees that eases the conscience although in many cases not as beneficial as supposed is the process of "slicing" the sides of the trees to be removed. In doing this competing side branches are cut back or off to allow for proper development of color on fruit on the permanent tree.

Removing the Veterans

In the removal of trees too old, those nearing unprofitable age, weak or diseased trees, and others not strong enough to graft, two methods are possible. The first is complete removal by the axe and saw. This may be spread over several years taking out the weakest first or annually. If the grower hasn't the heart to cut his great big unprofitable trees he may sidestep or compromise by setting out a new young tree beside the old one and also plan on an annual removal of part of the old ones.

If one has good strong trees with fairly vigorous frame-work but of the wrong variety or trees otherwise unprofitable, it is strongly recommended that they be top-worked to some one of the six or seven standard sorts that will show profit. This gradually eliminates the undesirable and does not entirely sacrifice production meanwhile.

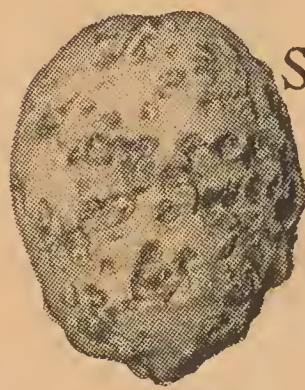
Action is needed. Some good growers have done their share; others have not. Cooperative action of commercial growers together with positive propaganda from the press, Farm Bureau, Horticultural Society, and College with other agencies is needed. This forward step should be brought forcibly to the attention of small growers, the inefficient grower, owners of small farm orchards, the marginal grower, and those who take no care of their orchards. If commercial growers hope to increase their profits it is their place and duty to start and finish a program of removal of all inefficient, unprofitable trees in their community, and county at once. It is these worthless and unprofitable varieties and the old trees producing off-grade fruit that have so large a bearing on the prices on the good sorts. There are thousands of "boarder" or "liability" trees in the state. The elimination of a liability or an expense is the quickest method of reducing cost. Reduced cost allows larger margins of profit.

A Program Requiring Courage

The firm with which the author is connected completed removal of 1600 Sutton trees last year closing a ten-year removal program. We have also eliminated many odd sorts in the last ten years besides cutting hundreds of wild trees. We are now working on a removal or top-working program on all Hubbardston, King, Wagner, Jonathan, Gravenstein and some others. We are cutting about 100 filler and crowding trees yearly. It takes determination to remove one-half of the 25-30 year old Northern Spy trees in an orchard that is in full bearing just to gain better color, vigor, and production on the other half. Strange to say in practice when the trees are taken out over a five-year period production seems to be increasing and quality is keeping pace with the ratio of removal.

High production means little unless it is accompanied by careful marketing.

One Fifth of American Potato Crop Ruined by Disease



Seed Treatment this quick easy way controls important diseases and produces larger and better crops.



AT LEAST half of all seed planted by American potato growers carries disease; even certified seed is often infected. Dr. Wm. H. Martin, of the New Jersey Experiment Station, writing in the *American Produce Grower*, warns: "There is no state that does not permit at least 10% of scab and Rhizoctonia."

That's your handicap—right from the start! You can never be sure that you have planted disease free seed. But you can *control* the more important seed-borne diseases if you will do just one simple thing. Treat all seed with Du Bay Semesan Bel—the *instantaneous* dip disinfectant.

An Easier Safer Treatment

Semesan Bel is effective against surface-borne Rhizoctonia, black leg and scab, and protects the seed piece against soil-borne organisms. Harmless even to sprouted seed, which other treatments often injure. Surface-borne black rot and scurf or soil stain of sweet potatoes are also controlled with this treatment.



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For chaps, cuts, cracked or sore teats—for Caked Bag, Bunches, Inflammation of the Udder, and other troubles of the milk-producing organs Bag Balm insures quick healing, comfort, easy milking. For all farm healing Bag Balm is thorough and inexpensive.

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DAIRYMAN



How a High Producing Pennsylvania Herd Was Developed

By PAUL P. KORB

THE Purebred Holstein herd of Roy S. Bowen, Wellsboro, Pennsylvania, which won state honors in herd improvement work in 1927 with an average of 15,500 pounds of milk and 490.9 pounds of butterfat, came back in 1928 making an average of 20,400 pounds of milk and 656.5 pounds of butterfat.

Three years ago Mr. Bowen consulted the writer regarding the purchase of a family of cows consisting of a dam and five daughters, one of which was a calf. Knowing the history of this family I advised Mr. Bowen to purchase this group for the handsome sum of \$2400 for which he gave his note. He started home with this fine family of cows with his head high, confident of victory with the equipment at hand to fight a good battle.

Mr. Bowen and his wife with all the courage and vigor of youth started the next day to lay their plans for the future. The cows were given good care during the first winter, the next season the old barn was remodeled and a comfortable, practical dairy barn was the result. That fall the herd was placed in a Cow Testing Association with the results as published above.

Success Stimulates Further Effort

Mr. Bowen attended the dairy meeting at Harrisburg during the 1927 Farm Products Show where he received a silver cup from the Holstein-Friesian Association of America for having the highest average production with Holstein cattle in Association work. Fired by this encouragement Mr. Bowen returned home to his good wife where another resolve was made, namely to improve the past record by a substantial margin and the record for 1928 is the result.

Gwenie Prilly Pontiac, 339371, who derives thirty per cent of her blood from King of the Pontiacs, the only double century sire, had previously made an A. R. S. O. record in a small farm herd, under a man who had never tested before, of 903.43 pounds of butter and 20,228.4 pounds of milk in 305 days carrying twin calves 208 days. This grand old cow has had eleven calves, seven of which were females, and six of which are in Mr. Bowen's herd. The five daughters in milk have produced an average of 21,381 pounds of milk and 681.7 pounds of butterfat during the past year.

Three of the daughters are sired by Blaeres Pershing Pontiac, 249099, who is a son of Cornucopia Ormsby Lad, 144370, the best son of O. K. L. The other two daughters are sired by Charlevoix Ormsby Finderne King, 360987, who is a son of S. P. O. M. 40th and out of Kolrain Deane Finderne, 291571, a daughter of the great sire, Finderne Pride Fayne. The sixth daughter, a calf is sired by Meadow Holm Pontiac Pet, a proven son of Pet Concorde 2nd, 79453, with 23,682 pounds of milk and 1011 pounds of butter to her credit made at ten years of age.

The individual records of production of the herd are as follows:

Cow's Name	Age, Years	Lbs. Milk	Lbs. Butterfat
Wanda	7	27,255	946.0
Wilda	7	21,213	682.1
Winnie	3	22,879	630.4
June	4	19,210	608.0
Arelene	5	16,348	542.0
Gwenie	12	15,964	488.9
Elsie	7	17,641	585.2
Sadie	9	14,231	471.7

Elsie and Sadie Vale were in the herd only nine months of the year.

Wanda's production has probably never been equalled in herd improvement work any where in the country.

The present herd sire, Count Maxie Posh, 528229, is a son of the first prize show bull at New York State Fair, (Continued on Opposite Page)

It's easy to erect a UNADILLA

Any handy man can, with the help of a boy, erect a Unadilla Silo easily and quickly. Its few simple parts fit together perfectly and you have no additional cost for extra hired help.

The time and money saved through this one feature of the Unadilla is but the first proof of your wise choice. Order now. Discount for cash and early orders. Ask for free catalog—and literature on tubs, tanks and vats.

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THE Universal Natural Milker duplicates, as nearly as possible, the actual milking action of the calf—

— combines a gentle, massaging action (a soft rubber liner takes the place of the calf's tongue) with a low-vacuum suction — just like the calf.

This is one of the reasons why so many thousands of the better farmers and dairymen use Universal Milkings.

Write for free 24-page catalog.
THE UNIVERSAL MILKING MACHINE CO.
Dept. AA, Waukesha, Wis. or Syracuse, N. Y.
Eastern Factory Branch, 125 E. Franklin St., Syracuse, N. Y.



Two Types: Double and single units.

alternates-like milking by hand...

Universal natural milker

When writing advertisers be sure to mention the American Agriculturist.

(Continued from Opposite Page)

Count Korndyke Posh, a son of a 1100 pound cow. The dam, Sadie Butter Girl Maxie, 605338, has 1109.51 pounds of butter and 26,737.2 pounds of milk as a four and a half year old. Mr. Bowen states that his biggest problem is to get sires whose daughters will advance the work of this great family.

Herd Has Good Average Care

The herd management in this herd is only such as might be duplicated in any herd worthy of good care. The cows have been milked and fed three times daily, they are confined to average cow stalls and watered in drinking cups. The grain mixture is a good brand of twenty per cent feed. The roughage has not been very high quality and for this reason the grain is supplemented with a small amount of soaked beet pulp.

Whether this herd can pay for the feed and management may be answered in the following herd improvement summary for 1928:

Average value of product per cow...\$468.25
Total cost of feed... 183.99
Value of product above feed cost... 284.27
Returns for \$1 expended for feed... 2.55
Feed cost per 100 lbs. of milk... .90
Feed cost per pound of butterfat... .28

Whether good cows pay or not or whether they are only a "rich man's hobby" may be answered by this little hillside farmer's experience which was predicated only by faith in good cows, the using of credit and a will to do.

Mr. and Mrs. Bowen invite all people interested in good cattle to visit them on their farm when the opportunity presents itself.

How to Prevent and Treat Garget

GARGET is a trouble which has bothered dairymen to some extent for a number of years but it seems that it has been more serious for the past year or two than it has ever been before.

There are two conditions which are commonly called garget. One of them is a congestion or swelling of the udder just previous to, or at the time of calving. This condition, however, is not garget and treatment for it is altogether different. This congestion usually affects heavy producers and can be prevented to a large degree at least, by cutting down the amount of feed previous to calving and by feeding a laxative ration.

True garget, or mastitis, is infectious and is caused by bacteria. It is true that at any time during the lactation period the udder may become congested due to injury or exposure, but true garget is caused by infection.

Prevent Where Possible

The first thing of course is to prevent the disease wherever possible. If any of the cows are suffering from the trouble they should be milked last and the hands of the milker or the machine should be disinfected thoroughly before milking any other cow. The milk from the infected udder should be thrown outside the stable or yard so that it cannot serve to infect other animals. In addition to spreading the disease at milking time, the disease is commonly spread from one animal to another in the stallion row through the bedding.

Mild cases of garget can often be cured through home treatment. The first thing to do is to give a cathartic such as a pound of Epsom salts and cut the grain ration by at least a half. This can be followed by a teaspoonful of salt petre each day for three days. It also helps to massage the udder with lard, camphorated oil or some similar grease.

Milk Cows Often

The cow should be milked regularly and frequently, perhaps as often as every two hours. The animals should be kept in warm, dry quarters and the ration should be laxative and light. A milking tube is not usually advised as it is to spread the infection rather than cure the trouble.

Galactitis, the herd is one cause of a very high bacteria count and causes trouble in this way where milk is paid for on bacteria basis as well as fre-

(Continued on Page 17)



How will they MILK the last four months?

ANY GOOD COW is going to give a lot of milk right after calving. Nature sees to that.

But it takes the first half of the lactation period to pay her board. It's the last part that makes you the profit.

That's why shrewd dairymen say you can't judge any feed until you see what it produces through the *whole* lactation period.

These dairymen feed Purina Cow Chow. They have satisfied them-

selves that Cow Chow pays best through the *whole* lactation period. They have found that the proteins and minerals in Cow Chow supply exactly what they need to supplement their home grains and roughage. And they have found that the extra profit from extra milk shows up most *during the last few months* of the lactation period.

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cows—calves—hogs—steers





sheep—horses—poultry

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Write for information. Ask for a FREE copy of THE CATTLE SPECIALIST and how to get the PRACTICAL HOME VETERINARIAN

a livestock Doctor Book without cost. Find out why your cows lose calves—why they retain the afterbirth—why they fail to breed—why they have garget—why your calves have scours and goiters—why you have a shortage of milk. Veterinary Advice Free. Write to

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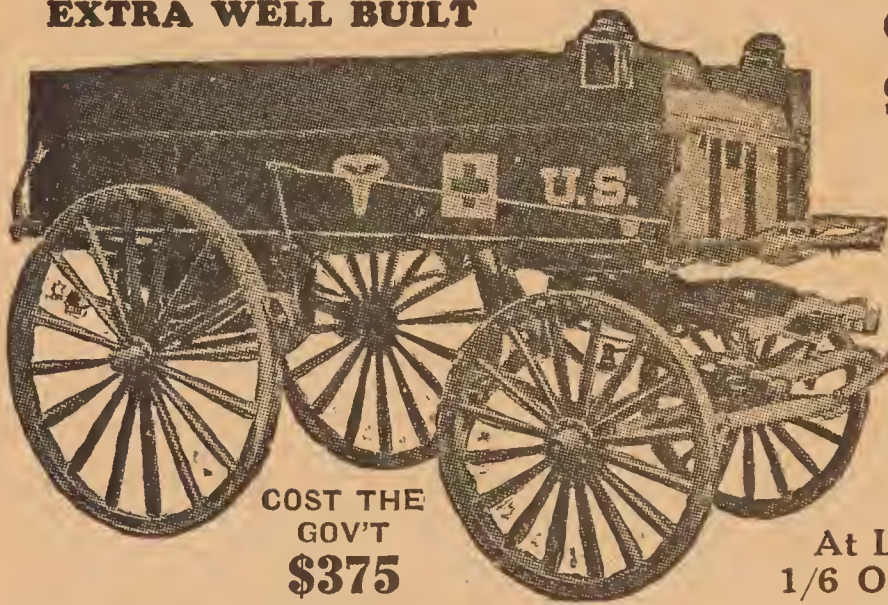
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Don't Delay! Supply Limited!

Wagon body is 9 ft. long, 4 ft. 7 in. wide; front wheels 3 ft.—rear 4 ft. 2 in.; round edge steel tires 2 1/2 in. wide, 1/2 in. thick; oak body has heavy floor with 2 side seats full length, fold up or removable; 7 steel tempered springs made of open oil tempered steel; spring hocks malleable. Upholstered driver seat with rest back—2 side lamps—hickory or ash tongue, double trees, neck yoke—chains—foot brakes; tail board wheels. Archibald pattern, "A Grade," bolted with 1/4 in. tire bolts, joint rim provided with felloe plates and 2 bolts; equipped with two 5 gallon heavy gauge galvanized tanks for water; suitable axle

wrench. Removable steps in rear. Painted 5 coats. A wonderful, strong, utility Farm Wagon. Purchasers often write: "I would have paid you twice as much just for the asking." Our policy in handling Government goods for the past 15 years is to make a fair profit and give the public unusual value. Publishers accept this advertising after inspection and they know what a wonderful bargain you are being offered. Without a doubt, this is one of the greatest bargains we have ever offered. Supply limited. Be sure to get one at this low price. Send your check today.

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Wh. Wyandottes	\$4.50	\$8.50	\$16.00	\$77.50	\$150
Rocks or Reds	4.00	7.50	14.00	67.50	130
Wh. Leghorns	3.50	6.50	12.00	57.50	110
Heavy Mixed	3.50	6.50	12.00	57.50	110
Light Mixed	2.75	5.00	9.00	42.00	80

From carefully selected free-range flocks. 100% arrival. Postpaid. Valuable illustrated 96-page booklet FREE. Telling all about poultry.

The Commercial Hatchery,
Box 75-A (The dependable plant) Richfield, Penna.

HIGH GRADE CHICKS

Immediate and April delivery

White & Brown Leghorns	100	500	1000
Bd. Rocks, R. I. Reds, Anconas	\$13	\$62.50	\$120
Wh. Rocks, Wh. Wyan., B.I. Minorcas	15	72.50	140
Assorted: Light 10c, Heavy 12c; Pekin Ducklings 32c each, \$30 per 100. All chicks for May delivery 1c less.	16	77.50	150

Also special mating blood tested chicks and two and six weeks old chicks. 100% Live delivery guaranteed. Order direct from adv. or write for circular. 10% books order, balance cash or C.O.D.

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Southampton, N. Y.

White Leghorn Eggs—Chix—Pullets—15th year—Large Type—Prolific—Trap Nested—Blood Tested. "The Early chick does the Trick." "Our Stock will put the FIT into PROFIT for you." "We treat you [] the year O."

Write for interesting circular.

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Free range bred	25	50	100	500	1000
Wh. & Brown Leghorns	\$3.25	\$6.25	\$12.00	\$58.75	\$115
Ancona & Black Leghorns	3.25	6.25	12.00	58.75	115
White & Barred Rocks	3.75	7.25	14.00	68.75	135
Rhode Island Reds	3.75	7.25	14.00	68.75	135
Heavy Mixed Broilers	3.25	6.25	12.00	58.75	115
Light Mixed Broilers	2.25	4.25	8.00	38.75	75

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SPECIAL FALL prices for breeding Turkeys, Geese, Ducks, and Guinea. Write your wants and for mailing list. PIONEER STOCK FARM, TELFORD, PA.

Reviewing the Markets

Milk Prices

The following are the March prices for milk in the basic zone of 201-210 miles from New York City.

Dairymen's League prices are based on milk testing 3.5%. Sheffield on the basis of 3%.

Class	Dairymen's League	Sheffield Producers
1 Fluid Milk	3.37	3.17
2 Fluid Cream		2.30
2A Fluid Cream	2.46	
2B Cond. Milk		
Soft Cheese	2.71	
3 Evap. Cond. Milk Powder		2.30
Hard Cheese	2.40	
4 Butter and American cheese. Based on New York City Market quotations on butter and American cheese.		

The Class 1 League price for March 1928 was \$2.90 for 3.5% milk and Sheffield's \$2.80 for 3%.

The above prices in each class are not the final prices the farmer receives. The final price received from the dealer is the result of the weighted average.

Butter Prices Higher; Tone Easier

CREAMERY	Mar. 6	Feb. 27	Mar. 7, 1928
SALTED			
Higher than extra	51 1/4-52	50 1/2-51	51 1/2-52
Extra (92sc)	-51	50	50 1/2-51
84-91 score	47 1/2-50 1/2	46 1/2-49 3/4	43 1/2-50
Lower Grades	46	47	45

The butter market is a shade easier than it was at our last report, although prices are higher. The reason for this slightly softer tone can be found in the receipts. We are getting slightly more butter than a week ago, much of it arriving late due to severe delays experienced last week. Also, we are receiving considerable butter that has been diverted from Chicago. All of these factors are bound to react on sentiment especially after prices have advanced. On March 6, there was a surplus of .93 score and some buyers were able to obtain some of this stock at a discount. Accordingly, we would not be greatly surprised if prices were to recede slightly after the writing of this report. Statistically the market holds firm. On March 1, the four largest cities reported cold storage holdings totaling 5,479,118 lbs., whereas on March 1 a year ago, those same cities reported holdings totaling 7,484,875 lbs.

Well Cured Cheese Firmer

STATE	Mar. 6	Feb. 27	Mar. 7, 1928
FLATS			
Fresh Fancy	23 1/2-25	23 1/2-25	23 -24
Fresh Average			
Held Fancy	27 1/2-29	27 1/2-29	-29 1/2
Held Average			

It appears that the supply of fancy well cured New York State flats is becoming more limited. At any rate, the supply is so strongly held that a slightly better jobbing demand has increased the strength of the market to the point that 29c is now an inside price for both colored and white specials. Whether or not this has had any effect on the fresh cheese market we do not know. But there is a steadier feeling on fresh State flats, inclining to the firmness, but as yet values have not been disturbed.

Egg Market An Up and Down Affair

NEARBY WHITE	Mar. 6	Feb. 27	Mar. 7, 1928
Hen's Sel. Extras	42 -43	46 -	34 -36
Hen's Av'ge Extras	40 -41	44-45	31 -31 1/2
Extra Firsts	39 -39 1/2	42-43	30 -30 1/2
Firsts			29
Undergrades			
Pullets			
Pewees			
NEARBY BROWNS			
Hennery	43 1/2-44	48-49	33 -34
Gathered	43	48	32 -32 1/2

The egg market has been through another hectic week. Following our report of February 27, prices continued to advance. Supplies were short and on the first of March it was a real bull market. As business came to a close on March 1 however, some receivers felt that increased supplies would be available during the week ending the ninth, and accordingly made offers for deliveries during that week at sharply lower prices. However, there was no change in quotations on Monday the 4th, although there was an unsettled tone. Prices still held at 47c to 47 1/2c for the best nearbys. The unsettled condition continued on the fifth, and the situation became more sensitive. Buyers held off, which made it difficult for

receivers to clear their floors, and between the two forces prices again started down-hill. These lower prices resulted from a clash of sentiment rather than actual burdensome supplies. In other words the bears were at work. We are very likely to see the same general situation continue at this time, when we are just entering the flush period.

The first export shipment of the season to the Argentine goes out on March 9, and consists of 4,400 cases.

Live Fowls Higher

	Mar. 6	Feb. 27	Mar. 7, 1928
FOWLS			
Colored	31-32	-31	-26
Leghorn	31-32	-31	20-23
CHICKENS			
Colored	31-36	31-36	31-35
Leghorn	31-36	31-36	31-35
BROILERS			
Colored	35-45	35-45	
Leghorn	35-42	35-42	
CAPONS	35-42	35-42	45-50
TURKEYS	25-40	25-40	30-50
DUCKS, Nearby	28-30	-28	29-33
GESE	20-22	20-22	21-23

The live poultry market is holding the strength we reported last week. The freight market on March 6 was established at 31c for live fowls, following a canvass by the value committee of the New York Poultry Exchange. This canvass was taken when buyers and sellers could not get together. Express fowls were in such a strong position and selling so well, that it was expected they would go to 32c as a general thing. The above quotation is given in view of a number of sales at that level. Other lines of poultry remain substantially the same as a week ago.

Potato Market Lower

STATE	Mar. 6	Feb. 27	Mar. 7, 1928
150 lb. sack		1.75-1.85	3.75-3.90
Bulk, 180 lbs.		1.90-2.10	
MAINE			
150 lb. sack	1.75-2.00	1.75-2.10	3.85-4.40
Bulk, 180 lbs.	2.10-2.35	2.25-2.40	4.65-5.15
PENNA.			
150 lb. sack			
No. 1		1.90-2.10	
Bulk, 180 lbs.	1.85-2.00		
LONG ISLAND			
150 lb. sack		2.25-2.50	
No. 1	2.00-2.35		4.75-5.00
Bulk, 180 lbs.	2.35-2.60	2.50-2.75	5.50-5.90

The whole potato market has moved to lower level, with Long Islands apparently getting the worst of it. Sacked goods have gone down 15c to 25c with a reduction on bulk goods not quite as severe. Only the outside figure on Maines has been affected. We give no quotations on States in the absence of sufficient business; generally States were around \$1.75 in 150 pound sacks.

Slight Changes in Beans

The bean market has experienced a slight change in the various varieties. Marrow beans now cover a range from \$11 to \$13.25 depending on size and quality. Pea beans have eased off two shillings, covering a range of \$10.50 to \$11.25. Red Kidneys have eased off also, the inside figure of \$8.25 remaining unchanged, while the outside figure of \$8.75 is two shillings less than last week. Limas remain unchanged.

Feeds and Grains

FUTURES (At Chicago)	Mar. 6	Feb. 27	Last Year
Wheat (Mar.)	1.21 1/4	1.23 1/4	1.39 1/4
Corn (Mar.)	.94 3/4	.96 1/4	.93 1/4
Oats (Mar.)	.45 1/4	.49 1/4	.57
CASH GRAINS (At New York)			
Wheat, No. 2 Red	1.55 1/4	1.58 1/4	1.71 1/4
Corn, No. 2 Yel.	1.13 1/2	1.14	1.15 1/2
Oats, No. 2	.60 3/4	.63	.69 1/2
FEEDS (At Buffalo)	Mar. 2	Feb. 23	Mar. 3, 1928
Grade Oats	38.00	38.50	37.50
Spring Bran	31.50	32.00	38.00
Hard Bran	34.00	34.50	40.50
Standard Mids	30.50	31.00	38.00
Soft W. Mids	38.50	39.50	44.50
Flour Mids	36.00	36.00	39.50
Red Dog	38.00	38.00	41.00
Wh. Hominy		38.50	40.25
Yel. Hominy	38.00	38.50	39.00
Corn Meal	38.00	40.50	41.00
Gluten Feed	41.50	50.00	44.75
Gluten Meal	50.00	60.00	54.00
36% C. S. Meal	60.00	46.00	47.00
41% C. S. Meal	46.00	50.50	52.00
43% C. S. Meal	50.50	53.00	54.00
34% O. P. Linseed Meal	57.50	58.00	52.00

The above quotations are those of the local Buffalo market and are F. O. B. They are reported in the weekly letter of the N. Y. State Department of Agriculture and Markets.

Farm News from Albany

Progress of School and Road Tax Proposals

LAST week has seen continued progress at Albany with the various proposals for aiding New York State agriculture. Some of the proposals have been modified either by the legislature or by suggestions from the Governor, and there has been considerable disagreement between the Governor and the legislature on some of the proposed legislation. On the whole, however, at this writing it seems that there is a good chance that most of the bills will pass without serious modification or any amendments which will seriously interfere with real tax relief for the farmer.

On March 4, Governor Roosevelt sent a special message to the legislature recommending \$2,450,000 in support of the rural schools. This is the bill recommended by the Agricultural Advisory Commission, headed by Henry Morgenthau, Jr., except that the Governor has suggested the reduction in appropriation. The Commission advised that there be appropriated each year \$1500 for every one-room school, of which the local district should raise \$4 a thousand, or a four-mill tax, and the State pay all of the rest.

The Governor has suggested the same bill except that he suggests that the amount be placed at \$1200 the first year and increased a hundred dollars for each year thereafter until \$1500 is reached. This would save the State considerable money during the first two or three years, and the \$1200 is probably all that most of the schools would need, so that the amendment suggested by the Governor will probably be acceptable to most farmers. Certainly the bill in either form will bring great relief to farmers in the reduction of school taxes.

The other school bill, already explained several times in AMERICAN AGRICULTURIST, giving more relief to small village schools of less than five teachers, has the endorsement of both the Governor and the legislature and is certain to pass.

These two school bills will do more for rural taxpayers and for maintaining the small schools than any other legislation that has been passed in many years. AMERICAN AGRICULTURIST is especially enthusiastic about them because both the Publisher and Editor personally and through the columns of the paper have spared no effort to secure the passage of this legislation.

Suggestions for State Aid for Roads

In last week's issue we printed Governor Roosevelt's supplementary message to the legislature giving his suggestions and views on the gasoline tax and the State aid for roads. Summarized, these recommendations would provide:

First: The enactment of a gasoline tax of two cents a gallon beginning June 1, 1929, the entire proceeds to be applied to highway purposes.

Second: The appropriation of \$4,000,000 for the equalization of the cost of construction of highways and bridges forming a part of the State highway system.

Third: The appropriation of \$600,000 to relieve towns and villages of the cost of maintenance of highways forming a part of the state system.

Fourth: The appropriation of \$4,200,000 as additional aid to counties for the construction of lateral roads, with state approval and under state supervision, as a part of the general system.

The legislature itself has proposed another plan to help the rural districts reduce their road taxes by the State's providing more aid for the maintenance of the roads. There is considerable controversy at Albany between the legislature and the Governor over which one of these plans will prevail. So far as the farmer is concerned, he will obtain substantial relief in his road taxes if either plan eventually becomes a law, and it is pretty certain that one or the other, or possibly a modification, or a combination of the two plans will eventually pass.

Watch these columns for further developments.

On Old Age Pensions

A legislative hearing of interest to everyone was held in Albany on March 5 on the proposed legislation providing for old age pensions. It is argued that either a bill should be passed immediately providing for the State's helping old people over seventy years of age or else that a commission should be appointed to study the problem of old age pensions.

Those in favor of the legislation state

that people who work hard all of their lives rendering service to their families and their communities and who are good citizens should not be left destitute in their old age or be sent to the poorhouse. Those who oppose the proposals say that old age pensions would add greatly to the tax burdens of the State and they would encourage people not to be thrifty.

At the close of the hearing, it was indicated that the legislature might at least go as far as to make a further study of the need for old age pensions.

Dairymen's League Withdrawals

THE Dairymen's League reports 1,936 cancellations of contracts on the part of their members for this year's withdrawal period, closing on March 1st. Complete figures are not available at this writing, but we understand that there are between four and five hundred more withdrawals this year than last year. On the other hand, the total of new contracts received during the eleven months from April 1, 1928 to March 1, 1929 was 5,642, so the League gained some three thousand new members during the year after the withdrawals are taken out.

Those who withdraw have opportunity for reconsideration and usually there are quite a few who do reconsider each year and have their contracts reinstated. Last year over a hundred of those who withdrew during the cancellation period asked to come back in the League soon after. Every year there are some cancellations which are accounted for by changes in buying conditions which make it impractical for some of the members to continue with the League, even if they cared to do so. Then there are always those who for some reason or other become dissatisfied and withdraw.

On the whole, so far as the facts which come to the AMERICAN AGRICULTURIST in various ways indicate, the general confidence and belief in the League are strong and well maintained.

Arthur M. Hyde, Secretary of Agriculture

ARTHUR M. HYDE, newly appointed Secretary of Agriculture in President Hoover's cabinet, is a Missouri farm owner who has been an active Republican for many years and at one time was seriously mentioned for Vice-President as a running mate to President Coolidge. From 1921 to 1925 Mr. Hyde, as Governor of Missouri, gained an intimate knowledge of the farm relief problem.

Some time ago Mr. Hyde took a positive stand in opposition to the equalization principle of the McNary-Haugen Bill. He supported the Hoover farm relief program in the President's campaign and is committed to farm relief effort which will be economically sound and practicable.

New York County Notes

Chautauqua County—For weeks every day has been much like every other—snowing moderately but very cold, sometimes away below zero and evidently too cold to snow but presently warming up just enough to snow again. Potatoes are 50 to 55 cents per pound, apples \$1.00 per bushel but quite conspicuous by their absence. Most groceries seem to be dropping just a bit and meat is not quite so high prices as formerly.—E. M. A.

Saratoga County—We are having beautiful days with just enough snow for the children to enjoy their skis and sleds. The State roads having no snow prevents the farmers doing much team work with sleighs. Some are drawing logs to saw mill on dirt roads and some have them trucked after drawing from woods. Potatoes were so cheap last fall that some held their crop over in the hopes of better prices this spring, but the market is dull at present. Dairymen's League milk prices average about \$3.75, farmer's butter 50 cents per pound, and eggs from 40 to 50 cents per dozen.

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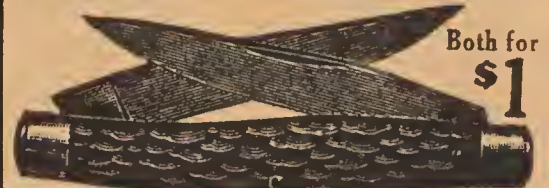
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Stomach Worms in Sheep

Can you recommend a remedy for stomach worms in sheep?—Mrs. D. F., New York.

THE following directions are taken from Farmers' Bulletin 1150 for the copper sulphate treatment of stomach worms in sheep:

"In the preparation of the dose use only clear blue crystals of copper sulphate (bluestone). When ready to make up the solution, crush the crystals to a fine powder. Dissolve one quarter pound (avoirdupois) of the powdered crystals in one pint of boiling water, using a porcelain or enamelware dish, as the bluestone will corrode most metals. Then add enough cold water to make three gallons, using wooden, earthenware, or other non-metallic receptacles. This will make an approximate one per cent solution and will be enough to dose 100 adult sheep allowing for about a ten per cent waste.

The amounts of the dosage for both old sheep and lambs are:

For lambs under one year of age—1¾ ounces (50cc).

For sheep past one year old—3½ ounces (100cc).

"A glass with marks scratched on the side with a file may be used for measuring the doses. Sheep may be drenched with a narrow-necked bottle, a syringe, or a funnel and rubber tube with a brass mouthpiece in the end. Customarily the treatment is given after the sheep have been starved over night; but apparently it may be given with equally good results without preliminary fasting, provided the animals are not gorged with feed or water when treated.

"While being drenched, the sheep should remain on all four legs with its head held horizontally. This is important for if the head is held above the horizontal (nose higher than eyes) there is danger of some of the fluid passing into the lungs, thereby causing pneumonia and almost certain death. Care in the administration of the dose is highly important as carelessness or any undue haste is liable to have serious results."

There are also a number of commercial worm remedies on the market.

Molasses for Fattening Lambs

ANUMBER of Western New York farmers, who feed lambs for the market during the winter months, are experimenting with molasses as a part of the grain ration this year. So far the results have been entirely favorable. Sheep feeders claim that molasses is not only fattening but also acts as a mild laxative.

The ratio of molasses to other parts of the grain ration varies with the different farmers. Some use six to eight gallons to thirty bushels of grain; others are using twice that amount. The cheap grade of molasses is used, the cost of which is only \$40 a ton. Wherever the writer has seen it fed, the lambs take to it like ducks to water.

Little or no difficulty is experienced in using a molasses ration in a self feeder as the grain feeds down with little or no gumming. In fact, the farmers are entirely satisfied with it.—H. B. P., New York.

Farmers who are interested in silage should consult a Cornell bulletin on silos and the production and feeding of silage. Write to the office of publication at the state college of agriculture at Ithaca, N. Y. and ask for E 90.

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(Continued from Page 13)

quently resulting in loss of one or more quarters of the udder.

The principal point to watch is to give the animal treatment as soon as the disease is observed and to use all possible precaution to prevent spread to all other animals in the herd.

Boosting Fall Milk Production

If dairymen wish to have an efficient milk production during ten months of the year, preventing the usual fall shortage, proper feeding must be used. Increased milk production during the months of October and November is an easy matter if the cows are given the right kind of feed during the Spring and Summer, according to the lecture given by Professor William T. Crandall of Cornell University at Lockport recently.

The time to start the program for boosting the fall production is in the Spring. Spring-freshened cows should be given grain rations in addition to their pasture feed. The dairyman must be willing to continue these grain rations through the summer, and the cows must be fed well during the dry season so that their physical condition will be sound when they freshen.

The dairyman should know the daily production of each cow and feed grain enough to produce that amount of milk, providing that the amount of grain is not greater than the ratio of one pound to three or four pounds of milk. By using the cows to the best advantage there should be no Fall shortage and the surplus during the flush seasons would not be greatly increased. Such a system would be profitable to the dairyman.

Cows On Pasture Need Grain

According to Professor Crandall, a dairyman must get an income of more than \$100 per cow a year over the cost of the feed to realize a profit. Such a profit will pay about forty cents an hour for the labor, a wage compensation that would be entirely satisfactory to all farmers.

To help make this net income of \$100 per cow, an increased milk production in the fall when the prices are higher should be worked for. Most farmers make the mistake of taking the grain rations from their cows as soon as turned out to pasture. The continued feeding of grain should be given a trial. The keeping of a milk production record, also a record of the amount of grain fed, will show the farmer the amount of feed necessary to produce his milk and will answer the question of whether or not the continual use of grain will increase the Fall production.

—H. B. P., New York.

Composition of Cow's Milk

Constituents	Per cent
Water	87.0
Fat	4.0
Carbohydrates: Milk sugar.....	5.0
Protein:	
Casein	2.8
Albumin .....	.5
Mineral matter .....	.7

Total100.0
U. S. D. A. Extension Service Handbook.

Milk Absorbs Odors and Flavors

MILK is a food which absorbs flavors very readily and for this reason particular care is necessary during the winter time while the cows are confined to the barn. One caution that should be followed is to feed any highly flavored feeds such as ensilage, turnips, cabbage or weedy hay following milking rather than before. Another point that needs emphasis is to check up on all points in handling the milk to see that all utensils are clean and sterile and that the milk is cooled immediately.

Proper ventilation and light of a dairy barn help by removing odors quickly. The U. S. Bureau of Dairying estimates that about \$6,000,000 worth of milk is rejected annually because it has soured and an approximately equal amount because of its off flavor.

SAVED CHEMUNG COUNTY \$1940

ON THIS BARN

When the Chemung County, New York, Improvement Committee decided to build a new Dairy and Horse Barn on the County Farm, Jamesway was asked to prepare the building plans. Five contractors put in bids. The difference between the highest and lowest bid was \$1940. The job went to the low bidder. After the barn was built Mr. A. G. Turner, Chairman of the Committee, wrote us as follows:

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A Farmer's Store

EVERY farmer knows how important it is to have a responsible and well-stocked hardware store close at hand. In times of emergency when a broken bolt or a worn out drive belt ties up an important part of the farm work you go to your local store for help. "Farm Service" Hardware Stores carry thousands of little items to render just such service as this to you—practically without profit because of the long time which the money paid for this emergency stands on the shelves. In buying other things in the store, you have an opportunity to reciprocate for emergency service as well as to get the best of quality merchandise at right prices. You can "see before you buy" and thus be sure of satisfaction at a "tag" store.

Arrange now to fix up your fences this spring. At our stores you will get all needed fencing material of dependable quality at lower prices.

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Where prices are lower because you get personal help in the selection and maintenance of your purchases.



Good Fencing Saves Many Times Its Cost

GOOD farm fence pays for itself in helping you cut production costs and increase your profits.

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He carries Zinc Insulated Fence, Banner or Ideal Steel Posts and Gates in stock. He has the kind of Fence that can serve you best and is able to help you get the biggest value at the lowest cost, quality considered.

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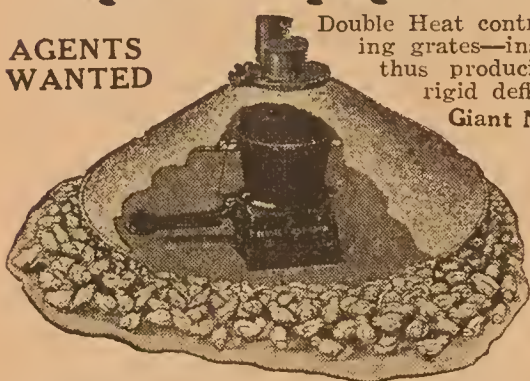
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CHICKS

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Tancred Strain W. Leg. \$12 per 100
Wh. Leghorns 11 per 100
Barred Rocks 14 per 100
S. C. Red 14 per 100
Heavy Mixed 12 per 100
Light Mixed 9 per 100
500 lots 1/2c less; 1000 lots 1c less.
100% live delivery guaranteed. Order from this ad. or write for free circular.
C. P. Leister, McAlisterville, Pa.

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Famous Tancred Strain, Single Comb White Leghorn
Chicks, from heavy laying free range flocks. Our flocks are headed with 260 egg strain cockerels. Write for our new free circular and our prices.
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Book your order now for March and April Chicks.
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QUALITY CHICKS

S. C. White Leghorns per 100-\$11.
S. C. Barred Rocks \$13. Light mix \$9 per 100. Heavy \$11. Special prices on larger lots. 100% live delivery, postpaid. New circular free.
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Lamon Baby Chicks and Setting Eggs

START NOW to build your flock of the finest all-purpose fowl ever developed. Prolific layer of white-shelled eggs, fine table fowl, develops early, grows fast and will command top prices. Day-old chicks, \$1.00 each; settings, \$5 to \$50. Order now to insure delivery.
S. E. RAYMOND, Chardon, Ohio

BABY CHICKS

25	50	100	25	50	100
Barred Rocks	4.00	7.50	14	S.C.V. Leg.	3.50 6.50 12
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500 Lots 1/2c less				1000 Lots 1c less	
Free Range Flocks				Live Delivery	

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With the A. A. POULTRY FARMER



A New Development in Raising Baby Chicks

(Continued from Page 3)

battery brooder as any method now in practice.

For the small flock owner the battery is of particular value. From this point on in the story we will deal entirely with the problem as it affects the small poultryman who puts out only a few hundred chicks. Take for instance the small flock owner who wants to start a thousand chicks for the purpose of securing three or four hundred laying hens for next winter's flock. The usual practice would be to start two or three brooder stoves. Some have good success by putting 500 chicks under one brooder stove but the average poultryman or small flock owner will experience a high mortality from crowding chicks when brooding in large numbers in the same pen. The most successful poultrymen use two stoves for this number of chicks. This means two small brooder houses or a large building capable of holding that number of stoves.

Compare this method with one where the battery system is followed. Instead of heating up two brooder stoves, one small building with a battery will hold the same number of chicks and the crowding problem has been practically eliminated. Recent experiments conducted in the Vineland, New Jersey area, shows that the average brooder stove with the canopy removed will heat the building sufficiently for the battery that will hold one thousand chicks. Of course the building must be properly constructed and free from all drafts. The stove is usually set on one side of the building, preferably on the west or the north. The battery is placed in the middle of the building where the stove stood formerly.

At this point a new factor in poultry production enters the situation. Formerly we have been told to have a temperature under the hover around 98 or 100 degrees for the first five days. Recent observations at Vineland show that if the temperature of the building is kept around 85 degrees the chicks will thrive equally as well if not better than where the temperature under the hover has been kept up around 100 degrees. This is explained by the fact that a temperature of 98 under the hover and an even room temperature of 85 degrees, are two entirely different propositions. It may be that while the temperature under the hover may be 98, outside in the rest of the building it may be down to 55 or 60 degrees. Some of the most successful battery operators state that they have had very satisfactory results with even much lower temperatures after the first few days. Indications now point to a revolutionary change in the temperatures recommended for the brooding of chicks. It is a well known fact that the temperature under the wing of the mother hen is rarely anywhere near 95 degrees. Some tell us that a temperature in the room of fifty degrees is sufficient after the first week or ten days.

Feeding Simplified

The battery has simplified the feeding practices. All of the feed is placed in hoppers fastened to the outside of the brooder. In this method there is not one chance in a thousand that the feed can become contaminated in any way. The feed boxes are always kept clean and no feed is ever wasted. The same applies to the water and the buttermilk. It is impossible for the chicks to become wet or drown by falling in the drinking fountains. With the screened floor and the removable galvanized dropping pans the brooder is kept clean all of the time and the sanitation problem has been solved. These dropping pans are removed by pulling out at one side and are easily cleaned. If the bottoms are covered with a thin layer of shavings or finely cut hay all the moisture is quickly absorbed and

(Continued On Opposite Page)

Danger of Infection Among Baby Chicks

Success in raising baby chicks is dependent upon proper care and management. Readers are warned to exercise every sanitary precaution and beware of contaminated drinking water. Baby chicks must have a generous supply of pure water. Drinking vessels harbour germs and ordinary drinking water often becomes contaminated and may spread disease through your entire flock and cause the loss of half or two thirds your hatch before you are aware. Don't wait until you lose half your chicks. Take the "stitch in time that saves nine." Remember that in every hatch there is the danger of some infected chicks—danger of diarrhea in some form and other loose bowel and intestinal troubles. Don't let a few chicks infect your entire flock. Give Walko Tablets in all drinking water for the first two weeks and you won't lose one chick where you lost dozens before. These letters prove it:

Mrs. Bradshaw's Remarkable Success in Raising Baby Chicks

"Dear Sir: I see reports of so many losing their little chicks, so thought I would tell my experience. I used to lose a great many of the little downy fellows from bowel troubles, tried many remedies and was about discouraged. As a last resort I sent to the Walker Remedy Co., Dept. 420, Waterloo, Iowa, for their Walko Tablets for use in the drinking water of baby chicks. I used two 50c packages, raised 300 White Wyandottes and never lost one or had one sick after using the Tablets and my chickens are larger and healthier than ever before. I have found this Company thoroughly reliable and always get the remedy by return mail."
—Mrs. C. M. Bradshaw, Beaconfield, Iowa.

Never Lost One After First Dose

Mrs. Ethel Rhoades, Shenandoah, Iowa, writes: "My first incubator chicks, when but a few days old, began to die by the dozens. I tried different remedies and was about discouraged with the chicken business. Finally I sent to the Walker Remedy Co., Waterloo, Iowa, for a box of their Walko Tablets to be used in the drinking water for baby chicks. It's just the only thing to keep the chicks free from disease. We raised 700 thrifty, healthy chicks and never lost a single chick after the first dose."

You Run No Risk

We will send Walko Tablets entirely at our risk—postage prepaid—so you can see for yourself what a wonder-working remedy it is when used in the drinking water for baby chicks. So you can prove—as thousands have proven—that it will reduce your losses and double, treble, even quadruple your profits. Send 50c for a package of Walko Tablets (or \$1.00 for extra large box)—give it in all drinking water and watch results. You'll find you won't lose one chick where you lost dozens before. It's a positive fact. You run no risk. We guarantee to refund your money promptly if you don't find it the greatest little chick saver you ever used. The Pioneer National Bank, the oldest and strongest bank in Waterloo, Iowa, stands back of our guarantee.

WALKER REMEDY CO., Dept. 420 Waterloo, Iowa

Baby Chicks



WYCKOFF AND TANCRED STRAIN

100% Arrival Prepaid to your office.
100 500 1000
White Leghorns.....\$12.00 \$57.50 \$110
THE RICHFIELD HATCHERY, Box E, RICHFIELD, PA.

DUCKLINGS

\$33. EGGS \$14-100
"Duck News" Free.
ROY PARDEE,
Islip, L. I., N. Y.
Hampton's Black Leghorn Day Old Chicks.
Circular free. **A. E. HAMPTON, Box A, Pittstown, N.J.**

they can be cleaned in the morning with no trouble whatever. With the battery there is no litter or filth for the chickens to pick up which may be laden with disease germs. This new idea has proven that the disease problem has been reduced to a very low point since its first inception.

By using feeds that are properly balanced and adding cod liver oil with its vitamins many of the so-called baby chick diseases are overcome. With the use of balanced feeds, leg weakness is unknown, toe-picking is rarely experienced and there is little chance for the spread of contagious diseases, especially bacillary white diarrhea.

Details Require Less Attention

There is no question but that the use of the battery will require less attention than the brooder stove, as it becomes a routine proposition. If a battery is neglected the consequences are not as serious as the battery depends on room temperature while the brooder stove depends upon hover temperature. The temperature under the hover will drop rapidly with the lowering of the fire while the room temperature will remain high for a long period because of the larger area to cool.

By removing and cleaning the dropping pans each morning, the entire building will be kept sweet and clean and one of the worst disease menaces removed. All of the work with the battery is in the battery room while with the brooder stove you must go in and out, carrying coal, and ashes, and making more or less noise. This disturbs the chickens and makes them easily frightened. Also there is the possibility present of excessive floor drafts with its resultant chilling of the chicks. More work is also involved in cleaning out the litter, entailing considerable expense and bother.

Ventilation

One of the big problems that has arisen with the use of the battery has been that of ventilation. It has been rather difficult to keep the air in the battery room free from odors at all times.

The ventilation in the average sized brooder house is not sufficient for the housing of a thousand chicks where formerly only two or three hundred were kept. After a few hours the air in the battery room becomes quite foul if some additional means of ventilation is not used. It can be easily realized that one thousand chicks consume a large amount of air in the course of the day.

This can be overcome in the smaller buildings where only one battery is located by the installation of a special ventilator at the top of the room so that the foul air can pass out. In rooms where two or more batteries are in operation much trouble has been experienced in the past. By installing a small blower and a cheap ventilation system the problem can be solved and the air kept pure and sweet all day long. The ventilator can be easily and cheaply made at home. The blower need not be operated during the night as the birds are usually quiet at that time and there seems to be little or no difficulty to keep the air pure at that time.

Moving the Birds

Another detail that must not be overlooked is that of moving the birds after they are ten days or two weeks old to larger quarters. During the first few days one compartment of a battery will accommodate 250 chicks. After the first ten days, due to a rapid growth, they will begin to crowd and must have more room. If they are permitted to crowd, toe-picking often starts in at this time. The most successful poultrymen at the end of ten days put one half of the birds in another compartment of the battery. At the end of the second week they are again separated and at the end of the fifth week, if the growth has been normal, the battery compartment will hold only fifty chicks.

By this time the chicks are ready for the brooder house on range. If they have been properly hardened by the gradual reduction of the temperature and the weather is not too cold they

(Continued on Page 20)

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But they are the best places in the world for you to prove that the amazing New Mobiloil can save you money every day.

We announce the New Mobiloil—an oil so startling in its performance that the superlative statements we are ready to make about it are actually conservative.

For example, repeated road and laboratory tests prove that this New Mobiloil commonly assures from 10% to 30% more power than other oils sold for the same purpose. Which means a saving of as much as 16% in gasoline consumption. Our tests have consistently bettered these figures.

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This amazing New Mobiloil's wearing quality will save you anywhere from 15% to 50% in oil consumption. And the fact that it does a better lubricating job means fewer repairs and less time lost through costly breakdowns.

Substantial quantity discount

For a season's supply it is cheaper to buy in the 55-gallon and 30-gallon drums with convenient faucets. On these large containers your Mobiloil dealer will give you a substantial discount. His complete Mobiloil chart tells you the correct grade of Mobiloil for your car, tractor and truck.

Make this chart your guide

It shows the correct grades of Gargoyle Mobiloil for certain prominent cars. If your car is not listed here, see at your dealer's the complete Mobiloil Chart, which recommends the correct grades for all cars, trucks, tractors, etc.

NAMES OF PASSENGER CARS	1929		1928		1927		1926	
	Engine		Engine		Engine		Engine	
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
Auburn, 6-66	BB	Arc.	BB	Arc.	BB	Arc.	A	Arc.
" 8-cyl.	BB	Arc.	BB	Arc.	BB	Arc.	A	Arc.
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Buick	BB	Arc.	BB	Arc.	BB	Arc.	A	Arc.
Cadillac	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Chandler Special Six	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Chevrolet	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Chrysler, 4-cyl.	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" Imperial	BB	Arc.	BB	Arc.	A	Arc.	A	Arc.
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
De Soto	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Dodge Brothers	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Durand	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Erskine	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Essex	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Ford, Model A	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" Model T	A	Arc.	A	Arc.	E	Arc.	E	Arc.
Franklin	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Gardner, 8-cyl.	BB	Arc.	BB	Arc.	BB	Arc.	A	Arc.
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Graham-Paige	BB	Arc.	BB	Arc.	A	Arc.	A	Arc.
Hudson	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Hupmobile	BB	Arc.	BB	Arc.	A	Arc.	A	Arc.
La Salle	BB	Arc.	BB	Arc.	BB	Arc.	A	Arc.
Marmon, 8-cyl.	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" other models	A	Arc.	BB	Arc.	A	Arc.	A	Arc.
Moon	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Nash, Adv. & Sp. 6	BB	Arc.	BB	Arc.	BB	Arc.	A	Arc.
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Oakland	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Packard	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Peerless, 72, 90, 91	BB	A	BB	A	BB	A	BB	A
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Plymouth	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Pontiac	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Reo	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Stearns Knight, 6-80	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
" other models	BB	A	BB	A	BB	A	BB	A
Studebaker	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Velie, 8-cyl.	BB	Arc.	BB	Arc.	A	Arc.	A	Arc.
" 6-cyl.	A	Arc.	A	Arc.	A	Arc.	A	Arc.

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BABY



CHICKS

HILLPOT Quality Chicks

Leghorns-Rocks-Reds-Wyandottes



SEND FOR THIS USEFUL CHICK BOOK

You will find it a valuable guide in selecting your chicks for the coming season and a constant help in rearing them. The book which is illustrated in color describes my breeds fully;

tells of my careful methods of mat-ing and rearing; discusses the most profitable sizes for flocks; contains house-plans and construction details and concise feeding and rearing charts. Write for your copy today.

W. F. HILLPOT, Dept. 129, FRENCHTOWN, NEW JERSEY

(Continued from Page 19)

can go to the brooder house without the aid of the stove.

At this stage many put the birds out on young and tender rye, alfalfa or other green crops. Battery chicks hatched in February are ready to go out on range about the first of April or even the middle of March. In the case of the very early chicks it may be necessary to use a brooder stove for a short time.

The first five weeks in the battery are apparently long enough under average conditions for any chick. If they have had the proper feed, they will be healthier than those chicks raised in the brooder house with a stove or under the wing of the mother hen. They will be free from all diseases and parasites and if they have been separated at regular periods they will be active of body, sturdy of limb and equal in every respect to any chick raised on the ground.

Again let me state that if the proper attention to details has been followed the poultryman is assured of a much lower mortality than with the old hen or the brooder stove. In the even heated room with the battery there is little or no chance for chilling of the chick as is frequently experienced with the brooder stove. Then there is no crowding of the chicks in trying to get close to the stove as is often the case where brooders are used.

So with all of these advantages of the battery method of brooding; the reduction in the number of stoves to keep in operation and the lessened amount of labor in caring for a house of chicks, the battery brooding looms up as the next big step to come to the poultry industry.

WENE Blood-Tested CHICKS

If You're Out for Big Money—

You must have stock that will produce more than ordinary results. WENE CHICK FARMS cater to the men and women who are determined to make more than a bare living out of their poultry operations.

For Eggs, we recommend our Specialty-bred S.C. White Leghorn Chicks and Pullets from State-Supervised, Blood-Tested matings. Every female breeder a mature hen, weighing at least 4 lbs. and producing chalk-white eggs averaging not less than 24 oz. to the dozen. Prices: \$21.00 per 100; \$102.50 per 500; \$200.00 per 1,000.

S.C. White Leghorn Pullets, 8-10 Weeks; 12 for \$13.80; 25 for \$27.50; 50 for \$53.75; 100 for \$105. For broilers and Roasters order Wene Cross-Bred Chicks from blood-tested White Wyandotte-White Rock matings. Prices: \$19.00 per 100; \$92.50 per 500; \$180.00 per 1,000.

Straight Heavy Breeds, select Wene Barred Rocks, White Rocks, White Wyandottes or Rhode Island Reds. All are blood-tested. Prices: \$25.00 per 100; \$122.50 per 500; \$240.00 per 1,000.

WENE CHICK FARMS, Dept. D., Vineland, N. J.

Buy C.M.L. Chicks



C.M.L. CHICKS

Cost no more than ordinary chicks from the average hatchery and the quality is far better. We have specialized for years in BARRON LEGHORNS. Imported direct from Barron, Pedigrees 285 to 314. BARRON S.C.W. LEGHORNS, BARRED ROCKS, WHITE ROCKS, REDS, WHITE WYANDOTTES.

Our birds have ample range which insures large, hardy chicks. They are carefully selected and mated. They mature early. Our fine quality chicks can be had at a price that will surprise you. Get our low prices. They will interest you. C. M. Longenecker, Box 40, Elizabethtown, Pa. Write today for FREE catalogue.

300,000 White-Brown Buff Leghorn CHICKS

Shipped C.O.D. Send No Money PURE STRAINS—Tannered—Hollywood—Barron—American S.C. White Leghorns—Brown and Buff Leghorns—Eggs and Chicks Produced from some of the finest matings in Pennsylvania. Breeders Specializing in High Egg Production—Dependable Chicks for Commercial Poultrymen—100% Live Arrival—Send No Money—Chicks Shipped C.O.D.—Catalogue.

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with an official record. Ask for our Baby Chick Book describing our Pedigreed Cornell Chicks from stock that has laid from 200 to 312 eggs in their pullet year and mated to breeders that have averaged over 200 eggs in their pullet year. Also describes our 144,000 egg hatchery with 22 years' experience in hatching Baby Chicks. Leghorns, Reds, Rocks, Wyandottes, Minorcas, and Giants. The home of better Chicks at lower cost.

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	25	50	100	500	1000
S.C.W. & Br. Leghorns.....	\$3.50	\$6.00	\$12	\$57.50	\$110
S.C.B. and W. Rocks.....	4.00	7.50	14	67.50	130
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Assorted Chicks.....	3.00	5.00	9	42.50	80

100% prepaid safe delivery guaranteed. Order from this ad. or write for circular Box 161 J. N. Nace Poultry Farm, RICHFIELD, Pa.

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WONDERFUL WINTER LAYERS 3 Reasons, (1) Breeding, high priced blood lines. Best pure bred, show winning strains, bred for winter eggs, egg-size and number of eggs, from high egg record bred-to-lay females. (2) Cull for standard of perfection, quality, size, health, color, shape. (3) Actually weigh more when hatched. Perhaps most important poultry undertaking. Scientific incubating, proper moisture, best, Petersime Electric Incubators. Often weigh pound more a 100. Snappy, peppy, healthy, fluffy, right start, twice value 15 kinds. Better for the low price can't be had. Big Discounts NOW. Catalogue FREE.

MODEL HATCHERY, Box S, MONROE, INDIANA

BABY CHICKS

	25	50	100	500
White Leghorns.....	\$3.00	\$5.25	\$10.00	\$45.00
Barred Rocks and Reds.....	3.50	6.25	12.00	57.50
Heavy Mixed.....	3.00	5.25	10.00	45.00
Light Mixed.....	2.75	4.75	9.00	42.50
Pekin Ducklings.....	8.00	15.00	28.00	130.00
Mixed Ducklings.....	6.50	12.50	25.00	115.00

John Shadel Hatchery, McAlisterville, Pa. Route 2.



BOS QUALITY CLASS A CHICKS From healthy heavy layers. Several varieties. Low prices. Special discounts. No money down. Pay 10 days before shipment or C.O.D. 100% live delivery post-paid. Catalogue free. Bos Hatchery, Zeeland, Mich. R. 2A

20th CENTURY "MARVEL" CHICKS



Special Mating Imported Barron S. C. White Leghorns Our flocks for this very Special Mating consist of 350 YEARLING hens carefully selected by an Expert Poultryman. These hens weigh not less than 4 1/2 pounds, and up to 6 pounds. They produce better than 250 eggs per year, per hen, imported from TOM BARRON, of England.

Standard Bred "MARVEL" Winter Layers

THOUSANDS OF PLEASED CUSTOMERS can tell you about the splendid chicks and wonderful profits made by our Marvelous High Class, Heavy Laying, Standard Bred, American Cert-O-Culd Matings for 29 years; Pure-Bred, carefully culled for size, type, color, vigor and egg laying ability. Look at the low prices—100% Live Delivery Guaranteed—you can safely order from this advertisement. References: Commercial Bank, Dun or Bradstreet.

	50	100	500	1000
S. C. Wh., Br., Buff, Blk. Leghorns, Anconas.....	\$7.00	\$13.00	\$60.00	\$115.00
Barred and Wh. Rox, It. C. and S. C. Reds, Blk. Minorcas.....	8.00	15.00	70.00	135.00
W. Wyandottes, Buff Orpingtons, Buff Minorcas.....	8.50	16.00	75.00	145.00
Impt. Barron W. Leghorns, W. Minorcas, Parks' Rox.....	9.50	18.00	85.00	160.00

Heavy Mixed, \$12.50 per 100; Light Mixed, \$9.00 per 100. Wh. Pekin Ducklings, 25c each. C. O. D. Shipments: We will ship 20th Century Chicks C. O. D. (pay postman on delivery) if you prefer. Get our FREE illustrated catalog. Tells all about our money-making chicks. C.O.D. plan, imported matings, etc. 20th CENTURY HATCHERY Box R NEW WASHINGTON, OHIO

FREE BABY CHICKS

You Get the Chicks—We the Ad-vertising. Fair? SHOW

Better get your pencil and send for this 4-color, beautifully illustrated catalog now—also advertising slips for your free Baby Chicks. Only a limited number, so you should write now—this very minute.

This catalog, the prettiest and most elaborate we have ever seen, gives you some new, cashable ideas on raising pure-bred poultry—actually shows you how to s-t-r-e-t-c-h poultry profits—complete history of 17 different breeds—famous strains. . . Shall we mail your copy tomorrow?—and send your FREE CHICKS in a week or two?

GLASER HATCHERIES - M'COMB-LIEPSIC - OHIO.

SINGLE COMB White Leghorns Exclusively

3000 breeders on free farm range. Pure Barron English Strain, with trapnest records up to 314 eggs in a year. The large vigorous Leghorns that lay large white eggs. Now booking orders for hatching eggs and baby chicks Mar., Apr., & May delivery. Special feeding directions with all orders. Circular free Cecil Sherow and Olive Briggs-Sherow successors to EDGAR BRIGGS, SUNNY BROOK FARM Box 50 Pleasant Valley, N. Y.

Green Forest Husky Chicks

English and Tancred Strain Ship C. O. D. S. C. White Leghorns.....\$3.25 \$6.25 \$12 S. C. Barred Plymouth Rocks.....3.75 7.25 14 Mixed Chicks.....2.75 5.25 10 Leghorns are out of hens with trapnest records of 291-300 eggs. We pay parcel post and guarantee 100% good, strong chicks on arrival. Free circular. GREEN FOREST POULTRY FARM J. W. Amig & Son, Props. Star Route Richfield, Pa.

PINE TREE

ORDER YOUR MARCH CHICKS NOW

Direct From the "Oldest Hatchery" Let the Reliable Pine Tree Hatchery Supply your chicks this year. Safe arrival guaranteed. All chicks shipped prepaid parcel-post. Complete catalog on care and feeding of chicks given, upon request, with each order. Please remit with Money Order, Check or Registered Letter.

These Prices for March Deliveries Guaranteed

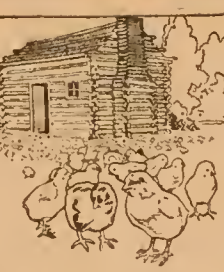
S.C. Wh. Leghorns	25	50	100	500
(A.P.A. Certified)	\$4.25	\$8.00	\$15	\$72.50
Barred Plymouth Rocks.....	4.75	8.75	16	77.50
R. I. Reds.....	4.75	8.75	16	77.50
W. Wyandottes.....	5.50	10.50	20	97.50

SPECIAL MATINGS—4c per Chick Higher, and worth it!

PINE TREE HATCHERY, Box 55, Stockton, New Jersey Jos. D. Wilson, Owner Since 1892

BABY CHICKS

BIG CHICKS from High Record Matings



1900-1929 First to ship Chicks in U. S.

UHL PIONEER HATCHERY & EGG FARMS

New Washington, Ohio Dept. A

BABY CHICKS 100% Live Delivery.

	50	100	500
Wh. and Br. Leghorns.....	\$6.00	\$11.00	\$52.50
Buff and Bl. Leghorns.....	6.00	11.00	52.50
Anconas.....	6.00	11.00	52.50
Barred Rocks.....	6.50	12.50	60.00
Wh. and Buff Rocks.....	6.50	12.50	60.00
SC and RC Reds.....	6.50	12.50	60.00
SC/Bl. Minorcas.....	6.50	12.50	60.00
Wh. and SL Wyandottes.....	7.50	14.00	67.50
Buff Orpingtons.....	7.50	14.00	67.50

All absolutely first class purebred stock from culled flocks. Prompt shipments. James F. Krejci, 9507 Meech Av. Cleveland, O.

BABY CHICKS

13 Leading Varieties—White Leghorns, Black Minorcas, Rocks, Reds, Wyandottes, Ilanburgs, Speckled Sussex, Buff Orpingtons.

\$9.00 per hundred and up. Free Catalog and Price List

Lantz Hatchery, Tiffin, Ohio

SINGLE COMB RHODE ISLAND REDS

Vt. Certified: Tested free from B.W.D. Males from 200-300 egg hens. Unhatched Chicks: 3000 Baby Chicks weekly. Circular. ASCUTNEY FARMS, A10, HARTLAND, VT.

WYCKOFF and BARRON STRAIN, White Leghorn Chicks—11 cents each; \$100 per 1000. Prepaid and safe delivery guaranteed. Our 19th year. Circular free. \$1.00 books order. THE PENNSYLVANIA HATCHERY, Box W, Liverpool, Pa.

When Writing Advertisers, Be Sure to Mention American Agriculturist

BABY

CHICKS

CHERRY HILL CHICKS

S.C.W. Leghorns—Wyckoff Strain.....	100
S.C. Everlay Brown Leghorns.....	12.00
Barred Rocks—Wm. Nace's select.....	14.00
S.C. Rhode Island Reds.....	15.00
Mixed or Broiler Chicks.....	9.00
1/2c less in 500 lots. 1c less in 1,000 lots.	
25 chicks add 2c, 50 chicks add 1c. Full count.	
100% live arrival guaranteed. Parcel Post prepaid.	
Bank reference. Order direct from this ad or write for free circular.	
CHERRY HILL POULTRY FARM,	
WM. NACE, Prop. McALISTERVILLE, PA.	



Lone Oak Poultry Farm

A breeding farm where nothing but our own production and rearing is sold.

Chicks of Known Ability

Breeders used this season were sired by males whose dams' production records ranged from 200-278 eggs. This same blood is being intensified still more in the present flock matings. Make sure of the production ability of your future flock by securing chicks from these choice matings.

Choice breeding cockerels, priced right.

LONE OAK POULTRY FARM, Box 661, BABYLON, N. Y.

5 Lb. Leghorns

The old reliable Heavyweight stock. Produced High Up on Pennsylvania's healthy mountain top. Get your chicks from certified record strains above 300 eggs. R.O.P. Hollywood, Tancred, Barron Matings. Hatch weekly pure white eggs up to 24 ounces per dozen. Beautiful Color Plate Leghorn Catalogue Free.

FARM SERVICE

ROUTE A10

TYRONE, PENNA.

EIGENRAUCH FARMS

RED BANK,

NEW JERSEY

18TH YEAR

breeding White Leghorns for size, vigor and heavy production of large White EGGS. 8,000 LAYERS are housed on our farm.

Our Chick Guarantee

100% satisfactory arrival on the exact date we promise shipment. Every chick sold by us is hatched from eggs laid by breeders on our own farm.

Write for Free Folder and Prices on Pullets and Chicks

EIGENRAUCH FARMS Dept. G, Red Bank, N. J.

Hall's Chicks

Leghorns - Reds - Rocks - Wyandottes

"WELL BRED FROM WELL BREEDERS"

You can't fool the neighbors, and most of our output is sold to our neighbors. If you want really "better chicks" with some real breeding behind them, to make MORE MONEY for you, take advantage of our years of breeding. New England Accredited Stock. All breeders. 100% White Diarrhea free. Official Contest records. Circular.

Hall Bros. Poplar Hill Farm, Box 59 Wallingford, Conn.

BABY CHICKS

25 50 100 500 1000

S.C.W. Leghorns.....	\$3.25	\$6.50	\$12	\$57.50	\$110
Bd.Rocks & S.C. Reds	3.75	7.25	14	67.50	130
Heavy Mixed.....	3.25	6.50	12	57.50	110
Light Mixed.....	2.50	4.75	9	42.50	80

A Special Discount on orders placed in advance Will ship C.O.D.

PINECREST POULTRY FARM & HATCHERY

Herbert Miller, Prop. Box 12 Richfield, Pa.

HERE: NEARLY EVERYONE RAISES FULL BLOODED "AMERICAN" QUALITY CHICKS



American or Eng. SC. Wh. Leghorns.....	50	100	500	1000
Hollywood Wh. or Brown or Buff Legs.....	\$6.75	\$13.00	\$62.00	\$120.00
Tancred Wh. Leg. Anconas—Barred Rocks.....	7.25	14.00	67.00	130.00
RC or SC Reds, Wh. Rocks, Parks Rocks.....	7.75	15.00	72.00	140.00
Wh. Wyandottes, Buff Orp., Blk. Minorcas.....	8.25	16.00	77.00	150.00
Brahmas, Col. Rocks, Blue Andalusians.....	9.25	18.00	87.00	170.00
Light Mixed \$9.00 a hundred. Mixed any breeds our selection \$10.00. Heavy Mixed \$12.00 a hundred.	11.25	22.00	105.00	200.00

Get our NEW CATALOGUE—It proves to you the SUCCESS our Customers have with our chicks—Breeders culled and Bred for High EGG PRODUCTION in Winter when eggs are demanding large premiums. Reference, Curwensville National Bank—100% Live Arrival—Dependable Service. Order Early.

AMERICAN CHICKERIES, BOX 214, GRAMPIAN, PA.



CHICKS

with vim and vigor

Hatched by men with 19 years experience, from culled flocks, 100 per cent live delivery guaranteed by Prepaid Parcel Post at the following prices:

S. C. White Leghorns.....	11c each—\$100.00 per 1000
S. C. Brown Leghorns.....	11c " 100.00 " 1000
Barred Rocks.....	12c " 110.00 " 1000
S. C. R. I. Reds.....	14c " 130.00 " 1000
S. C. Black Minorcas.....	14c " 130.00 " 1000
Mixed Broilers.....	9c " 80.00 " 1000

Order now for spring delivery. Capacity 60,000 eggs. \$1.00 will book your order. Catalogue free.

The Pennsylvania Hatchery, Liverpool, Pa.

Our Slogan "Service After Delivery"



Fairport Quality Chicks

are bred to make money for you. Strong, healthy, vigorous from the world's best and heaviest laying strains such as—Tancred, Ferris, Owen Farms, Daniels, Thompson, Martin, Shepard, Fishel and others. Free range flocks, scientifically culled and supervised. Smith Hatched. 100% live delivery guaranteed. 16 breeds 9c and up. Postpaid. Members International Baby Chick Association. Send now for free poultry book and prices. Buy Hatchery Chicks for Greater Profits.

FAIRPORT HATCHERIES Box 44 Fairport, N. Y.



Schwegler's "THOR-O-BRED" BABY CHICKS

THEY LIVE because they are bred from healthy, free range breeders that have thrived and gained in vigor for generations. They LAY because they are from selected and tested high egg power stock. White, Brown and Buff Leghorns, Barred and White Rocks, R. I. Reds, Anconas, Black Minorcas, Buff Orpingtons, White Wyandottes. \$2c and up. 100% live delivery guaranteed. Postpaid. Member International Chick Ass'n. Write today for FREE Chick Book.

SCHWEGLER'S HATCHERY, 204 Northampton, BUFFALO, N. Y.



100% Live Arrival

Ferris Strain White Leghorns.....	100	500	1000
Everlay Brown Leghorns.....	12	57.50	110
Basom's Barred Rocks.....	14	67.50	130
White Rocks.....	14	67.50	130
Owens' R. I. Reds.....	14	67.50	130
Black Minorcas.....	14	67.50	130
Mixed Chicks.....	9	42.50	80

JUNIATA POULTRY FARM

Box A Richfield, Pa.

WOLF SELECTED CHICKS

BABY CHICKS

Don't miss this chance to get a start with Wolf's extra quality pure-bred high producing stock. Every breeder produced on free range and health of chicks is safeguarded. Get Our Catalog and Price List

Tells about prizes won by our birds. Read about Mary Heneel who made over \$1000 profit in one year with birds of our breeding. All leading breeds—prices very attractive. Write today. Chicks shipped C.O.D. Toe picking stopped instantly with Wolf's "No-Pick." Order box today. \$1.00 postpaid. Satisfaction guaranteed or money refunded.

WOLF HATCHING & BREEDING COMPANY, BOX 1, GIBSONBURG, OHIO

BABY CHICKS

hatched by the best system of incubators from high class bred-to-lay stock. White, Brown, Buff Leghorns, Anconas \$14.00 per 100; Barred, White Rocks, Minorcas, Reds \$16.00 per 100; White Wyandottes, Buff Orpingtons \$17.00 per 100; Giants \$20.00 per 100; Heavy Broilers \$12.00 per 100; Light Broilers \$10.00 per 100; Pekin Ducklings \$30.00 per 100. Add 25c on orders for less than 100. Safe delivery guaranteed by parcel post.

Nunda Poultry Farm, Desk H, Nunda, N. Y. Member of the International Baby Chick Ass'n. and the N. Y. State Co-operative Chick Producers Ass'n.

New York State Certification Pays

The Key to Success and Greater Profits with Production Bred Poultry Today is Through the Purchase of High Grade Stock, Eggs or Chicks from Members of the

New York State Co-operative Official Poultry Breeders, Inc.

Formerly New York Co-operative Poultry Certification Association, Inc.

The Big 1929 Catalogue is off the press, and will be mailed

Free to All Requests. Write.

M. M. Griffiths, Sec'y.

Box Y New Hartford, N. Y.

National "Superbred" Chicks

500,000 SUPER-QUALITY CHICKS FOR 1929

Insure next winter's poultry profits by ordering NATIONAL "SUPERBRED" CHICKS NOW

We breed and hatch 13 of the leading Breeds. Send for our FREE illustrated catalog with prices on our utility and special mated chicks. All chicks sent prepaid. We guarantee 100% delivery of good lively chicks. Member of International Baby Chick Ass'n. You will save money by writing us now. National Chick Farms, Box 408, Mifflintown, Penna.



White Leghorn Baby Chicks a Specialty

S. C. W. Leghorns.....	Per 50	100	500	1000
Barred Rocks.....	\$6.50	\$12.00	\$57.00	\$110.00
R. I. Reds.....	7.50	14.00	67.50	130.00
Heavy Mixed.....	7.50	14.00	67.50	130.00
Light Mixed.....	6.50	12.00	57.50	110.00
Our White Leghorn Cockerels: Sire—from hen that laid 512 eggs per year. Hens—254-290 eggs. Actual 365 day trap nest record. All chicks Postpaid to your door. 100% live delivery guaranteed. Order direct or write for free circular.	5.00	9.00	42.00	80.00

PENN HATCHERY, Dalmatia, Penna. Formerly Sunshine Hatchery



HUBER'S RELIABLE CHICKS

MAKE EXTRA POULTRY PROFITS

When we say RELIABLE—we mean RELIABLE in every way. Breeding stock of highest quality of 19 years of careful development. Special attention paid to health of flocks and records kept.

CATALOG FREE—CHICKS SENT C. O. D. IF YOU WISH

Write for details—get our illustrated catalog which tells all the story. Our prices reasonable. A book on Raising Chicks worth many dollars given free with each order of \$10.00 or more. Big discount for early orders.

HUBER'S RELIABLE HATCHERY, No. High St., Fostoria, Ohio

QUALITY BABY CHICKS

Five extra given free with every box of one hundred ordered. April hatched chicks. Leghorns, White, Brown, Buff, Black—\$14.00 per 100; Barred Rocks, Reds, Minorcas, Anconas, \$16.00 per 100; White Rocks, Wyandottes, Buff Orpingtons, \$18.00 per 100. March, \$2 more; May, \$2 less; June \$4 less. Custom hatching. Eggs for hatching. Odds and Ends, Left Overs, Mixed broiler chicks, Light, 10c; Light and Heavy, 12c; All Heavy, 14c; Better order now. Will send C.O.D. Thousands hatching daily all year around. Active, husky, chicks hatched from healthy free range breeders that will live, grow and lay. Prompt shipments. Postage prepaid. Live delivery. Send for folder. SCHOENBORN'S HATCHERY, 335 Main St., Hackensack, N. J. Phone 1603 or 1604.

KERLIN BARGAINS in Wh Leghorn Chicks

"Kerlin-Quality" Money-Making Leghorns. Beautiful, Great Winter Layers, White Diarrhea Free, Egg Contest Winners. Over 60,000 Delighted Customers. BIG DISCOUNT on Chicks ordered Now, Delivery When Wanted. Free Starting Feed! Big Catalog FREE! Kerlin's Grand View Poultry Farm, Box 35, Centre Hall, Pa.

CHICKS

Will ship C. O. D.	25	50	100
S. C. Reds.....	\$4.00	\$7.50	14.00
Barred Rocks.....	4.00	7.50	14.00
White Leghorns.....	3.50	6.50	12.00
Heavy Mixed.....	3.50	6.50	12.00
Light Mixed.....	2.75	5.00	9.00
500 lots 1/2c less, 1000 lots 1c less.			
Free range. 100% Delivery. Circular.			

W. A. LAUVER, McAlisterville, Pa.

BABY CHICKS

25	50	100	500	1000
Barred Rocks.....	\$4.00	\$7.50	\$14	\$67.50
S.C.W. Leghorns.....	3.50	6.50	12	57.50
Heavy Mixed.....	3.50	6.50	12	57.50
Light Mixed.....	2.75	5.00	9	42.50

These chicks are from free range and heavy egg producing flock. 100% live delivery guaranteed to your door. Write for Special Mating prices.

FRANK NACE, Cocolamus, Pa., Box No. 120

CLEAR SPRING QUALITY CHICKS

S.C. White Leghorns.....	per 100	500	1000
Barron and Wyckoff Leghorns.....	\$11.00	\$2.50	\$100.00
Barred Rocks and R.I. Reds.....	12.00	57.50	110.00
Light Mixed, \$9.00 per 100; Heavy Mixed, \$12.00 per 100, for March and April, 100% live delivery. Postpaid. New circular free giving full details of all breeds.	14.00	67.50	130.00

CLEAR SPRING HATCHERY, McAlisterville, Pa. Box 49

He Sold them Next day...by Telephone

A Bell System Advertisement

A FARMER whose address is Route No. 4, Ft. Atkinson, Wisconsin, was away from home when a stranger drove by. The stranger was from Beloit, fifty miles away. He was interested in a Guernsey cow and calf that he saw in the field, but the farmer's son did not have authority to sell. The next day the farmer got the man in Beloit on the telephone. He sold him the cow and calf—a cash transaction of more than \$200.

The telephone promotes many a sale. It finds when and where to sell cattle, hogs, grain, fruit or produce—for more money. It stands always on guard in the home in case of accident, sickness or fire. It is never too tired to run errands to neighboring towns. The telephone pays for itself many times over.

The modern farm home has a telephone.



United Parents Exhibit Great Show Is Held in Grand Central Palace

THE second annual Exposition held by the United Parents Association of Greater New York was held at Grand Central Palace the week of February 24th. Judged from the viewpoint of exhibits and of attendance great strides have been made. Fundamentally the idea is sound, that of bringing together in an exhibit different types of work done in various schools so that parents and others interested in education may get a general picture of what is being taught today.

Space is too brief to give more than a passing glimpse of the exhibition. On the first floor were commercial exhibits

gestions for practical comfort and artistic appearance. The nursery school exhibit on the third floor gave further ideas as to how the average home or apartment can be furnished to include the tables, wardrobe and toilet necessities of the young child.

The school exhibits on second and third floors furnished food for prolonged study and thought. The things that even young children of 8 or 10 years can do with pottery or pictures simply amaze one. Music and maps, paintings, woven or hooked rugs and mats—in short practically all forms of expression for all ages through hand crafts were shown. The classes of boys who were doing their work with tin and at the lathe had a constant audience. Students were stationed at school exhibits to answer questions and explain the display.

It is worth a trip to the city to see such an exhibit and it should be studied in detail to get the most from it.

Tested Recipes

Onions De Luxe.

Peel and slice onions $\frac{1}{2}$ inch thick. Soak in milk $\frac{1}{2}$ hour, drain, season with salt and pepper, roll in flour and fry until brown in a frying pan containing some hot fat. Handle carefully to prevent the slices falling apart.

—L. A. C.—New York.

Molded Salmon.

1 cup milk, 2 eggs, $\frac{1}{2}$ teaspoon salt, $\frac{1}{2}$ cup cold water, $\frac{1}{4}$ cup whipped cream, 1 envelope gelatine, 1 cup salmon. Heat the milk in a double boiler, when scalded add it slowly to the well beaten egg, then add the salt. Soak the gelatine in the cold water. Add this to the custard and stir until dissolved. Mix in the salmon and set in a cool place. When it begins to stiffen beat in the whipped cream and place in a cold place until wanted.

This recipe serves as the main luncheon dish or it can be sliced and used with salad dressing and lettuce as a very good salad. It will need pickles or olives to give the necessary contrast in flavor and color.—L. A. C.

Peach Pudding

Place a layer of stewed peaches in a buttered pie dish or casserole. Put on fire $1\frac{1}{2}$ pints milk with 2 ounces butter. When boiling pour over 1 pint bread crumbs. Cover and soak. Beat up the whites of two eggs to a stiff froth, then beat in the yolks. Stir lightly into soaked bread crumbs and pour over the peaches. Sprinkle a little sugar over the top and bake in a moderate oven until a golden brown.—MRS. T. T., Canada.

Because of the previous cooking of the fruit this pudding can be cooked in the oven. This is an advantage when one has to make such a dessert in a hurry.

Spring Fashion Book



OUR New Fashion Book is full of good ideas on clothing for every woman, whether she sews or whether someone else sews for her. It shows the best of the season's styles for women and children besides giving practical beauty hints by Percy Westmore, the beauty expert of First National pictures. Johanna Mathieson, costume designer of Universal Pictures, tells how the screen has influenced American dress, giving her words special emphasis by showing the effects of a woman's dress upon the lines of her figure. In addition to these valuable hints, the catalog shows transfer designs for hooked rugs, bedspreads, curtains, dresses and lingerie. Send 12 cents for the Spring Fashion Book to Pattern Department, American Agriculturist, 461-4th Avenue, New York City.

For Grange Lecturers

The subjects of the debates are:

Is the young man who chooses farming as a life work making a mistake?

* * *

Should farmers use Saturday afternoon as a half holiday?

* * *

Is prohibition under present conditions a damage rather than a benefit?

* * *

Does poor cooking cause more misery than strong drink?

* * *

Should farmers adopt an 8 hour day.

* * *

Is it more economical to buy concentrates for the dairy than to grow them?

Any one of the following debate outlines will be sent to Granges, Farmers' Clubs or others who will make use of them on receipt of 2 cents each to cover mailing costs.

Send to

American Agriculturist
461, 4th Ave. New York City

Ask the Man WHO SELLS IT



D. Deane Tuttle

SAYS, "AMERICAN AGRICULTURIST to me is an institution for service to its readers, far reaching in its results. I am proud to be able to render some part in this service."

THERE IS AN OPENING FOR
A LIVE WIRE SALESMAN.

Send for booklet, "Your Opportunity"

**AMERICAN
AGRICULTURIST**

ITHACA

New York

When Writing Advertisers, Be Sure to
Mention American Agriculturist

In Honor of St. Patrick

A Central Idea For a Party Makes More Fun

WHEN the guests have assembled at this affair, in answer to their clover leaf shaped invitations, they should be given paper bags, and sent on a four leaf clover hunt. The clovers, cut from green cardboard, are hidden all over the house, and the guests will be allowed fifteen minutes to find them. Of course the ones with the fullest bags will win the hunt, and a four leafed clover brooch may be awarded the winning girl, and a clover decorated match box to the man.

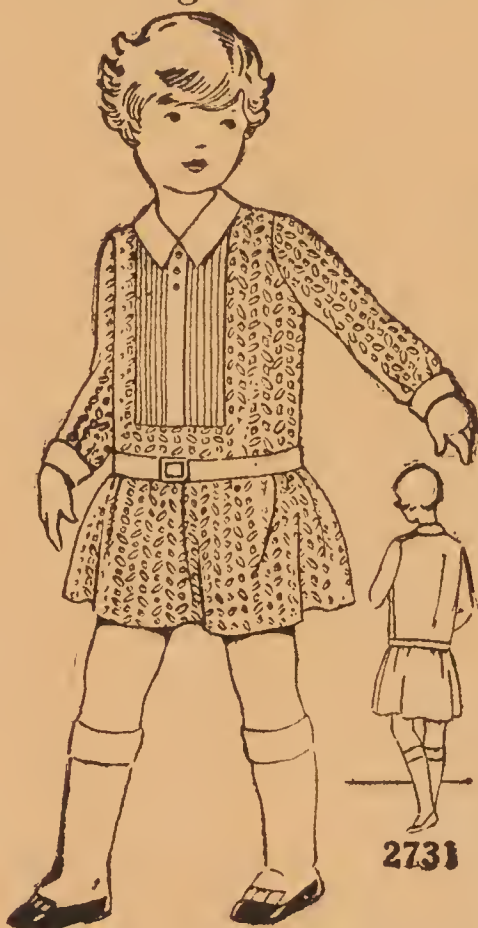
Men are the contestants in a real Irish fight, while the girls "root" enthusiastically for them. A player is chosen from each side. Each is given a tall hat of green cardboard and armed with a broom, the end of which is well wrapped with towels. Each opponent mounts his steed, which is a box upon which he must stand on only one foot. The battle of trying to knock off the other player's hat begins. Dropping the pole or putting down the foot eliminates a contestant. When one member of a team is dislodged another takes his place. This continues until the champion wins.

The event which follows may be a guessing game. A huge clover leaf cushion made of green paper cambric and stuffed with cotton may be brought in, fairly bristling with pins. Each guest has two guesses as to the number of pins on the cushion. The one whose guess is most nearly correct may be presented with a silver mounted rabbit foot.

Then have a race to the Blarney Stone. Stand two chairs side by side against the wall. A large piece of cardboard cut in the shape of a stone hangs

just above the chairs. Better still if you have a strong mantle, and no fire in the fire place, have a stone of fairly good size placed on top. Now line up the guests in two rows, a girl, then a boy, and start the leaders off to climb on the chairs, and kiss the stone. Then

Cunning Little Frock



The attractive pleated bodice with little-boy collar gives a distinctive touch to this frock NO. 2731 for the wee lady. Green chambray with white pique, white Swiss with blue polka dot trimmed with plain blue batiste or printed and plain sateen would combine well for this design. The pattern cuts in sizes 4, 6, 8 and 10 years. The 8 year size requires 1 7/8 yards of 36 inch material with 5/8 yard of 40 inch contrasting. PRICE 13c.

TO ORDER: Write name, address, pattern numbers and sizes clearly and correctly and enclose with correct remittance in stamps or coin (although coin is sent at own risk). Add 12c for one of the Spring Fashion Books and send to Pattern Department, American Agriculturist, 461-4th Avenue, New York City.

they run back to the end of the line, and two more start; this performance is repeated until all have raced. The line which finishes first wins—a box of green mints.

A Green Contest may follow. Each guest is given pencil and paper and is allowed to ask others for names of green things, the words to be written down. The person asked can give any word they desire, but if you have that word, you cannot re-write it. The one who can get the most green words in five minutes wins the prize—a bottle of green ink.

You may enjoy a snake walk—Cut green snakes from paper, and scatter on the floor. Choose sides, and one from each side is blindfolded, and walks about the floor. Have some one at the piano, and as the music stops, if one happens to be standing on a snake it will score for her side. Then two others are blindfolded and the sides having the most scores wins—a green paper snake.

Then announce that you have never charged for refreshments, but this time you must do so, as all guests realize it costs something to prepare lunch for such a crowd. Ask them to proceed in single file, men behind their partners, into the dining room where they will find the price of each article plainly marked—pay Mother before you leave. "Pig-in-the-blanket" sandwiches cost two squeals. "Irish potato salad"—one grin. "Blarney Stone" (Cucumber pickles) a bit of blarney. "Salted nuts"—two winks. "Candy"—show your sweet tooth. "Sugar cookies"—a sweet remark. "Coffee"—an Irish jig, joke or song.—M. F. M.

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The Little Shepherd of Kingdom Come *By John Fox, Jr.*

The high tide of Confederate hopes was fast receding now. The army of the Potomac, after Antietam, which overthrew the first Confederate aggressive campaign at the East, was retreating into its Southern stronghold, as was the army of the West after Bragg's abandonment of Mumfordsville, and the rebel retirement had given the provost-marshals in Kentucky full sway. Two hundred Southern sympathizers, under arrest, had been sent into exile north of the Ohio, and large sums of money were levied for guerilla outrages here and there—a heavy sum falling on Major Buford for a vicious murder done in his neighborhood by Daws Dillon and his band on the night of the capture of Daniel Dean and Rebel Jerry. The Major paid the levy with the first mortgage he had ever given in his life, and straightway Jerome Conners, who had been dealing in mules and other Government supplies, took an attitude that was little short of insolence toward his old master, whose farm was passing into the overseer's clutches at last. Only two nights before, another band of guerillas had burned a farm-house, killed a Unionist, and fled to the hills before the incoming Yankees, and the Kentucky Commandant had sworn vengeance after the old Mosaic way on victims already within his power.

That night Chad and Harry were summoned before General Ward. They found him seated with his chin in his hand, looking out of the window at the moonlit campus. Without moving, he held out a dirty piece of paper to Chad.

"Read that," he said.

"You have ketched two of my men and I hear as how you mean to hang 'em. If you hang them two men, I'm a-goin' to hang every man of yours I can git my hands on."

"DAWS DILLON—Captain."

Chad gave a low laugh and Harry smiled, but the General kept grave.

"You know, of course, that your brother belongs to Morgan's command?"

"I do, sir, said Harry, wonderingly.

"Do you know that his companion—the man Dillon—Jerry Dillon—does?"

"I do not, sir."

"They were captured by a squad that was fighting Dawes Dillon. This Jerry Dillon has the same name and you found the two together at General Dean's."

"But they had both just left General Morgan's command," said Harry, indignantly.

"That may be true, but this Dawes Dillon has sent a similar message to the Commandant, and he has just been in here again and committed two wanton outrages night before last. The Commandant is enraged and has issued orders for stern retaliation."

"It's a trick of Daws Dillon," said Chad, hotly, "an infamous trick. He hates his Cousin Jerry, he hates me, and he hates the Deans, because they were friends of mine." General Ward looked troubled.

"The Commandant says he has been positively informed that both the men joined Daws Dillon in the fight that night. He has issued orders that not only every guerilla captured shall be hung, but that, whenever a Union citizen has been killed by one of them, four of such marauders are to be taken to the spot and shot in retaliation. It is the only means left, he says."

There was a long silence. The faces of both the lads had turned white as each saw the drift of the General's meaning, and Harry strode forward to his desk.

"Do you mean to say, General Ward —"

The General wheeled in his chair and pointed silently to an order that lay on the desk, and as Harry started to read it his voice broke. Daniel Dean and Rebel Jerry were to be shot next morning at sunrise.

The General spoke very kindly to Harry.

"I have known this all day, but I did not wish to tell you until I had done everything I could. I did not think it would be necessary to tell you at all, for I thought there would be no trouble. I telegraphed the Commandant, but"—he turned again to the window—"I have not been able

her was long and hard. Out they went past the old cemetery, past the shaft to Clay rising from it, silvered with moonlight, out where the picket fires gleamed, and swinging on toward the Capital, unchallenged, for the moon showed the blue of Chad's uniform and his face gave sign that no trivial business, that night, was his. Over quiet fields and into the aisles of sleeping woods beat that musical rhythm ceaselessly, awakening drowsy birds by the wayside, making bridges thunder, beating on and on up hill and down until picket fires shone on the hills that guard the Capital. Through them, with but one challenge, Chad went, down the big hill, past the Armory, and into the town—pulling panting Dixie up before

Chad drew a long breath of relief and gladness and patted Dixie on the neck as he rode slowly toward the low building where he had missed the train on his first trip to the Capital. The telegraph operator dashed to the door as Chad drew up in front of it. He looked pale and excited.

"Send this telegram at once," said Chad.

The operator looked at it.

"Not in that direction to-night," he said, with a strained laugh, "the wires are cut."

Chad almost reeled in his saddle—then the paper was whisked from the astonished operator's hand and horse and rider clattered up the hill.

At headquarters the Commandant was handing the negro's note to a staff-officer. It read:

"You hang those two men at sunrise to-morrow and I'll hang you at sundown."

It was signed "John Morgan," and the signature was Morgan's own.

"I gave the order only last night. How could Morgan have heard of it so soon, and how could he have got this note to me? Could he have come back?"

"Impossible," said the staff-officer. "He wouldn't dare come back now."

The Commandant shook his head doubtfully, and just then there was a knock at the door and the operator, still pale and excited, spoke his message:

"General, the wires are cut."

The two officers stared at each other in silence.

Twenty-seven miles to go and less than three hours before sunrise. There was a race yet for the life of Daniel Dean. The gallant little mare could cover the stretch with nearly an hour to spare and Chad, thrilled in every nerve, but with calm confidence, raced against the coming dawn.

"The wires are cut."

Who had cut them and where and when and why? No matter—Chad had the paper in his pocket that would save two lives and he would be on time even if Dixie broke her noble heart, but he could not get the words out of his brain—even Dixie's hoofs beat them out ceaselessly:

"The wires are cut—the wires are cut!"

The mystery would have been clear, had Chad known the message that lay on the Commandant's desk back at the Capital, for the boy knew Morgan, and that Morgan's lips never opened for an idle threat. He would have ridden just as hard, had he known, but a different purpose would have been his.

An hour more and there was still no light in the East. An hour more and one red streak had shot upward; then ahead of him gleamed a picket fire—a fire that seemed farther from town than any post he had seen on his way down to the Capital—but he galloped on. Within fifty yards a cry came:

"Halt! Who comes there?"

"Friend," he shouted, reining in. A bullet whizzed past his head as he pulled up outside the edge of the fire and Chad shouted indignantly:

"Don't shoot, you fool! I have a message for General Ward!"

"Oh! All right! Come on!" said the sentinel, but his hesitation and the tone of his voice made the boy alert with suspicion. The other pickets about the fire had risen and grasped their muskets. The wind flared the flames just then and in the leaping light Chad saw that their uniforms were gray.

The boy almost gasped. There was

(Continued on Page 26)

The Story Thus Far

CHAD leaves "Lonesome" with his dog "Jack." His foster parents care both dead from the plague and plans have been laid to bind Chad out to a hard fisted neighbor. After the funeral, Chad collects a rifle, some powder, and shot and a haversack and with "Jack" by his side, starts out for unknown parts. He meets the sons of Joel Turner from over the mountain who take him home. Chad's cleverness at school gains the admiration of Caleb Hazel, the schoolmaster. They become close friends. Hazel tells Chad of the "Bluegrass Country" beyond the hills. Logging operations take Chad to a distant city where he gets lost and starts home on foot. He is picked up by Major Calvin Buford. It appears that Chad is also a Buford and is believed to be a kinsman of his new found friend, who takes him to his home in Lexington in the heart of the "Bluegrass." Chad accepts the Major's offer of a home and an education. Chad enters into the social life and becomes very popular at school. He falls in love with Margaret Dean, daughter of General Dean, neighbor of the Bufords. Meanwhile feeling grows bitter between North and South and war clouds gather. Chad joins the Union forces under Grant. His command takes him back to Lexington.

to get them a trial by court-martial, or even a stay in the execution. You'd better go see your brother—he knows now—and you'd better send word to your mother and sister."

Harry shook his head. His face was so drawn and ghastly as he stood leaning heavily against the table that Chad moved unconsciously to his side.

"Where is the Commandant?" he asked.

"In Frankfort," said the General. Chad's eyes kindled.

"Will you let me go see him to-night?"

"Certainly, and I will give you a message to him. Perhaps you can yet save the boy, but there is no chance for the man Dillon." The General took up a pen. Harry seemed to sway as he turned to go, and Chad put one arm around him and went with him to the door.

"There have been some surprising desertions from the Confederate ranks," said the General, as he wrote. "That's the trouble." He looked at his watch as he handed the message over his shoulder to Chad. "You have ten hours before sunrise and it is nearly sixty miles there and back. If you are not here with a stay of execution both will be shot. Do you think that you can make it? Of course you need not bring the message back yourself. You can get the Commandant to telegraph—" The slam of a door interrupted him—Chad was gone.

Harry was holding Dixie's bridle when he reached the street and Chad swung into the saddle.

"Don't tell them at home," he said. "I'll be back here on time, or I'll be dead."

The two grasped hands. Harry nodded dumbly and Dixie's feet beat the rhythm of her matchless gallop down the quiet street. The sensitive little mare seemed to catch at once the spirit of her rider. Her haunches quivered. She tossed her head and champed her bit, but not a pound did she pull as she settled into an easy lope that told

how well she knew that the ride before

a wondering sentinel who guarded the Commandant's sleeping quarters.

"The Commandant is asleep."

"Wake him up," said Chad, sharply. A staff-officer appeared at the door in answer to the sentinel's knock.

"What is your business?"

"A message from General Ward."

"The Commandant gave orders that he was not to be disturbed."

"He must be," said Chad. "It is a matter of life and death."

Above him a window was suddenly raised and the Commandant's own head was thrust out.

"Stop that noise," he thundered. Chad told his mission and the Commandant straightway was furious.

"How dare General Ward broach that matter again? My orders are given and they will not be changed."

As he started to pull the window down, Chad cried:

"But, General—" and at the same time a voice called down the street:

"General!" Two men appeared under the gaslight—one was a sergeant and the other a frightened negro.

"Here is a message General."

The sash went down, a light appeared behind it, and soon the Commandant, in trousers and slippers, was at the door. He read the note with a frown.

"Where did you get this?"

"A sojer come to my house out on the edge o' town, suh, and said he'd kill me tomorrow if I didn't hand dis note to you personally."

The Commandant turned to Chad. Somehow his manner seemed suddenly changed.

"Do you know that these men belonged to Morgan's command?"

"I know that Daniel Dean did and that the man Dillon was with him when captured."

Still frowning savagely, the Commandant turned inside to his desk and a moment later the staff-officer brought out a telegram and gave it to Chad.

"You can take this to the telegraph office yourself. It is a stay of execution."

"Thank you."

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LIVE STOCK

(See Page 26)

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EARLY VEGETABLE PLANTS. Frostproof Cabbage: Wakefields, Copenhagen, Golden Acre, Flat Dutch., Bermuda Onions, Beets, Lettuce. Postpaid: 100, 40c; 500, \$1.25; 1000, \$2.25. Collect: 1000, \$1.00; 5000, \$4.50. Tomato Plants: Earliana, Bonny Best, Baltimore. Postpaid: 100, 50c; 500, \$1.50; 1000, \$2.50. Collect: 1000, \$1.75; 5000, \$7.50. Write for prices on Potato, Pepper, and Egg Plants. Carefully Packed. Varieties Labeled. Delivery Guaranteed. PIEDMONT PLANT CO., Albany, Ga.
SEED CORN—CERTIFIED West Branch Sweepstakes for sale, grown by Penna State College Instructions. 95 to 100% germination. \$3. per bu. A. L. WINTER & SON, Montoursville, Pa.
FREE GLADIOLUS BOOK—36 pages, 45 illustrations. Describes 171 exquisite varieties, many new. Tells how to grow. It's free! The famous beautiful Rainbow Collection of thirty bulbs, all different, \$1. postpaid. HOWARD GILLET, Gladiolus Specialist, Box J, New Lebanon, N. Y.
CERTIFIED—COLLEGE INSPECTED Seed Potatoes. Green Mountain and Irish Cobblers. Write for our prices. WALTER L. CARPENTER INC., Chittenango Station, N. Y.

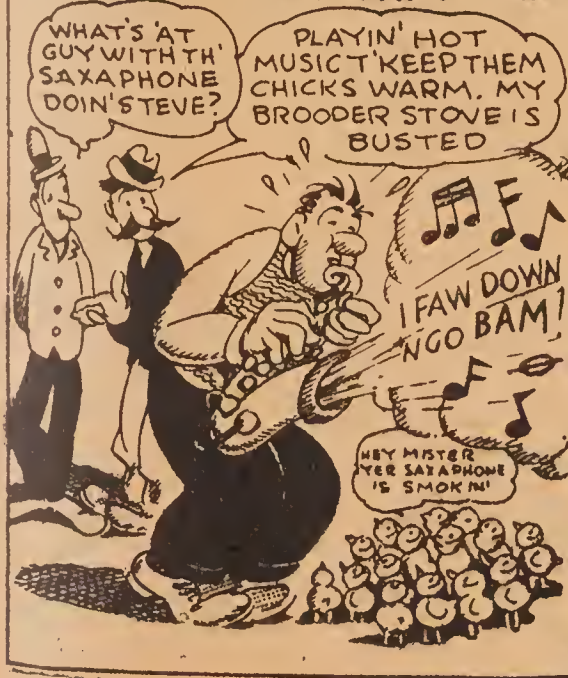
Additional Classified Advertising On Page 26

HANDY ANDY Says "Here's How"

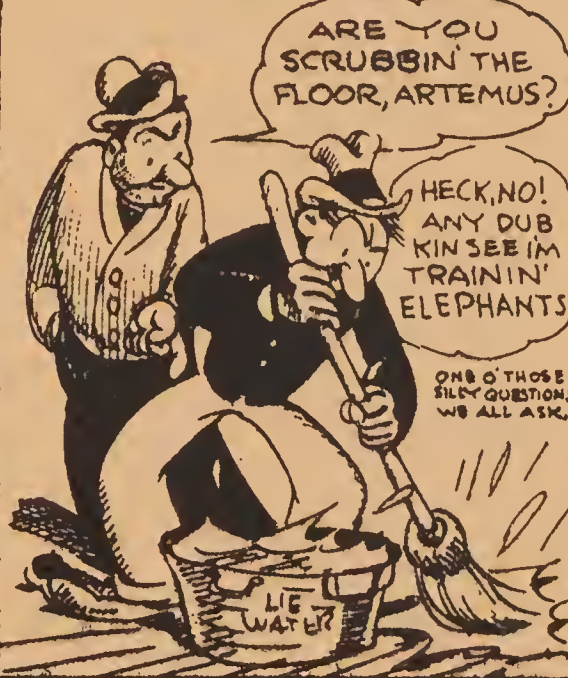
To Welcome the Baby Chicks

By Ray Inman

GIVE YOUR BABY CHIX A WARM CLEAN RECEPTION WHEN THEY ARRIVE



the brooder house with boiling LYE water 1 lb. LYE TO 30 GALS WATER



HAVE BROODER HOUSE DRY, STOVE REGULATED AND THERMOMETER 2" FROM THE FLOOR AT 95° WHEN CHICKS ARRIVE



WHEN CHIX ARE 60 HOURS OLD, FEED THEM A GOOD BABY CHICK STARTER, OR MILK.





Livestock



Breeders



CATTLE

CATTLE



Keep Ahead With Jerseys

Life is too short to waste time on inferior dairy cattle when a profitable Jersey herd can be developed at a low cost.

Start now! One cow or a herd of good Jerseys will bring satisfactory returns. Jersey milk is the highest quality milk averaging 5.36% butterfat and it is produced at low feed cost.

For free illustrated booklets on Jerseys and dairying, write

The American Jersey Cattle Club
324E West 23rd Street New York, N. Y.



HOLSTEINS FOR PROFIT!

More Dollars per Cow per Year

More Milk Increased milk yield per cow, according to reliable authorities, results in larger profits. Holsteins produce the most milk and butterfat. That's why the majority of dairymen milk Holsteins.

The HOLSTEIN-FRIESIAN ASSOCIATION OF AMERICA
230 East Ohio Street, Chicago, Illinois

6 COWS,

11-12 year old heifers, 6 bulls 3 to 18 months old. 4 calves 3 months old, 2 registered guernsey calves 3 months old TB Tested.

SPOT FARM, TULLY, N. Y.

FOR SALE—At all times Guernsey and Holstein cows and heifers in carload lots. FRED JENSEN, Waupaca, Wis.

When Writing Advertisers, Be Sure to Mention American Agriculturist

\$50⁰⁰/₁₀₀ OFF in the Chinese Auction

of FISHKILL DEMEER HENGERVELD

Born February 6, 1928

He is a son of a three year old (by the noted Dutchland Colantha Sir Inka) that has made two good long time records first and second calf on twice a day milking. This young bull's sire, and also his dam are son and daughter of Winana Segis May 2d, who made 876.76 lbs.

of butter and close to 20,000 lbs. of milk in ten months as a four year old. Also his sire is a son of Hengerveld Homestead De Kol 4th who has a splendid list of large producing daughters, he being a son of Jenny Linn Colantha, with a record of over 30 lbs. butter in 7 days.

His Price is Now \$300.

This price will be reduced \$50 the first of each month until sold.

Dairymen's League Certificates will be accepted at face value in payment for this animal.

FISHKILL FARMS HENRY MORGENTHAU, Jr., Owner
461 Fourth Avenue New York

SWINE

SWINE

Pigs From Reliable Stock

Buy where quality is never sacrificed for quantity. We sell only high grade pigs, fast growers, that will prove a good investment—thrifty and rugged, having size and breeding. Will ship C.O.D.

Chester and Yorkshire—Berkshire & Chester
7 to 8 weeks old.....\$4.00
8 to 10 weeks old.....\$4.25
Satisfaction guaranteed, or money refunded. 10 days trial allowed. Crates supplied free. A. M. LUX, 206 Washington St., Woburn, Mass. Tel. Wob. 1415.

PIGS FOR SALE OLD RELIABLE STOCK

Heavy legged, square backed, Chester and Yorkshire crossed, Poland China and Chester crossed, Barrows, boars or sows—8 to 10 weeks old, \$4.00 each. Fancy Berkshires, also Chester Whites, 2 months old Sows and unrelated Boars, \$5.00 each. 10 days trial or your money back. Shipped C.O.D. Crating free of charge. Yours for quality hogs.

ED. COLLINS, 35 Waltham Street, LEXINGTON, MASS.

FARMERS BUY FROM FARMERS

Let us suggest to you as breeders the best kind of a pig to start to raise is a good one. You save time and money. We sell all pigs with a trial of two weeks, and then if dissatisfied, return pigs and we will return your money.

7-8 wks. old, \$4.00 ea.; 8-10 wks. old, \$4.50 ea.
Breeds—Chester and Yorkshire cross, and Berkshire and Chester cross. Crating free. These prices F.O.B. our depot. Will ship any number C.O.D. or send check or money order.

MISHAWUN STOCK FARM, WOBURN, MASS.
P. S. No pigs sold at the farm; only by appointment.

BEST GRADE Chester, Berkshire and Poland China Pigs. 3 months old, \$12.00 each; 6-8 weeks old, \$7.00 each. (Express Paid). Bred Sows and Boars. C. E. BOSSERMAN, York Springs, Pa.

When Writing Advertisers, Be Sure to Mention American Agriculturist

Additional Classified Advertising

SEEDS—NURSERY STOCK

SPECIAL LOW PRICES on pedigreed Green Mountains, Russels and Cobblers, Catalogue. ROY HASTINGS, Malone, N. Y.

RAISE BEARDLESS BARLEY, New two rowed, stiff strawed, heavy yielder. Also Burbank Oats and Gold Nugget Corn. Descriptions and samples free. LONG-ACRE FARM, Route 2, Geneva, N. Y.

EARLY JUNE RED Raspberry sets for sale. The earliest, largest, heaviest bearing berry grown. Send for literature telling what the New York State Experiment Station says of the June. LESTER BENNETT, Victor, N. Y.

TIFTON'S RELIABLE PLANTS. Frostproof Cabbage, Bermuda Onion Plants. Wakefields, Dutch Ballhead, Copenhagen, Golden Acre, Postpaid, 500, \$1.50; 1,000, \$2.50. Express paid, 500, \$1.25; 1,000, \$2.15; 5,000, \$9.40. Early Tomato, Pepper, Cauliflower, Egg Plant later, write TIFTON PLANT CO., Tifton, Ga., Box 57.

WANTED TO BUY

WANTED—HAY, GRAIN, Potatoes, Apples, Cabbage, Carloads. Pay highest market prices. THE HAMILTON CO., New Castle, Pa.

WANTED TO BUY old bags. We pay excellent prices. Write for prices. We pay freight. OWASCO BAG CO., Rochester, N. Y.

PRINTING—STATIONERY

200 FINE WHITE ENVELOPES neatly printed with your return corner card, postpaid, \$1.00. Samples free. PRINTER HOWIE, Beebeplain, Vt.

WOOL—HIDES—FURS

MUSKRAT FURS WANTED. Black—Large \$3.50. Medium \$2.50. Brown—Large \$2.50. Medium \$1.50. All furs wanted. EVERETTE SHERMAN, Whitman, Mass.

The Little Shepherd of Kingdom Come

(Continued from Page 24)

need for quick thought and quick action now.

"Lower that blunderbuss," he called out, jestingly, and kicking loose from one stirrup, he touched Dixie with the spur and pulled her up with an impatient "Whoa," as though he were trying to replace his foot.

"You come on!" said the sentinel, but he dropped his musket to the hollow of his arm and, before he could throw it to his shoulder again, fire flashed under Dixie's feet and the astonished rebel saw horse and rider rise over the pike-fence. His bullet went overhead as Dixie landed on the other side, and the pickets at the fire joined in a fusillade at the dark shapes speeding across the bluegrass field. A moment later Chad's mocking yell rang from the edge of the woods beyond and the disgusted sentinel split the night with oaths.

"That beats the devil. We never touched him. I swear, I believe that hoss had wings."

Morgan! The flash of that name across his brain cleared the mystery for Chad like magic. Nobody but Morgan and his daredevils could rise out of the ground like that in the very midst of enemies when they were supposed to be hundreds of miles away in Tennessee. Morgan had cut those wires. Morgan had every road around Lexington guarded, no doubt, and was at that hour hemming in Chad's unsuspecting regiment, whose camp was on the other side of town, and unless he could give warning, Morgan would drop like a thunderbolt on it, asleep. He must circle the town now to get around the

American Agriculturist, March 16, 1929

rebel posts, and that meant several miles more for Dixie.

He stopped and reached down to feel the little mare's flanks. Dixie drew a long breath and dropped her muzzle to tear up a rich mouthful of bluegrass.

"Oh, you beauty!" said the boy, "you wonder!" And on he went, through woodland and field, over gulley, log, and fence, bullets ringing after him from nearly every road he crossed.

Morgan was near. In disgust, when Bragg retreated, he had got permission to leave Kentucky in his own way. That meant wheeling and making straight back to Lexington to surprise the Fourth Ohio Cavalry; representing himself on the way, one night, as his old enemy Wolford, and being guided a short cut through the edge of the Bluegrass by an ardent admirer of the Yankee Colonel—the said admirer giving Morgan the worst tirade possible, meanwhile, and nearly tumbling from his horse when Morgan told him who he was and sarcastically advised him to make sure next time to whom he paid his compliments.

So that while Chad, with the precious message under his jacket, and Dixie were lightly thundering along the road, Morgan's Men were gobbling up pickets around Lexington and making ready for an attack on the sleeping camp at dawn.

The dawn was nearly breaking now, and Harry Dean was pacing to and fro before the old Court-House where Dan and Rebel Jerry lay under guard—pacing to and fro and waiting for his mother and sister to come to say the last good-by to the boy—for Harry had given up hope and had sent for them.

(To be Continued Next Week)

Additional Classified Advertising

TOBACCO

HOMESPUN TOBACCO: Chewing 5 lbs. \$1.50; Smoking 5 lbs. \$1.25. Fifty cigars \$1.75. Pay when received. Pipe free. FARMERS UNION, Paducah, Ky.

HOMESPUN TOBACCO Chewing 5 lbs. \$1.50, Smoking 5 lbs. \$1.25. Pipe free, pay when received. FARMERS ASSOCIATION, West Paducah, Kentucky.

LEAF TOBACCO—Good sweet chewing, 3 lbs., 90c; 5, \$1.25; 10, \$2.00. Smoking, 3 lbs., 60c; 5, 90c; 10, \$1.50. UNITED FARMERS, Mayfield, Kentucky.

GUARANTEED HOMESPUN TOBACCO. Chewing, 5 lbs. \$1.50; 10—\$2.50. Smoking, 10, \$1.75. Pipe Free. Pay Postman. UNITED FARMERS, Bardwell, Ky.

MISCELLANEOUS

USED CIVIL WAR ENVELOPES with flags, designs, etc., \$1 to \$15 paid. Other stamps on envelopes before 1871 bought. W. RICHMOND, Cold Spring, N. Y.

WANTED USED BAGS any quantity and grade. Highest prices and freight paid. HOFFMAN BROS. BAG CO., 39 Gorham St., Rochester, N. Y.

LEARN AUCTIONEERING at home. Every student successful. SCHOOL, Box 707, Davenport, Iowa.

CANARIES. CLOSING OUT Sale. THERESA HYLAND, Andover, N. Y.

BARRELS OF SLIGHTLY damaged crockery—Hotel chinaware—Cookingware—Glassware—Pottery. E. SWASEY COMPANY, Portland, Maine.

SUPERIOR GRAFTING WAX for Successful grafting. 1 lb. 50c; 3 lbs. \$1.25 postpaid. D. VICTOR MFG. CO., So. Weymouth, Mass.

OUR 1929 CATALOG just from press. 84 pages showing Largest Line of Poultry Supplies in the world (Over 350 items). Write today for your copy FREE. BROWER MFG. CO., Dept. 11 1, Quincy, Ill.

KILL THE LICE. Battenkill Farm Louse Powder almost 100% active ingredients. Two large boxes for \$1. Satisfaction guaranteed. BATTENKILL FARM, Greenwich, N. Y.

PATCHWORK: Rayon, Percale, Prints, 3 lbs. \$1. 100 assorted pieces 6x8, \$1. Special trial package, 50 cents, postpaid. NEW ENGLAND PATCHWORK CO., Hartford, Conn.

\$2 to \$500 EACH paid for hundreds of Old or Odd Coins. Keep all old money, it may be very valuable. Get posted. Send 10 cents for illustrated Coin Value Book, 4x6, 25 years in business. We buy and sell. CLARKE COIN EXCHANGE, Box 25, Le Roy, N. Y.

12 GUARANTEED BLADES for Gillette safety razor, 50c; 25, \$1.00 postpaid. A. STARR, Bloomsburg, Pa.

FIND HONEY. IF you wish to be an expert bee hunter write to WILL GROVER, Bristol, Vt.

FARMERS. End crow pests and replanting. Treat corn seed with guaranteed formula costing few cents per bushel. Same mailed on receipt of \$1. R. WHEELER, Marathon, N. Y., R.D. 1.

FARMS FOR SALE

TO SETTLE ESTATE 157 acres dry, level, highly cultivated land. Fruit, water, wood, good buildings, basement for 40 cows, silo. Six miles from city, near R. R. station. A. D. ROBSON, R.D. 7, Rome, N. Y.

DEL-MAR-VA—THE MARKET BASKET OF THE EAST. Three to ten hours by motor truck to New York, Philadelphia, Baltimore and Washington markets. Pennsylvania Railroad permeates Peninsula. Splendid productive land, farms, town and waterfront homes. Low prices. Good schools, low taxes. Very little snow and freezing. Handsome descriptive booklet. FREE. Address 164 Del-Mar-Va Building, Salisbury, Md.

GOOD 141 ACRE farm, Barn, house, garage, hen-house. State road. Cheap for quick sale. BOX 194, Mannsville, N. Y.

SITUATIONS WANTED

DO YOU NEED FARM HELP? We have Jewish young men, able-bodied, some with, but mostly without experience, who want farm work. If you need a good, steady man, write for an order blank. Ours is not a commercial agency. We make no charge. THE JEWISH AGRICULTURAL SOCIETY, Inc., Box A, 301 E. 14th Street, New York City.

LICENSED CHAUFFEUR DESIRES position. Honest, reliable, temperate man. Experienced truck and tractor operator. References. Write, FLOYD PULVER, Pine Plains, N. Y.



Unordered Merchandise a Nuisance

"I am enclosing a copy of a letter from the American Specialty Company to my son. They are trying to collect for seeds sent to him which were never ordered. Now they have the account in the hands of a collection agency. I have the seeds but understand that inasmuch as no postage was included for their return and as they were never ordered, I am not called upon to return them."

THIS question of unordered merchandise is a serious nuisance, but unfortunately there seems to be no way to stop it, unless all of our subscribers stand up for their rights in the matter.

When no postage is included for the return of unordered merchandise, you are under no obligation to return it, although you should keep it in some safe place to be called for by the company. We suggest that you write telling them that the merchandise is in your possession and upon receipt of the necessary postage it will be returned.

Insurance Company Not Licensed in New York

"Would you please investigate the Postal Life and Casualty Company of Kansas City, Mo. Representatives are in our neighborhood and are offering an attractive policy."

UPON investigation we find that this company is not now and never has been licensed to transact the business of insurance in New York State. It makes no reports to the Insurance Department.

The law prohibits any person or corporation from aiding an unlicensed company in effecting insurance or otherwise in this state and any person so acting is liable to prosecution for a misdemeanor, the penalty of which upon conviction is \$500. fine or one year's imprisonment, or both. If this company has any representatives in the state selling its new accident insurance policy, the facts should be laid before the district attorneys of those counties in which such representatives are operating. It is of course, legal for insurance companies not licensed to deal with New York State residents directly by mail but it would seem to be fair to assume that any company that fails to take out a license does so because it is unable to meet the requirements of the State Insurance Department.

Jackson's Rheumatism Remedy Questioned

PACKAGES have been received by Rochester residents mailed by Mark H. Jackson of Syracuse. These contained a remedy or cure for rheumatism. Several years ago the Federal Authorities seized a supply of Jackson's remedy and issued a statement that he "falsely and fraudulently" represented it. He admitted that it was fraudulent, pleaded guilty and was fined. He is avoiding the claims made at that time but is evidently selling the same or a similar product.—Rochester Better Business Bureau.

Fur Bearing Animals in Confinement

Can you give us any information in regard to raising muskrats. We have a swamp where there are some. A party tells us they can be fenced in and money can be made by letting them multiply. Any information will be appreciated.

BEFORE raising fur bearing animals in confinement it is necessary to get a license from the State Conservation Commission at Albany, N. Y. The cost of this is rather small.

This license allows any one to catch fur bearing animals alive during the open season, to sell them at any time for breeding stock and to sell their pelts during the open season. The Bu-

reau of Biological Survey of the U. S. Department of Agriculture has done some very good work on fur farming and we are asking them to send you Farmers Bulletin 869 entitled "Muskrats for Fur."

Subscriber Receives Pay For Milk

"I have a claim against E. G. Waterman of Watervliet, N. Y. for milk sold to him. Anything you can suggest to help me collect this money would be greatly appreciated. Part of the milk was delivered prior to September 1, when Water-

man was bonded, but most of it has been delivered since September 1, when as I understand it, he did not take out a bond with the State Department. Letters which I write asking for payment of the claim are ignored."

ON investigation we are informed that Mr. Waterman has been notified by the State Department of Agriculture and Markets on several occasions to file a bond with the Department as there were evidences that he was purchasing milk from producers without a license in violation of the State Law.

We believe that this case has been turned over to the Attorney General and we trust that action will be taken to compel the filing of a bond for the protection of producers.

Following considerable correspondence by us on this case our subscriber informs us that he has received a check for part of the amount due him and a note for the balance.

Money Paid to A. A. Subscribers During Jan., 1929

Insurance Indemnities

To January 1st, 1929.....\$119,741.15
During January 1929.....2,544.99

Total.....\$122,286.14

John Purcell, R4, Baldwinsville, N. Y.....\$ 5.00	Marjorie M. Clemons, R.1, Barneveld, N. Y. 10.00
Struck by auto—fractured rib	Struck by car, contused leg.
John Johnson, R.1, Nicholson, Pa..... 20.00	Wm. H. Ballon, Wendell, Mass..... 25.00
Auto collision—cuts.	Wrecked vehicle—fracture.
Michael De Stafeno, Oxford Depot, N. Y..... 20.00	Elizabeth Penzes, R.1, E. Aurora, N. Y..... 20.00
Travel accident, lacerations and contusions	Auto collision—cut face, loss of teeth.
Garrett Dey, Arkport, N. Y..... 20.00	Leon Begham, Rochester, N. Y..... 20.00
Travel accident—contusion knee.	Auto collision—cut face, loss of teeth.
James L. Flemmings, S. Britain, Conn..... 40.00	Ellis Fleury, R.2, Burke, N. Y..... 42.86
Travel accident—fractured rib.	Auto collision, sprained right ankle.
S. J. Elting, Broadway, Madalin N. Y..... 60.00	John Burke, Clyde, N. Y..... 30.00
Auto overturned—fractured left clavicle.	Auto overturned—contused right foot.
Stella Joiner, Dryden, N. Y..... 90.00	Alfred Coomber, Canandaigua, N. Y..... 40.00
Fractured leg (Ref. Dec. 28, \$40.00)	Travel accident—lacerated scalp.
Dale Smith, R.35, Middleport, N. Y..... 77.14	Harry Robbins, R.4, Frankfort, N. Y..... 130.00
Auto overturned, fractured ribs.	Travel accident—fracture of knee.
George D. Wait, Owego, N. Y..... 80.00	Margaret Weir, R.1, Fly Creek, N. Y..... 57.14
Auto accident, hip injured.	Auto collision, body contusions.
John Ott, Box 86, Frensburg, N. Y..... 35.00	Bert J. Smith, R.2, Mansfield, Pa..... 40.00
Auto accident—lacerated face, concussion	Travel accident—fractured right clavicle.
Herman Schmidt, R.1, Deposit, N. Y..... 20.00	Francis Hill, R.3, Oxford, N. Y..... 30.00
Travel accident—crushed muscles of leg	Struck by truck—fractured left leg.
John Thornburg, R.2, Arcade, N. Y..... 17.14	George M. Lott, R.1, Great Bend, Pa..... 41.43
Struck by auto—sprained right knee	Travel accident—sprained ankle.
J. M. VanLeenwen, Selden, L. I., N. Y..... 40.00	Paul C. Rogers, Stearnville, Pa..... 14.28
Auto collision, strained back and neck	Auto accident—lacerated back and hand.
Roy Colvin, Camillus, N. Y..... 30.00	Rufus W. Fritz, Owings Mills, Md..... 40.00
Struck by auto—fractured skull	Struck by truck—lacerated scalp, sprains.
Donald McCarthy, Lawton, Pa..... 10.00	Geo. C. Shelor, R.3, Nottingham, Pa..... 30.00
Auto accident—cut left hand and face.	Struck by auto—contusions.
Oscar Adams estate, Croton Falls, N. Y..... 1,000.00	E. A. Anderson, R.17, Mayville, N. Y..... 30.00
Train struck auto—mortality.	Struck by auto—compound fracture leg.
Ralph Simons, Box 102, Smyrna, N. Y..... 90.00	NaMott Campbell, R.3, Hamilton, N. Y..... 60.00
Auto accident—fractured hip and side.	Auto collision—fractured ribs.
Mrs. Hennie Lamson, R.2, Hannibal, N. Y. 130.00	Jennie A. Campbell, R.3, Hamilton, N. Y..... 40.00
Auto accident—lacerated face, bruises.	Auto collision—fractured ribs.
Vivian Waters, R.2, Cuyler, N. Y..... 30.00	Charles Clizmadia, R.1, Pittsford, Vermont 10.00
Auto overturned—fractured spine and thigh.	Auto collision—contusions.
Manley S. Matthews, R.1, Rector, N. Y..... 20.00	
Travel accident—strained muscles of thigh.	

\$2,544.99

Service Bureau Claims Settled

Ray C. Ellis, Stanley, N. Y.....\$ 36.00	C. B. Whitmoeyer, Muncy, Pa..... 181.12
(Refund from mail order company)	(Returns on beans)
D. L. Whitlock, Oswego, N. Y..... 23.50	William Burgess, Huntington, L. I..... 125.00
(Refund on unsatisfactory merchandise)	(Amount due on contract)
Mrs. Harry McConnell, Williamson, N. Y. 2.05	Ross Rathbun, Red Creek, N. Y..... 12.50
(Refund on returned order)	(Adjustment on unsatisfactory deal)
Mrs. A. J. Stone, Rochester, N. Y..... 13.10	Walter J. Buchanan, Fort Johnson, N. Y. 19.85
(Refund on unsatisfactory merchandise)	(Adjustment on shipment of bags)
Mrs. C. A. Kehr, Unadilla, N. Y..... 2.00	R. E. Stevenson, Sherman, N. Y..... 10.00
(Refund on unsatisfactory deal)	(Refund on cancelled order)
Mrs. D. S. Pierce, Sloansville, N. Y..... 6.00	Howard Ruff, Dunraven, N. Y..... 30.23
(Pay for knitting done)	(Adjustment from commission merchant)
W. H. Stone, Canton, Pa..... 14.86	Leon D. Nelsh, DeLancy, N. Y..... 9.00
(Express claim settled)	(Refund on freight charges)
Mr. William Smoyer, Macungie, Pa..... 1.50	Joseph Bauer, Pine City, N. Y..... 3.00
(Refund on radio apparatus)	(Credit for return merchandise)
L. Thompson, Pierrepont Manor, N. Y..... 12.40	A. W. Gilman, Truthville, N. Y..... 10.86
(Refund on oil burner)	(Settlement on pet stock)
Lewis Packard, Troy, Pa..... 14.70	G. B. Chase, Martville, N. Y..... 5.48
(Returns on eggs)	(Adjustment on express charges)
William Decker, Rhinebeck, N. Y..... 3.39	L. E. Ball, Theresa, N. Y..... 9.00
(Refund on radio equipment)	(Settlement on pig order)
H. A. Shutts, Waverly, N. Y..... 15.00	S. J. Woodcock, Cooperstown, N. Y..... 40.25
(Adjustment on merchandise)	(Adjustment on dead pigs)
Edwin Oakley, Naples, N. Y..... 4.00	
(Adjustment on chicks)	

\$604.79

General Claims Adjusted Where No Money is Involved

Eugene M. Sullivan, Ddessa, N. Y.	George H. Cooley, Utica, N. Y.
(Merchandise order received)	(Order satisfactorily filled)
George W. Nelson, Conneautville, Pa.	Mrs. Nellie Kessler, Onondaga, N. Y.
(Merchandise order received)	(Merchandise received)
E. A. Ward, Glenfield, N. Y.	C. A. Nadler, Homer, N. Y.
(Merchandise order filled)	(Livestock order filled)
Miss H. M. Abernethy, Doylestown, Pa.	K. V. Hoffman, Lorain, Ohio
(Premium received)	(Blanket order filled)
Mrs. A. P. Atwater, Jewett, N. Y.	Jacob D. Null, Hanover, Pa.
(Adjustment for selling goods)	(Adjustment on railroad difficulty)
E. D. Hathaway, Schuylerville, N. Y.	
(Dog exchanged)	

Chicken Thief Rewards Paid in January

(The A.A. chicken thief rewards were discontinued on January 1, but we are paying awards where the thief was actually under arrest prior to January 1.)	
Mr. Arnold L. Burdette, Germantown, Md.....	\$25.00
Mr. Wm. Somerville, R.3, Brighton Sta., N. Y.....	\$25.00

Total Paid to Subscribers \$3,199.78

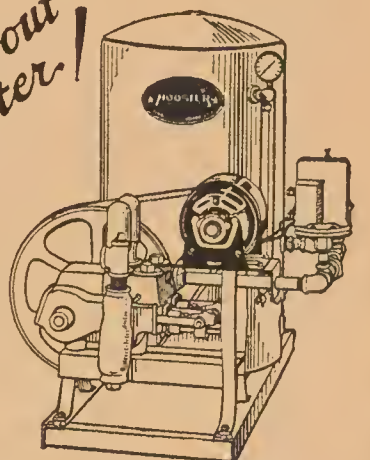


Modern Farmers must have running water

FRESH running water is a necessity on the modern farm! For sanitation, drinking and culinary purposes, garden irrigation, and many home uses require water under pressure. HOOSIER systems operate from any power—electricity, gasoline, wind—and draw water from wells, springs, or lakes. Economical to operate. The GALVAZink coating, inside and out, makes for many years of uninterrupted service.

A Free Book About Water!

Our book, "How to Have Running Water," is full of information that will help solve your water problems. It's FREE. Write for it today.



FLINT & WALLING MFG. COMPANY
29 OAK ST., KENDALLVILLE, IND.



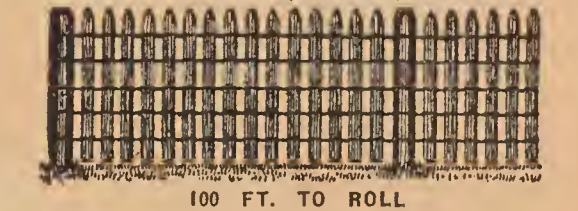
SAVE HALF Your Paint Bills USE INGERSOLL PAINT

PROVED BEST by 87 years' use. ONLY Paint endorsed by Grange for 50 Years. Made in all colors for all purposes at WHOLESALE FACTORY PRICES. INGERSOLL PAINT BOOK tells all about Paint and Painting for Durability. FREE TO YOU with Sample Cards and our PREPAID FREIGHT OFFER. WRITE US. DO IT NOW and SAVE MONEY.

PATRONS' PAINT WORKS, Inc.
Oldest Ready-Mixed Paint Factory in America. Est. 1842
252 Plymouth Street, Brooklyn, N. Y.

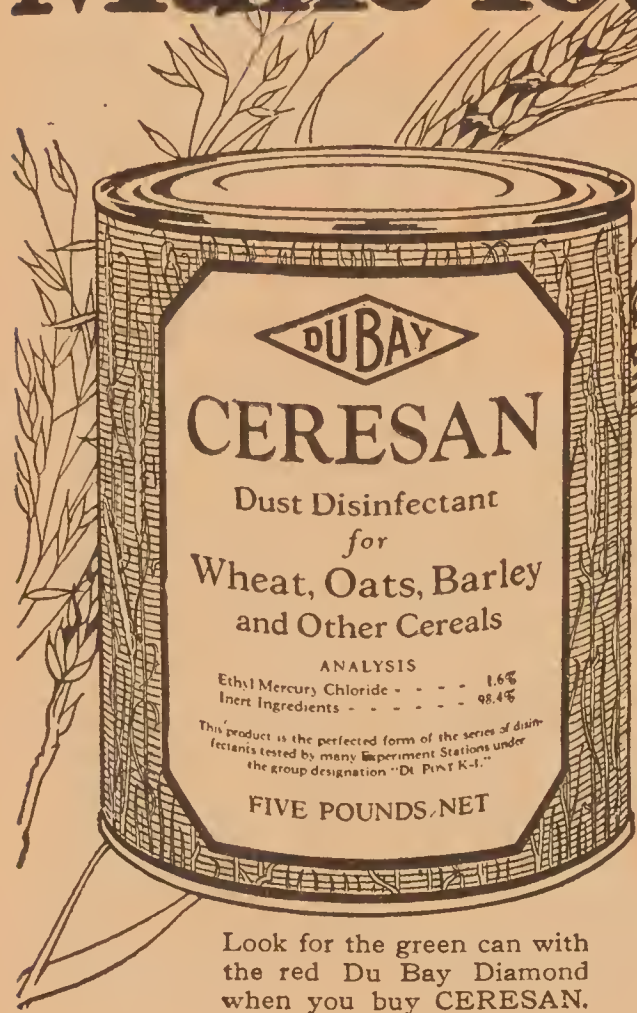


FENCING We manufacture a ready made Cedar Picket and Galvanized Wire Fence—interwoven—Painted Green—Red—or Plain—made in 3 to 6 ft. heights. For chickens, farms, yards and lawns



Used extensively for snow protection along Highways. Write for prices and catalog. NEW JERSEY FENCE CO., Burlington, N. J.

Make Your Grain Fields Pay You More This Year!



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CERESAN controls:

Wheat—Bunt or stinking smut and seed-borne flag smut.

* *

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* *

Barley—Stripe disease, covered smut and loose smut in certain 6-row winter varieties.

* *

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* *

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	W. E. Robbins Hardware	Wellsville
	Wellsville Milling Co.	Wellsville
	Hazlett & Chase	Whitesville
Cattaraugus	Economy Drug Store	Salamanca
Chemung	Banfield-Jennings Co-op.	Elmira
	Geo. W. Peck Co.	Elmira
Chenango	Harold L. Keller	Norwich
Clinton	J. D. Bowen	Saranac
Cortland	McGraw & Elliott	Cortland
Erie	W. H. Geib & Son	East Aurora
	R. F. Knoehe & Son	Hamburg
	W. G. Arthur	Orchard Park
Franklin	Cooks Pharmacy	Chateaugay
	D. Dickinson & Co.	Malone
Herkimer	The Sauer Drug Corporation	Herkimer
Lewis	F. C. Snyder's Pharmacy	Lowville
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	Geneseo Hardware Co.	Geneseo
Monroe	Joseph Harris Co., Inc.	Coldwater
	Burr & Starkweather Co.	Rochester
	Hart & Vick	Rochester
	James Vick's Sons	Rochester
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Oneida	Utica Seed Co.	Utica
Onondaga	Frederick H. Ebeling	Syracuse
	Onondaga Farmers Supply Co., Inc.	Syracuse
Ontario	Peck Hardware Co.	Canandaigua
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Schenectady	Empire Seed Co.	Schenectady
Schuyler	W. M. Pellett	Watkins Glen
Seneca	J. F. Farrell	Seneca Falls
Steuben	Hawkins & Hill	Addison

IN NEW YORK

COUNTY	DEALER	TOWN
Steuben	B. C. McKay	Atlanta
	Geo. W. Peck Co.	Bath
	Kinkaid Produce Co.	Cohocton
	Peck-Lookup Co.	Cohocton
	Geo. W. Peck Co.	Corning
	Geo. W. Peck Co.	Prattsburg
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Tioga	The Beach Drug Co.	Owego
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Wyoming	E. K. Lucas	Gainesville
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IN NEW JERSEY

COUNTY	DEALER	TOWN
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Cumberland	Minches Seed Store	Bridgeton
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	Ed. Hann	Swedesboro
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	W. T. Pierce	Allentown
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	Andrews and Avis	Elmer
Salcm	Garrison's Rexall Pharmacy	Elmer
	G. M. Andrews & Son	Woodstown

IN NEW JERSEY

COUNTY	DEALER	TOWN
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IN DELAWARE

COUNTY	DEALER	TOWN
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	W. M. Hinkle	Dover
	J. A. Frear & Sons	Dover
	Clarence Voshell & Son	Felton
	W. W. Wilson	Frederica
	Harrington Hardware Co.	Harrington
New Castle	Ellwood A. Pierson	Wilmington
	The Phillips-Thompson Co.	Wilmington
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	Chipman & Penuel	Laurel
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IN MARYLAND

COUNTY	DEALER	TOWN
Anne Arundel	Arundel Supply Co.	Annapolis
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	Wiseman-Downs Co.	Baltimore
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Stumpp & Walter Co.	New York
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Doty & Humphrey Drug Co.	Poughkeepsie

IN NEW YORK

Gibson-Snow Co. Inc.	Rochester
Hart & Vick, Inc.	Rochester
Vick & Dildine Co.	Rochester
Gibson-Snow Co. Inc.	Syracuse
Charles Hubbard Son & Co.	Syracuse
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Litchard, Schultheis & Johnson, Inc.	Wellsville

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New Jersey Wholesale Drug Co.	Newark
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Bennett, Denison, Clayton & Co.	Prospect Plains
American Chemical Specialties Co.	Springfield

IN NEW JERSEY

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O. A. Newton & Son	Bridgeville
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IN MARYLAND

James Bailly & Son	Baltimore
J. Bolgiano Seed Co.	Baltimore
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The Meyer Seed Co.	Baltimore
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CERESAN



Seed Disinfectants



Seed Disinfectants

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AMERICAN AGRICULTURIST

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March 23, 1929

Published Weekly

The Home of the Early Spud

How Florida Farmers Grow and Market Potatoes

EDITOR'S NOTE: The coming of rapid transportation, aided by the refrigerator car, is rapidly widening the sources for all farm products. Dairymen of the New York milk shed are now fighting to keep their boundaries of the present territory from expanding, but vegetable and fruit growers long ago found that they had to compete with products from all over the rest of the country and even from other countries.

The following story on the production of early potatoes in Florida gives an example of the increased supplies of farm products in our eastern markets coming from long distances.

Incidentally, this story may be a little optimistic and we would caution any of our readers thinking of going to Florida that the Florida growers have plenty of troubles.

THE humble potato may not suggest romance, but the tourist who visits Hastings, Florida, will discover that even the lowly spud has its thrilling human interest.

Hastings, a little town of about 1500 population, grows 6300 acres of potatoes annually, places the crop in the northern markets long before the average restaurant patron is expecting spring vegetables, and receives \$3,500,000 for doing the job. Where such sums of money are involved there is always romance, for making money and making love are closely associated and bring strong personalities into rivalry and conflict.

In the dickering for seed potatoes, fertilizer and credit, in the race to be first in the market, and in the gathering of growers and buyers into competing organizations, there are plots and counterplots enough to make a five-foot shelf of novels.

The soil of Hastings has attracted southern "crackers", and northern farmers who dodge the rigorous winters of their native states, make a crop in Florida and reach home again in time to plow and plant. Between these two types there is a natural antipathy which may be either developed into a feud or subordinated for the common good. Some of the northerners fail the first year but if they keep on they succeed. The loose soil that can be worked even with a hand cultivator, the absence of

By ARMSTRONG PERRY

rocks and stones, the plentiful supply of field hands at reasonable wages, all make agriculture a pleasure after the palmettos have been grubbed out and farming started.

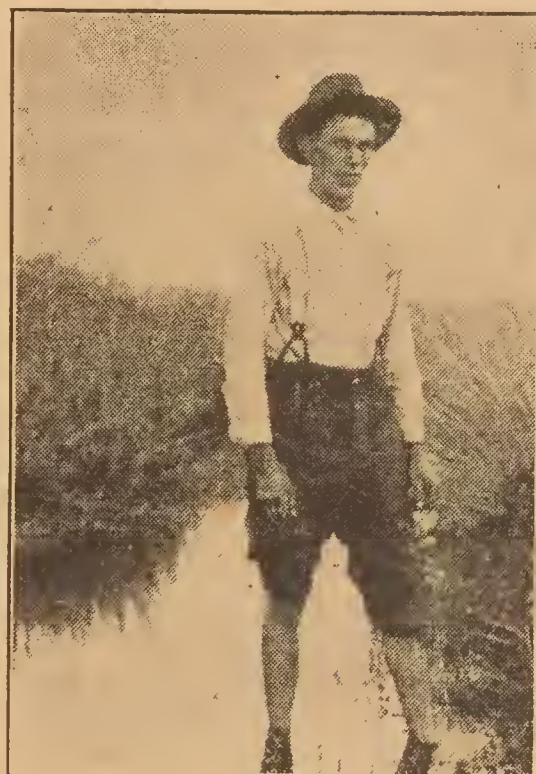
Florida potatoes have little competition because they reach the market months before the northern crop. The digging may start in March. The first potatoes out of the ground are snapped up at \$20.00 a barrel or more. For this reason some of the growers start digging as soon as the spuds are as big as walnuts. The supply increases and the price drops. The average price later in the season is around \$5.50 per barrel. But there is a good profit even at these prices, and the grower receives spot cash every day on delivery of the potatoes at the railroad station.

A farmer who is starting without capital, as eighty per cent of them do in Hastings every year, begins by borrowing to the limit. It costs him about \$20.00 an acre for seed, in addition to fertilizer, barrels and cash for planting operations. The total cost of producing an acre is well over \$100. All these items, even the cash, are usually procured from a local dealer or through an organization of growers. If a local dealer furnishes the wherewithal, he ties the

grower up to a contract that requires the grower to sell through him. If the growers' association provides these necessities, the grower saves a percentage of the cost and the association handles the marketing.

The average yield is about fifty barrels per acre. The average yield of a farm in Aroostook County, Maine, one of the leading potato counties of the United States, was reported as 140 barrels per acre in 1926. The Clinton Prison Farm, New York State, won the 1926 potato contest from the other state institutions with a yield of 527 bushels per acre. These records seem to dwarf those of Florida, but it should be remembered that Florida growers rush the digging and seldom give their spuds time to attain their full growth. Also that Florida prices seldom fall below \$4.00 per barrel while the highest average price for the whole country since the war was \$1.98 per bushel and in 1925 was down to 70 cents.

The Hastings potato grower does not worry about help. He does not even advertise. When he starts home with his seed potatoes he always finds a crowd of colored farm hands, both men and women, hanging around the railroad station. They seem to know by instinct where and when there will be work and they just appear from somewhere, no one knows where. They appear in Sanford when the celery is ready to ship and about the time the last of the Sanford celery starts for New York the Hastings potatoes are ready to dig. In the crowd of laborers at the station are expert diggers, pickers, graders and packers. The potato grower selects as many diggers as he wants, hires enough pickers to keep up with the diggers so that the sun will not bake the potatoes before they are picked



The man who buys a Florida farm without seeing it in the wet season sometimes has a hard time finding it afterward.



A few of the 100 freight cars used to carry away the potatoes dug in Hastings in one day.

(Continued on Page 8)

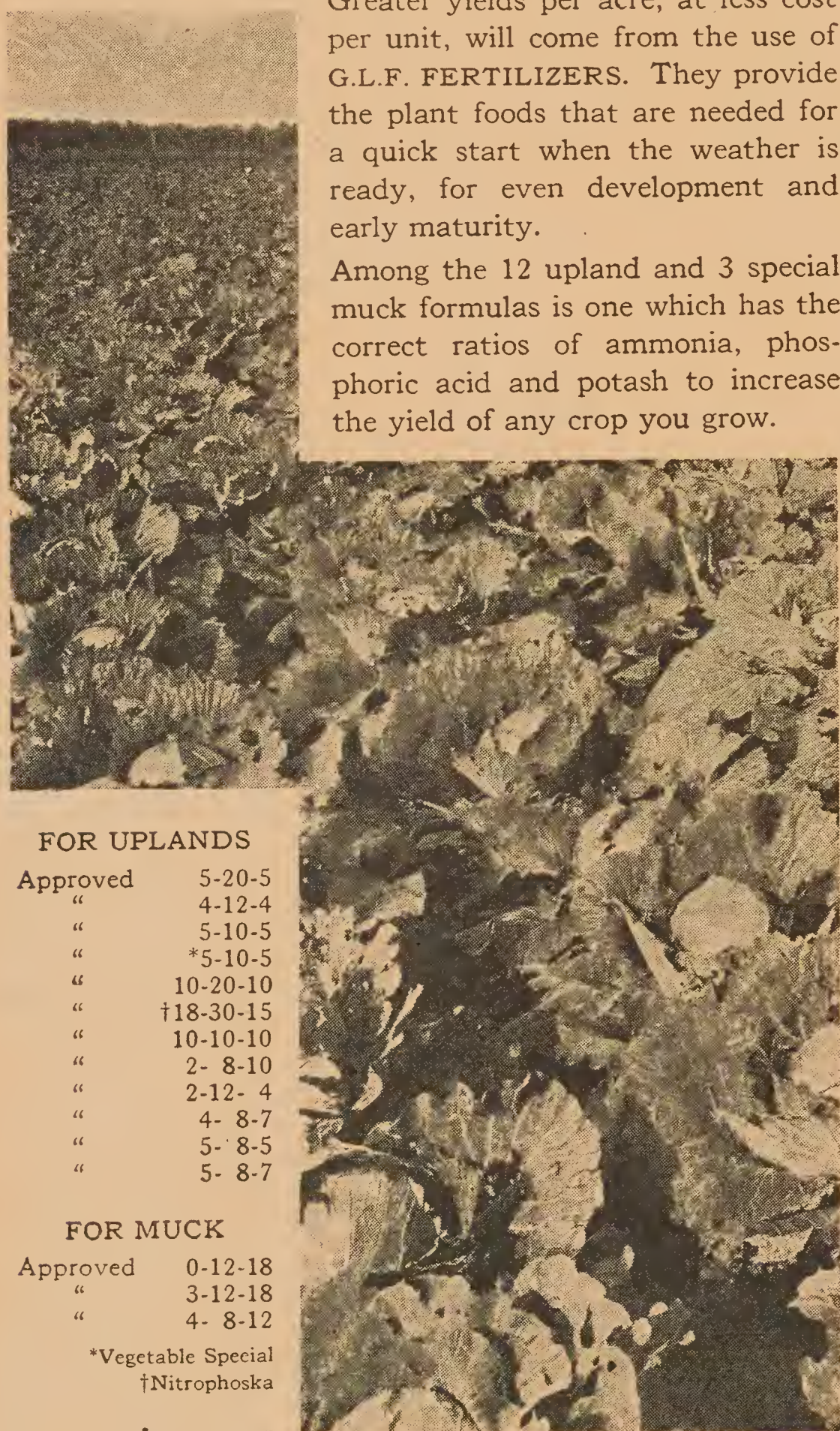
Turn To Page 5 for Professor Bussell's Article on Good Seed

With G. L. F. Fertilizers CROPS AND PROFITS Increase Together

IT'S the man whose crops are better than average who gets more than the cost of production from them. For he is the one who makes better use of his fixed costs—such as use of land, cost of tillage, and seed expense.

Greater yields per acre, at less cost per unit, will come from the use of G.L.F. FERTILIZERS. They provide the plant foods that are needed for a quick start when the weather is ready, for even development and early maturity.

Among the 12 upland and 3 special muck formulas is one which has the correct ratios of ammonia, phosphoric acid and potash to increase the yield of any crop you grow.



FOR UPLANDS

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"	*5-10-5
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"	10-10-10
"	2- 8-10
"	2-12- 4
"	4- 8-7
"	5- 8-5
"	5- 8-7

FOR MUCK

Approved	0-12-18
"	3-12-18
"	4- 8-12

*Vegetable Special
†Nitrophoska

The size and evenness of the heads of cabbage in this field belonging to Wilson & Jones, Hall, N. Y., indicates a well-fed crop. It was fertilized by 400 lbs. per acre of G.L.F. 5-20-5. Despite the poor cabbage year of 1928, this crop produced 25 tons per acre.

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Another Letter from Greece

Unusual Customs at Weddings and Funerals

By H. B. ALLEN,
Director of Education, Near
East Relief

ONE of the pleasures of foreign work is the opportunity it affords for studying the manners and customs of other peoples. During recent weeks it has been my good fortune to see some very interesting and even a few rather unusual customs of the country. In this connection there are three occasions which should be of special interest to our friends at home: A Greek wedding, a gypsy wedding procession, and a peasant funeral.

The funeral, or rather the funeral procession, was encountered as we were passing through the village of Doxato, near the eastern border of Macedonia. We drew up at the side of the narrow road to allow the little group of mourners to pass, and as we waited I watched, with my usual curiosity, for anything of unusual interest. I was not disappointed. Near the head of the line was an elderly lady carrying a flat tray or basket on which was some kind of an object covered with a white cloth. I called the attention of my interpreter to this peculiar object and to my surprise I was informed that it was the head of some member of the family who had passed on several years before. Further questioning brought out the whole story of the custom which is followed in certain sections of the country.

One Grave Per Family

Most families have one burial plot—a grave—and in this one grave all members of the family are buried, unless prevented by too rapid a death rate. No grave can be opened within three years after a burial and so provision is made, of course, for holding bodies, temporarily, when the need arises. In case a grave is opened after the allotted time and the body found to be still intact a simple ceremony is held and the grave is again closed.

Such a condition is taken to mean that the departed one was not fully prepared for the life beyond. Hence the prayers over the open grave, and the "second chance to make the grade". When there is death in a home the family grave is opened and a skull is removed. The skull is cleaned, washed with black wine covered with a white cloth, and taken to the home. There it is kept until the day of the funeral. On this occasion it is carried on a tray at the head of the procession and buried again with the corpse; thus ushering, so to speak, the newly departed one into the realm of the great beyond.

A Funeral Procession

The procession which we saw that day was formed somewhat as follows: At the head of the group walked a small boy carrying a cross, and behind the boy marched the priest chanting continuously in a minor key. Then came the woman bearing the head to which we have already referred. By her side walked another woman carrying bread and wine. Following these two was the open casket supported by four pall-bearers. Next in line came the close relatives, then the distant relatives, and finally the friends of the deceased. At the grave a brief service

is held. As the mourners pass through the gate on leaving the cemetery a boy and girl provides each person with a piece of bread and a sip of wine.

A Wedding Procession

The wedding procession was met one day near the town of Pravion on the Philippian plain. The party was on horseback and presented a most picturesque sight. There were about twenty in the group, all dressed in bright colored garments of red and blue and purple. The men wore white trousers trimmed with gold embroidery. At the head of the procession rode a man carrying a large flag—red with a small gold cross in the center.

There was one person in the party who appeared to be entirely covered by beautiful embroidered robes. By the side of this individual rode a young man apparently no more than seventeen or eighteen years of age. I learned that we were witnessing a family affair of one of the semi-wild, nomadic tribes inhabiting the mountains and plains in the region of Philippi. The flag which we saw was the tribal flag. The person completely hidden from view by flowing robes was the bride, and the boy by her side the groom. The wedding had taken place in the village of the bride and the party was proceeding by slow stages to the camp of the young husband. Although the marriage had been consummated some hours previous the young man had not yet seen his wife, nor would he see her until sometime later, after reaching camp and completing the festivities which would mark the close of the long ceremony.

The wedding which we saw was not a peasant affair but a typical Greek Orthodox ceremony performed in one of the well-to-do homes of Athens. I am sorry to confess that I lack the ability to describe a wedding with all of the elegant detail which the social reporter would employ in covering such an event. However, I can give you a few of the high lights. First of all it should be understood that in Greece, as in many other parts of the Near East, marriage is still a business transaction and is arranged entirely by parents or guardians. This includes the original selection of the mates, the engagement and the amount of dowry to be paid to the bride-groom. This latter is decided upon only after considerable bargaining.

In the particular case which came to my attention at the time of the wedding, I learned that the amount demanded by the man was 20,000 drachmas. Finally, however, a compromise was effected and the sum of 16,000 drachmas was agreed upon.

The marriage ceremony is rather long, and is conducted by a priest in flowing robes aided by his lay assistant. Part of the ritual is read and part of it is chanted in that characteristic minor key. After the ceremony has gone on for sometime the wedding rings are produced, properly blessed, and placed on the fingers of the contracting parties. They are then exchanged three times before finally coming to rest on

(Continued on Page 6)



A unique wedding party encountered on the Philippian Plain. In the center of the group is the bride, completely hidden from view by flowing robes. The boy at the left is the bride-groom. At the right will be seen a man carrying the tribal flag.

A Visit to A Fertilizer Plant

How the Different Chemicals Are Assembled, Treated and Mixed

By E. R. EASTMAN

DURING the last two or three years I have made it a point whenever I have had the opportunity to visit the great manufacturing plants which are making supplies for farmers. I wanted to learn what I could first-hand about how such supplies as feeds, fertilizers and farm machinery are actually made, and find out how efficiently these enterprises which mean so much to farmers are conducted.

A couple of weeks ago it was my privilege to go through a large fertilizer manufacturing and mixing plant and possibly you may be interested in a few of my impressions.

One of the most noticeable facts in a fertilizer plant is the large number of ingredients used to make the various mixtures. These ingredients come from many sources, both in this country and in many other parts of the world.

A Complete Fertilizer Contains Three Elements

A complete commercial fertilizer contains three essential elements, viz., nitrogen, phosphorus and potash, and the manufacturer has the problem of choosing the cheapest and most satisfactory sources of these materials. Up to recent years, the principal source of nitrogen was Chile saltpetre but now the manufacturer has the choice of a number of sources. In addition to the Chile saltpetre and sulphate of ammonia, there are a number of manufactured nitrogen products, some of which are made in Germany, and some of which are being made in increasing amounts in this country.

It is in the manufacture of various nitrates that the greatest progress has been made recently in the fertilizer business. New reduction processes for obtaining nitrates from the air are rapidly

increasing the supply of nitrogenous plant food and this in turn is bound to have its effect in making all fertilizers cheaper. In addition to the natural or manufactured chemicals, there are the organic sources of nitrogen such as cottonseed meal, tankage, dried blood, ground bones, etc. It is interesting to note that these animal fertilizer supplies are becoming comparatively of less importance. You remember the story about how the New England pioneers planted fish in the corn hills for fertilizer, and of course farm manure has been and still is the largest source of plant food on most farms.

But the chemists and the manufacturers are making the chemical plant foods of more and more importance in modern farming, and this new knowledge of chemistry in the manufacture of fertilizers is only one of the many ways in which chemical knowledge is destined to bring more changes in the future even than machinery. The past half century has been the age of machines; the next fifty years will be the era of the chemists.

Potash From Germany

But to get back to the fertilizer factory, I might tell you of the hundreds of bags containing potash salts imported from Germany, with the inscriptions and directions on the bags printed in the German language. During the war, several attempts were made to develop potash sources in this country, and although these experiments have been more or less successful, it is still difficult for American potash manufacturers to compete with the cheaper imported products.

When it comes to phosphorus, the third element of a complete fertilizer, it is necessary for

the manufacturer to use the natural phosphate rock coming from several southern states, although some phosphorus is obtained as a by-product in the manufacture of steel.

The process of making acid phosphate, or, as it is more properly called, superphosphate, is very interesting. As most of you know, it is manufactured by treating phosphate rock with sulphuric acid. This rock comes into the factory in fairly small pieces. The first process is to grind it in great, powerful mills to an exceedingly fine powder. It is then ready to be treated with the sulphuric acid which makes the phosphate rock very quickly available as a plant food. If it were not so treated with the acid, it would take years for the weak acids of the soil to release the plant food in the phosphate rock. In other words, Nature's processes are too slow for the farmer.

The name "acid phosphate" is a misnomer, and the term "superphosphate" is a much better description, for the final product is not acid in its nature.

Fires of Brimstone

Sulphuric acid is not manufactured in the particular mill which I visited, but a year or so ago I was in another plant where this acid is made, and the processes are fascinating. Outdoors in the yard there were great mountainlike piles of sulphur which has been shipped in by boat. Think of all the sulphur that all the poor kids have taken since the dawn of time as a spring tonic with molasses, and you will not begin to have the amount that I saw piled ready to be used for the manufacture of sulphuric acid.

The process of making the acid is too

(Continued on Page 17)

The Livestock Situation in New England

Raise Only Enough Calves to Maintain the Herd and Increase Economy of Production

By NATHAN KOENIG

THE New England States, together with that group of states which comprise the so-called northeastern section, have always been naturally adapted to livestock raising. The general rainfall, well distributed throughout the year, insures, almost without fail, an abundant hay crop and pasture in season. These crops are basically important for intensive livestock enterprises. New England farmers have seen the days of prosperity in beef and sheep production.

They have also seen those days pass out of existence because of keen competition from other producing regions and the increased demand for our higher producing land for more intensive agricultural purposes. Land that was formerly used for the production of grain and hay, has, to a great extent, been converted to the production of more intensive crops such as potatoes, tobacco, vegetables and tree fruits.

All of these factors have tremendously influenced livestock production in New England. Because of certain favored conditions, dairy cattle alone have been able to hold their position in the shift that has been occurring during the past 50 years. Because of these same favored conditions the poultry industry has developed and firmly entrenched itself upon many farms that are usually less suited for modern hay and crop production. Other agencies, such as the truck, auto, and tractor, have struck a blow

at horse power from which full recovery is practically hopeless.

Then what is the present situation of the livestock industry of New England and what is the outlook for the future? What past developments have been responsible for the present situation and what developments may farmers in this section expect in the future? With these questions in mind, George C. White, professor of dairy husbandry and dean of the division of agriculture at the Connecticut Agricultural College, attempts to analyze the past, and predict the future.

Studies have shown that beef and dairy cattle, in purchasing power, have for years moved par-

allel in a cycle approximately 16 years long. The next high peak in cattle prices is expected in 1931. In nearly all regions the ratio of heifers to dairy cows has been on the increase due to higher prices for the milking stock.

The greatest harm that the dairy farmer does to himself and the industry comes from the practice of increasing the number of cattle he raises when prices are on the upgrade, and failing to raise them when prices are low. The time to raise young stock is when prices are lowest and not when they are approaching their highest point.

Increased population, coupled with increases in the per capita consumption of dairy products, has brought about some marked changes in the dairy industry. There was once a time when cheese production on New England farms was a major enterprise. Later this was superseded by farm butter making and next by creamery butter making. At the present time the manufacture of these products in this section is scarcely profitable, and with the ever-increasing demand for fluid milk in New England these butter creameries, one by one, have been closed up.

For the past several years the New England territory has not supplied its own markets for the sweet cream trade, especially for ice cream manufacture. The fact is that cream, butter and concentrated products for ice cream, can be bought and shipped here more cheaply than the

(Continued on Page 10)



The abortion-free herd owned by the Connecticut Agricultural College. The production of this herd has increased about 1,500 pounds per cow per year in addition to a general improvement because of the application of proper abortion control measures.

Editorial Page of the American Agriculturist

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For Better Understanding of Rural School Problems

AT the close of the recent legislative hearing at Albany on rural school bills, one of the legislators, a member of the Committee on Education, stated that a trick which D. Boyd Devendorf, president of the Rural School Improvement Society, tried to use at the hearing was one of the worst insults ever made to a legislative body. If the Rural School Improvement Society ever had any standing with the legislature, it certainly lost it because of the tactics of its leaders at this last hearing.

During the hearing, before the Joint Committee on Education of the Senate and Assembly, a spirit of fairness seemed to prevail on both sides and the statements which were made by speakers representing both sides, with two or three exceptions, were conservative, mild and fair, each side trying to get at the truth of the rural school situation and find a fair remedy.

Very unfortunately, however, this common desire to reach an agreement and to bring out the truth was upset and largely nullified by two or three demagogic and exaggerated speeches made by supporters or representatives of the Rural School Improvement Society, including especially its president, Mr. Devendorf. Mr. Devendorf reserved his speech until the last, giving no chance of rebuttal to his remarks by the other side, and then after an extended attack on the Education Department, he stated that he held in his hand a letter written by the manager of radio station WGY at Schenectady in which Mr. Devendorf claimed the manager of that station had refused the officials of the Rural School Improvement Society the privilege of making speeches over WGY because the New York State Education Department had forbidden this station to allow these addresses.

This statement was immediately challenged by Mr. Cole of the Education Department, who asked Mr. Devendorf to produce the letter and file it with the Committee. This Mr. Devendorf refused to do, even after the chairmen of the Committees, Senator Webb, and Assemblyman Rice, had demanded that the letter be filed. Then the crowd also began to shout that the letter be filed, and the hearing broke up in some confusion.

Immediately after the hearing, Senator Webb obtained possession of a copy of the letter, and he was so indignant at the deception which had been practiced upon the legislative committees

that in order to inform the people of the State what Mr. Devendorf had done, he issued a statement of the associated press of the State which read in part as follows:

"The charge was made at the conclusion of the hearing last night by D. Boyd Devendorf, representing the Rural School Improvement Society, asserting that the New York State Education Department had brought sufficient pressure to bear upon the WGY broadcasting station to bring about cancellation by the station of proposed talks on the Esmond rural school bills.

"Since the close of the hearing there has come into my possession a copy of a letter addressed to Mr. Devendorf by C. Emerson Markham of the WGY broadcasting station, dated January 25, which letter Mr. Devendorf had in his possession at the time he made the accusation. Inasmuch as I acted as chairman of this hearing and the letter from the manager of the broadcasting station to Dr. Devendorf directly refutes the statement by the latter, I feel it my duty to give the true facts to the public rather than let the accusation against two public officials (Commissioner Graves and Mr. Cole) of the state of New York and one major department of the State stand unrefuted.

"Mr. Markham in his letter to Mr. Devendorf says: 'The decision to cancel the talks has been made by the writer without any pressure being brought to bear by any outside organization whatever.'

"Furthermore, the concluding paragraph of Mr. Markham's letter is as follows: 'In conclusion I want to reemphasize the fact that the cancelling of your series of talks has been made by the writer without any influence being brought to bear by those organizations which you might logically have expected to protest against your addresses.'"

"The letter," Senator Webb said, "would tend to indicate that a deliberate attempt was made at the hearing by Mr. Devendorf to bring discredit upon two educational officials of the State as well as the Department of Education itself."

This unfortunate affair ought to be all that is necessary to convince reasonable people that they have been misled, and that they never can hope for progress in the rural schools or in any other movement for the betterment of rural life under such leadership. We believe that every reasonable person who attended the recent hearing was so convinced. Every one of the Thayer-Gedney-Esmond rural school bills advocated by the Rural School Improvement Society and Mr. Devendorf have since been unanimously defeated in the Legislative Committee.

If people desire to organize to improve, perfect and advance the interests of the one-room school, it should be their privilege to do so, and under the right leadership such an organization might be able to accomplish a lot. But the leaders must be sincere and willing to work out differences of opinion with the Department of Education and with members of the legislature on a constructive basis. As a matter of fact, there are not many real differences between the opposing sides and none that cannot be worked out by reasonable people. Most of the trouble is misunderstanding of the other fellow's views, which disappears when talked over on a friendly basis.

It is time we had better understanding and better feeling in the consideration of this whole rural school problem. Unfortunately, nearly everyone becomes excited and tears his hair when the rural school is mentioned. There is too much thinking with the emotions and too little with reason on this subject. No other school problem is so much surrounded with misunderstanding, prejudice and bitterness as that of the district school. This is perhaps natural for our feelings and affections are always involved in any question affecting our boys and girls.

Unfortunately, also, there have been those who have seemed to be more interested in helping to increase the prejudice and the misunderstanding instead of trying to solve the problem. But we are sure that all of us will agree that the real welfare of our children can never be secured, that real progress in rural education will never come to pass while this bitterness and misunderstanding prevail.

Let us, therefore, consider the question on its merits, laying aside prejudices based on misunderstanding, and casting out the bitterness towards those who are sincere but who do not

happen to see eye to eye with us on the school question. And let us study the whole problem of educational welfare of the boys and girls in a more kindly and tolerant spirit.

People Still Leaving the Farms

ACCORDING to the estimates of the New York State Department of Agriculture and Markets, the population now on New York farms is estimated at 767,000, a decrease of 132,000 in twelve years. From a social standpoint it is sad to see so many of our good country folk leaving the farms, but from an economic standpoint what would we do if even a small portion of those who had gone were still on the farms competing with those who remain for the markets?

The trend of population from country to the city is necessary and inevitable, as long as those who are left are still able by the use of modern science and machinery, to produce more than the market will pay good prices for.

Transportation Is Changing

FEW persons realize the great changes that have taken place in transportation in recent years. Ten years ago bus transportation was practically unknown. What little there was, was inefficient and uncomfortable. Today, behold the change! In New York State last year, there were 708 bus companies operating 2,759 busses, covering routes measuring 12,238 miles. In Pennsylvania, there were 2400 busses covering approximately 10,000 miles of road. In New Jersey, there were 3200 busses on 7,000 miles of highways.

Despite the great increase in population and demand for travel, the railroads in the United States carried fewer passengers in 1927 than they did in 1911. The electric railways are also declining. The automobile and the busses are taking the place of other long established means of transportation and if the signs are to be read rightly, it will not be long before the motor vehicle will be superseded by the airplane.

An Example of Good Cooperation

SO much is heard about the large cooperative farm organizations that we sometimes overlook some of the smaller ones that are doing efficient business and rendering real service to their members. We call your attention in particular to the St. Lawrence County Cheese Producers' Cooperative Association. An audit report on December 31, 1928, showed that this association did a total business for the year of \$745,166.32. It sold 3,147,540 pounds of cheese, for which it received an average price of 23.6 cents a pound.

We offer our congratulations to this group of producers in the North Country who are able to work together so well.

Eastman's Chestnut

NO one likes a joke more or likes to tell a good one better than Henry Morgenthau, ex-ambassador to Turkey. Here is one he was chuckling over in my office the other day:

"After a good deal of teasing, Jennie finally consented to go riding with John on a Sunday afternoon. This was back in the long, long ago. John's horse was a decrepit old farm plug that could not be whaled into a trot for love or money. After they had been out for a while, John said to Jennie:

"I want to kiss you."

And Jennie said: "What a foolish idea! What an absurd custom! What good is a kiss?"

To which John replied: "It's a lot of good. It puts pep into a fellow."

"Will it really do that?" asked Jennie, more interested.

"Yes, sir," said John, "it certainly does."

"All right then," replied the girl. "Get out and kiss that horse, and maybe it will put some pep into him so that we'll get home before dark!"

What Is "Good Seed?"

Some Rules That Will Help You Answer This Question

EDITOR'S NOTE: The following is a talk given by Professor F. P. Bussell on February 21 from Radio Station WHAM. Professor Bussell is a member of the Department of Plant Breeding at the New York State College of Agriculture, a department which, in a quiet way, has done excellent work in improving the quality of seed available to growers. Do not fail to read what he has to say about securing good seed.

ALL of you who are users of seed or dealers in seeds have a more or less clearly defined mental picture of what constitutes good seed. This idea or picture is your stock of seed knowledge and by it you judge seed to be good or poor.

Irrespective of what our notions of seed goodness or its lack may be, the final test of value is the crop resulting from the use of the seed. The profit resulting from the use of good as contrasted with poor seed is relatively greater than the proportionate increase from any other single item in the cost of growing a crop. Experience on countless farms has shown that poor seed is wasteful; wasteful of land, wasteful of fertility, wasteful of labor, while good seed conserves all of these. What I want to do is to indicate *why* this result follows, *why* good seed is good, and poor seed is poor; why in business reckoning one is an asset and the other a liability.

Much Seed Still Home Grown

In the early years of our history most of the seed used was grown on the home farm. Even today much field seed is home grown. Is it good seed or is it poor? My answer is that it may be very poor seed as it comes from the threshing machine or the corn crib; but it may have possibilities of becoming excellent quality seed if properly processed.

In judging the goodness of such seed, we will assume that it is a good variety and that it suits the farmer who is to use it. In his judgment the heredity, that is to say the variety, is satisfactory. But mechanically it may be far from good seed. It may be low in germination, or carry certain disease organisms or be foul with weed seeds. In some cases certain operations may make good seed out of it.

First he should determine the amount of life present. He can do this by making a germination test. If sprouts come strong and vigorous, well and good—if weak, or a large percentage dead, it will never make good seed irrespective of other things he may do to it. Second, he should try to make it as free of seed borne diseases as possible. Third, he should clean the seed thoroughly. Some of the home grown small grain seed sown on New York farms cannot by any stretch of the imagination be considered *good*, chiefly because of the high content of noxious weed seeds present. Of the material in the boxes of some grain drills actually operating in the field, as high as 14 per cent has been material other than seed of the crop which the sower wished to sow. A considerable percentage of this was weed seeds, quack grass, wild mustard, thistle, dock, and the like. Even a 1 per cent content of such weed seeds means thousands, or even hundreds of thousands of weed seeds sown per acre. The sower of such seed is storing up future trouble in weed eradication.

Careful cleaning of home grown seed is not merely a step—it is a seven league stride toward making poor seed good seed.

When Seed is Purchased

But much of our seed is *purchased* seed. How may we know whether the seed we buy is good or not good? It goes without saying that the items already mentioned as part of the picture must be included. Good seed must grow—it must be rendered as free from seed borne diseases as possible—it must be clean.

We said in the case of home grown seed that we would disregard the mat-

ter of variety because, since the farmer is aware of its performance, we could assume the variety is a good one. We cannot make this off hand assumption in the case of purchased seed. An essential part of our seed picture here is the heredity of the seed and this with some kinds of crop seeds is so important that it should occupy such a place in our picture that it stands out in bold and striking relief.

Buy Hardy Clover and Alfalfa

Just what do we mean by heredity in seed? We mean its essential varietal make-up: Its breeding: The *kind of life* which makes it possible for it to grow and respond as we want it to respond. If it be alfalfa seed we want it to have the winter hardiness that enables it to survive our cold winters and produce a good crop five or ten years after sowing. Contrast alfalfa seed grown in Arizona or Oklahoma with Dakota or Montana grown Grimm. Grimm seed is hardy: Arizona or southern grown common is not. The same difference in heredity applies to much of the foreign and Oregon grown clover seed. Our growers should be on guard against clover or alfalfa seed grown in areas where the climatic conditions are less severe than in New York State.

We have mentioned hardiness as one of these and its importance in the goodness of alfalfa and clover seeds. Winter wheat is likewise a crop where ability to withstand winter cold and spring freezing and thawing is of high importance. It is because of these hereditary qualities that Forward, Honor and Junior No. 6 are our most productive varieties and form 90 per cent of the winter wheat grown in the state.

Some Good Silage Corn Varieties

Let me enumerate a few of the other qualities which are part of the hereditary makeup as distinguished from the general characteristics of good seed which we have previously discussed. I can little more than mention these in the time allotted me. They include length of growing season. For example, early midseason varieties of oats are better in yield than either the very early strains or the late types for most of our oat growing areas. Likewise, medium early strains of silage corn are better than early flints or large late maturing dents. For various sections, depending upon length of growing season, such varieties as West Branch Sweepstakes and Cornell No. 12, Cornell No. 11 and Luce's Favorite are varieties of better hereditary makeup than Leaming, Pride of the North, Lancaster Sure Crop, Eureka and the numberless nondescript types offered in the trade as silage varieties.

Another hereditary characteristic of good seed is disease resistance. This is

By PROFESSOR F. P. BUSSELL,
N. Y. State College of Agriculture

soil of average or medium fertility, I would reverse the choice.

Seed Should Be True to Variety

Finally as a varietal or hereditary characteristic, seed should be pure. Much purchased seed is a mixture of many varieties and strains. Varietal purity insures greater uniformity in growth, ripening and quality of product and is a characteristic of high importance.

I now want to mention the general characteristics which all good seed should possess. These are not all of equal importance, but are qualities highly desirable.

First comes good germination. In all lots of seed used, the germination, amount of life present, ability to produce a strong initial growth, should be determined. Be wary of frosted Utah or Dakota alfalfa seed this year. There will be much of it on the market and the percentage of seeds that germinate strong should be determined. Old, and consequently weak, seed may often be told by the germination test.

A second desirable feature of good seed is good color. In itself this is un-

(Continued on Page 26)

New Crops Adaptable to Monroe County

IT may be a hard matter to convince some farmers that a diversity of crops is a way out of the worries of renewal notes or the discovery that there is little left after paying up accounts that must be paid. Some of us still stick to so many acres of wheat, hay, oats and corn and we live and that is about all. Some others are giving their attention to a limited acreage of cabbage, beans and potatoes. This has helped out especially where planting of these has been continued for several years.

Lays Plans On Five Year Average

One progressive farmer tells me that he puts in three or four acres each of cabbage and potatoes and a bigger acreage of beans every year. He was not discouraged by the price of cabbage in the season of 1927 when he sold his crop at four to five dollars per ton, because the main crop of a year or two previous sold for \$65.00 per ton and some of it at a higher figure. He planted the usual acreage in 1928 and sold for \$35.00 per ton and at this price it was the best paying crop on the farm. He added, "I can well afford to sell at \$10.00 or even less per ton one year in five and still make more than for any staple crop." He expressed a similar opinion as to potatoes and beans. The tomato as a farm crop is being taken up by some and if all goes well from the planting to the harvest-

ing some money, without a doubt, is gathered in.

A crop of small fruits seems to be one thing that the general farmer will not consider. I am convinced by experience that if those who have average farm land and those who are somewhat short when the taxes come due, would set out an acre or two of currants and gooseberries and give these one quarter only of the attention they give to general farm crops that many of their worries would not exist.

Currants a Profitable Crop

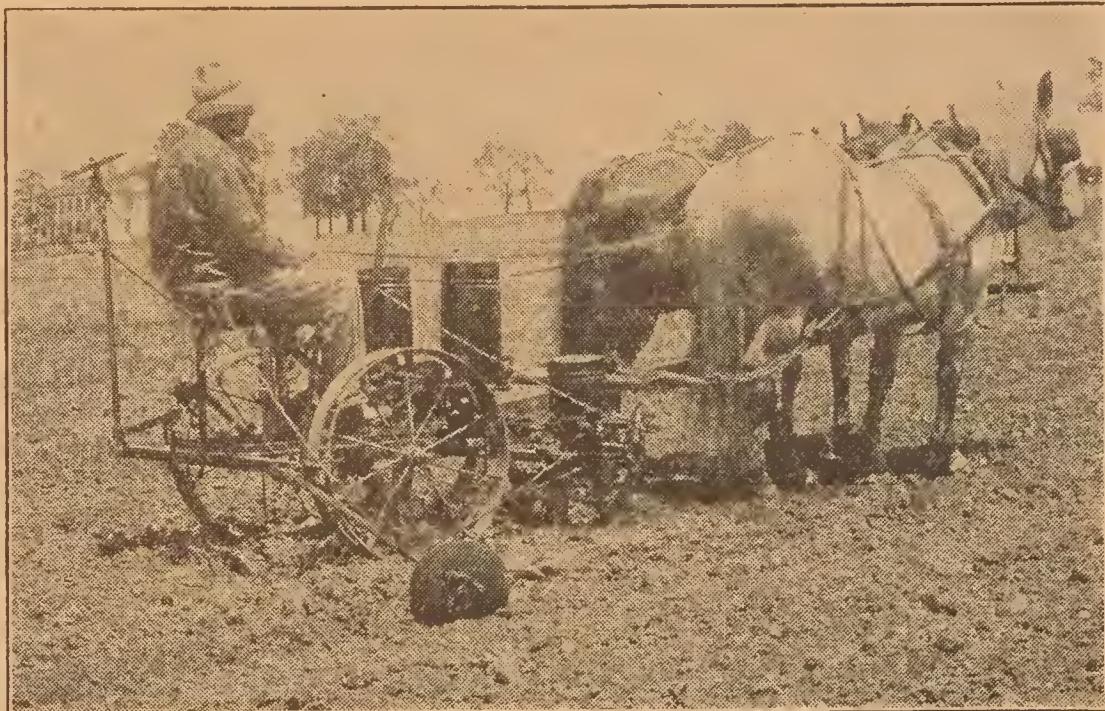
Good currant bushes two to three years old can be secured at a very reasonable price now compared with prices of ten or fifteen years ago. If planted in the fall or early spring a light crop can be had the first season and a good one the second. With reasonable cultivation, attention and an annual cutting back of the previous season's growth during the winter or early spring, a currant bush will outlive the planter—bushes thirty or more years old can be found in the majority of old gardens.

I have never sold a crop of currants at less than \$100 per ton and my memos show that one season the crop sold at \$250.00 per ton. Some years ago the crop on a half acre brought in \$537.00 and the next year \$438.00 and this without any fertilizer. At that time the prices were low as there was a much bigger acreage of the fruit grown those days. The past season \$200.00 per ton was realized and the crop was all that could be desired.

Gooseberries, although there is a good demand for the fruit, are not as profitable, but it is fruit that could well be considered as a money-maker compared with hay at \$10.00 per ton or wheat at \$1.30 per bushel.

Growing Christmas Trees

Norway Spruce evergreen trees are always in demand at the Christmas festive season and I have made more clear money from a half acre of these than from any ten acres into general farm crops. Secure strong seedlings and plant on any average soil (preferably up-land) in rows three feet apart with the trees two feet apart. Begin thinning by cutting the trees when they are three to four feet high and those left will then have more space to develop and you can cut some trees annually. If the reader has ever bought a tree at a garage or a grocery store he must see that there is good money in growing Christmas trees.—E. H. B., New York.



The yield at harvest time will depend, more than any other single factor, on the quality of the seed used.

"Wormy Apples Practically Nothing," says Harry Stanton. He writes:

"The writer feels that he owes your company a debt of gratitude over the results the past two seasons by adhering to the use of Rex Spray materials, especially NuREXFORM arsenate. Our wormy fruit was practically nothing.

"We did not put on any extra sprays, and neither did we use any additional so called 'spreader' in our formula; but the trees were most thoroughly sprayed as our 5000 bushels of apples witness."

HARRY L. STANTON.

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"I have never had any trouble" writes E. B. Seeds, "with plugged valves or spray heads when using NuREXFORM; and it does not settle to the bottom of the tank. It is also very easy to dissolve."

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A.A.'s Western New York Farm and Home Talk

Some Insects That Damage Apples

THE end of the first week in March took us back into winter with a vengeance. From mild, spring-like weather, mud and almost no frost, overnight we found ourselves back in freezing temperatures, snow and a driving March wind, one of the worst storms of the winter. Such are the uncertainties and vagaries of March. While we are waiting for the promise of spring to come back again, we may as well continue to study the orchard pests which we must control if we are to raise the good quality apples which the markets are more and more insisting upon.



M. C. Burritt

How the Codling Moth Lives

Last week we discussed our principal disease enemy, apple scab. Our worst insect pests, generally speaking, are codling moth and rosy aphid. Just now the codling moth is wintering in a cocoon usually found under the rough scales of the bark of a tree. In the spring, an inconspicuous, brownish moth will emerge from the cocoon and lay its eggs on the leaves or even the young fruits. From these eggs small larvae will hatch and make their way to the nearest apple where they enter at the calyx end and feed on the inside of the apple until they emerge to spin a cocoon and go through the cycle again. The whole success of controlling codling moth with spraying lies in getting the poison, arsenate of lead, into the calyx after the petals fall and before the calyx cup closes up over the end of the growing apple. Some are also killed through feeding on the poisoned leaf surfaces before entering the fruit. There is usually a second brood in midsummer which must be reckoned with by the same treatment, but we in New York are sometimes spared this, and we never have the third and even the fourth which some localities in the Northwest and in Virginia are afflicted with.

Rosy Aphis a Serious Pest

The green and rosy aphid, or lice, often do great damage to foliage and fruit, especially when seasonal conditions are just right. The rosy aphid which is slightly larger, one-tenth of an inch long, is bluish in color. It winters in the egg stage on the terminal shoots and buds. The eggs hatch soon after the terminal shoots, leaf and fruit buds begin to grow, and the lice begin to suck the juices from the tender young growth. If the weather has been favorable so that they are present in sufficient numbers, they do great damage. The leaves, buds and even the terminal shoots wither. Later broods cover the leaves and young fruits with a sticky honey dew which collects dust and dirt and blackens leaves and fruits. As aphid are sucking, not chewing, insects, they cannot be poisoned but must be choked to death with fumes. For this purpose, nicotine sulphate, or "Black Leaf 40", as it is commonly called, is best. It must be applied in the early or delayed dormant spray so as to get in its work before the young leaves from which the juice is sucked by the lice curls around and furnishes them with protection against the spray.

Two other insect pests, not entirely new, have become very serious in some areas, largely as the result of inadequate preventive treatment. These are bud moth and leaf roller.

The bud moth is particularly destructive when it becomes numerous. The caterpillar emerges from its silken cocoon usually located at the base of a fruit spur or short twig, in early

spring, and immediately makes its way to an unfolding cluster of leaves. First eating over the tender leaf tips, it then bores its way into the bud, and feeds upon the unopened blossoms. Bud moth work is easily seen for it webs the bud leaves together, and leaves the bud clusters in a ragged condition. As it needs more food it ties more leaves and even young apples into its web and feeds over their surface. The usual spray schedule of lime sulphur, arsenate of lead, and nicotine sulphate will control ordinary infestations, but where the full three early applications of delayed dormant, pre-pink and calyx have been neglected, and the pest is bad, it may be necessary to increase the amount of nicotine and arsenate and even to make special applications. Those who are having trouble should get Geneva Circular No. 109, and follow its suggestions.

Oil Sprays Kill Eggs of Leaf Roller

Leaf roller lays its eggs in June and July in masses on the smaller limbs and twigs and covers them with an impervious varnish-like substance, which act calls for a special oil treatment to kill them in this stage. The eggs begin hatching just before the pink shows in the buds. As the larvae are only about 1/16 of an inch long, they are hard to see although their work is not. About a month is spent in the caterpillar stage, feeding on the leaves and fruit. This is usually in May and June. They have a habit of rolling a leaf, tying it together with a web and using it as a shelter. The first injury is apparent on the leaves as holes and ragged edges, then blossoms are cut off, and later holes are eaten in the young growing fruits. Here again the usual spray schedule consistently followed holds the pest in control. However, in bad cases an application of oil on the eggs while the tree is still dormant is the surest method of control. As this must be carefully done at just the right time it will be best to get Geneva Bulletin 561 and study the matter carefully.

Growers really desirous of growing good fruit can do several things to help do it right now. They can

- (1) Prune thoroughly.
- (2) Study the nature and means of control of their principal insect and disease pests.
- (3) Register with their county agent for the spray service which is invaluable.
- (4) Overhaul their spray equipment.
- (5) Buy their spray material in advance and have it ready.—Hilton, N. Y., March 10, 1929.

Another Letter from Greece

(Continued from Page 2)

the owners' fingers. More pages of reading and more chanting and then a coronet is placed on the head of each; then exchanged three times. Still more of reading and chanting and the group marches three times around the center of the room, the priest chanting, the bride's attendant holding up her veil, and the best-man vainly trying to keep the coronets on the heads of his charges. Finally the groom is given three spoons of black wine from a glass, the two are pronounced man and wife, and congratulations are in order.

After this light refreshments in the form of small cakes and hard candies are served. Before leaving the home each guest is presented with a beautiful little box apparently made of celluloid and containing a special kind of hard candy. The significance of this is very much the same, it seems, as that attached to the custom in our own country of presenting to each guest a small box of wedding cake.

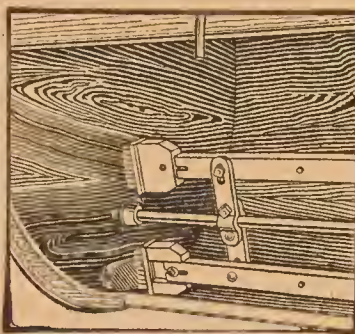


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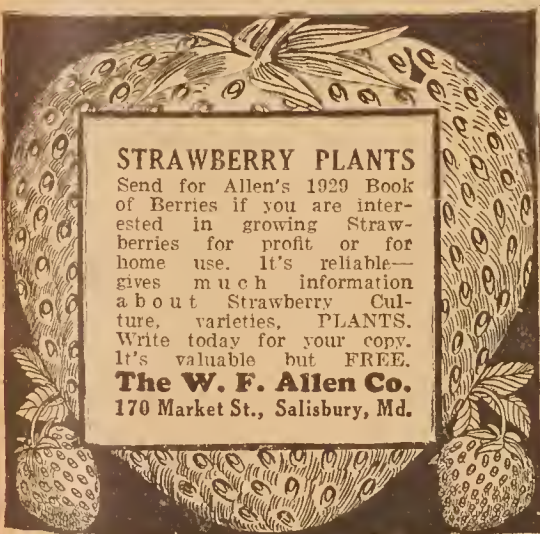
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Celery Goes to Seed

"Is there any way in which we can prevent celery from running to seed before it produces a marketable crop?"—R. D., Pennsylvania.

It seems that one of the best ways of preventing celery from seeding prematurely is to start planting as late in the season as is possible and refrain from subjecting the plants to low temperature for any considerable period in order to harden them. Experiments made by Professor H. E. Thompson of the New York State College of Agriculture indicate that extremely low temperature early in the season is the cause of this premature seeding.

Varieties of Peas for New Jersey

What varieties of peas are best suited for market gardening in this state?—R. P., New Jersey.

THE New Jersey State College of Agriculture states that many varieties that were popular ten years ago have been supplanted by new ones. The variety most extensively grown is World's Record. This variety was tried out in 1922 and has grown in popularity since that time. Another new variety which is slightly earlier than World's Record is Mammoth Podded Extra Early. It is stated that this grows vigorously, produces a large green pod and yields heavily.

Among the dwarf type, Little Marvel and Laxtonian are popular and give good satisfaction where aphids are not too numerous. These are used especially where they are interplanted with tomatoes.

Other varieties that are still used are Thomas Laxton, Gradus, Pilot, and Pioneer.

Last Year's Onion Seed Good

Will you please tell me if onion seed left over from last year will grow when it germinated strong last year? They are Ohio Yellow Danvers.—S. C. G., Pennsylvania.

THE usual length of life of onion seed is two years and in extreme cases it will germinate as long as seven years. It would seem from this that you would be perfectly safe in planting last year's seed.

Lime for Gardens

"Is lime a good thing to apply to garden soils and if so how much should be put on? Most recommendations for adding lime are given in terms of applications per acre."—B. D., New York.

THE situation with garden crops is somewhat different than it is with field crops since some garden crops may respond to lime whereas others may receive no benefit and even grow better on sour soil. Probably organic matter and fertilizer are more important for gardens than lime. Where hydrated lime is used on the garden 6 pounds of ground limestone or 3 pounds of hydrated lime can be used on each 300 square feet every three or four years.

Effect of Size of Seed-Piece on Potato Yields

Within certain limits the yield increases directly with the size of the seed-piece used. In tests conducted in New Jersey, Musgrave found that where a ½-ounce seed-piece was planted the yield was 254.7 bushels per acre, a 1-ounce seed-piece yielded 367.1 bushels, while a 1½-ounce piece gave a yield of 373 bushels. Planted 12 by 32 inches, with seed-pieces averaging ½-ounce in weight 8.5 bushels of seed will be required to plant an acre, 17 bushels with 1-ounce seed-pieces and 21.3 bushels with 1½-ounce pieces.

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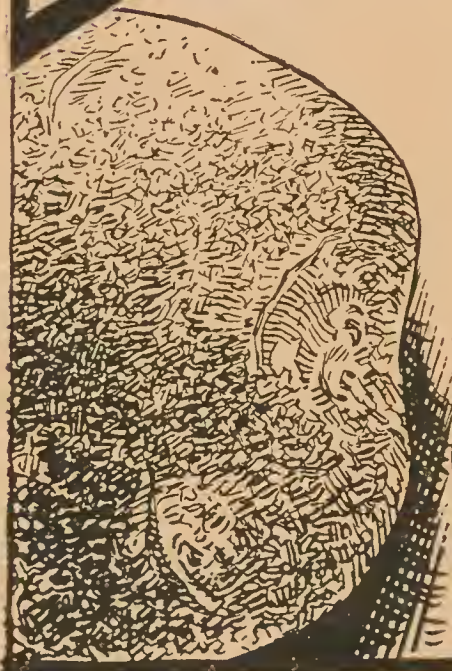
Introduced by us a little over a decade ago, sales the first year 1,000 barrels, the second year 4,300 barrels, third year, 11,000 and last season, over 15,000 barrels. Has this record ever been beaten? "Nothing succeeds like success" and DIBBLE'S RUSSETTS are a lasting success in American Potato Culture.

CERTIFIED of course, and at a lower price than the same high quality can be bought for elsewhere. We also have full stocks of all the other good varieties of Potatoes, Alfalfa, Clover and Grass Seeds, Seed Oats, Barley, Corn, etc. "Everything for the Farm" and at prices you can afford to pay.

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K. C. LIVERMORE

Box A

HONEOYE FALLS, N. Y.

The Home of the Early Spud

(Continued from Page 1)

up, and enough graders and packers to take care of the potatoes as fast as they come from the field. He loads the workers onto the truck and takes them home. They may live in tents or shacks on the place or they may prefer to return to town with the truck in the afternoon and find their own lodgings. If some or all fail to return to work, as they frequently do when they are not hungry, there are others to take their places.

The marketing of a big crop requires alert attention. Hastings ships potatoes not by the carload but by the train load. On an average day 100 carloads leave the station and at the peak 300 cars are shipped. Each car contains 163 barrels. Even at the low price of \$7.00 per barrel, this means \$114,000.00 for the average day's shipment. If the shippers did not have up-to-the-minute information, they might lose ten cents or more per barrel and that would amount to a considerable sum altogether.

There was a time when the dealers, who were close to the through wires from New York, Chicago and other marketing centers, received information some time in advance of the growers, who were busy on the farms supervising gangs of workers. Under such conditions it was natural that the growers should suspect the dealers of getting the best of the deal. Prices depend upon the number of carloads on hand in the big centers, and upon the number of carloads on the way there, as well as upon the demand. The man with the latest information concerning the movements is the winner. The United States Department of Agriculture took a hand in the situation in 1923. It sent to Hastings Mr. A. L. Thomas, a radio operator who had handled market information at other points, and Mr. J. D. Evers, a marketing specialist. The radio receiver kept about one jump ahead of the wire service and the information it brought was made available at once to the growers as well as to the dealers. These government officials even mimeographed each day's market reports and distributed copies to 600 local growers and dealers. This placed everyone on an equal footing, removed all cause for suspicion, and created good feeling all around. It was only necessary to maintain this service for one season. By 1924 so many broadcasting stations were sending out market reports that any grower with a radio receiver could keep up to the minute right in his own fields.

Hastings can control, to a great extent the prices received for its product. When the marketing centers are full of potatoes and there are heavy shipments on the way, the growers pass the word around for everyone to take a vacation for a few days. There is no use to glut the market and cause the railroads to place an embargo on shipments, as they did on potato shipments to New York in the fall of 1926. The fish are always biting in Florida, there are horseshoe pitching contests everywhere, and Daytona, Palm Beach and Miami are within easy reach. There is plenty of fun to be had while the prices are moving up.

Most of the growers sell their pota-

atoes on a "cash-track" basis, receiving cash on delivery of the day's digging at the railway station. Some, however, ship on consignment, which turns out all right if they go to an honest broker and if the price goes up by the time they arrive.

Some folks seem to be suspicious of Florida real estate dealers. Some of the suspicions may be justified, for periodically we hear of honest dealers and state or city officials getting together to make it hot for the crooked gentry. But conditions are better than they were in the "good old days" when the real estate used to sell home sites out on the prairies during the month or two that they were not under water. They used to buy a few enormous northern potatoes, conceal some in hills where spuds were growing that never would grow larger than hen's eggs before they were drowned, and then kick them out casually to dazzle the eyes of home-seekers.

Many of the northerners were such easy marks that they bought by mail, without even seeing the property. Only a few were as canny as the old farmer from the State of Maine who discovered black rings around the palmetto trees, about six feet from the ground. He insisted on knowing how the rings got there. The real estate dealer did not want him to discover that the rings indicated the high water mark. He told the farmer that they were made by the hogs, which scratched their backs on the trees.

When it came time to sign on the dotted line, the farmer refused to sign. "I

don't want none of yer land," he said, mentally measuring the height of the black rings above the ground, "but I'll give ye a durn good price fer a pair of them hogs."

It is not necessary to take any chances in buying potato land in Hastings or in the vicinity. A visit to the town in March or April will enable any experienced farmer to form an accurate opinion as to the productivity of the soil and the advantages of the marketing arrangements. If he wants to buy new land, grub out the palmettos and start from the beginning, a government agricultural agent will analyze the soil for him free of charge and give him honest advice. The difference in price between new land and cultivated land is about the cost of clearing, which may be as much as \$200.00 per acre if there are many trees.

Just how long potatoes can be grown on the same land is still an open question. The oldest potato farms in Hastings are growing their thirty-first consecutive crop this year.

This section has not been hard hit by frosts or storms. It is too far from the coast to be reached by tidal waves. Like most Florida country it is well watered. It is an old saying in the state that you can stick your finger in the ground anywhere and get water. Whether there is a real estate boom or a slump in the state, potatoes will grow and people will eat them. There is a good chance for farmers to make money there during the winter when nothing grows up north except taxes and feed bills.



A descendant of one of the first slaves brought to Hastings over a century ago. His numerous tribe are all workers in the potato fields. They are known as "Turnbull niggers" because their ancestors were brought to Florida by a family named Turnbull.



With the A.A. Crop Grower



More About Hardy Red Clover

IN the February 16th issue we published a story by E. N. Reed on hardy red clover strains. Judging from the dozens of letters we have received since, asking for further information on the subject, Mr. Reed mentioned a problem which is of considerable importance to many eastern farmers.

In an effort to get the latest information on this subject we wrote to Professor E. L. Worthen of the New York State College of Agriculture. Along with his reply Professor Worthen sent a leaflet entitled "Clover Essentials for New York." This is a four-page leaflet which gives in the briefest possible space, the essential directions for getting a good stand of clover in New York State. Our readers who are interested can get this leaflet either from the State College at Ithaca or from your Farm Bureau agent.

Professor Worthen's letter is as follows:

"It is true that we have no varieties of red and alsike clover. Our observation has been that where seed is used that has been grown in a climate as severe or more severe than that which obtains in this state, that failure seldom if ever occurs because the seed is not hardy.

Buy from Reliable Dealers

"In my judgment failure often takes place due to the fact that seed sold as northern grown seed has often been produced in southern climates or consists of a mixture of northern and southern grown seed. We know that this year much poor quality seed will be sold in New York State and I have no doubt that considerable quantities of it will be southern grown seed. The National Seed Staining law offers us some protection but it has not by any means eliminated the selling of unadapted red clover seed in this state.

"In my estimation the best protection one has is to purchase seed only from reputable seed concerns. Our New York farmers, as you well know, have an opportunity now of securing red clover seed of guaranteed origin. By using such seed we believe one is doing all that he can possibly do in protecting himself against unhardy red clover.

Other Causes for Failure

"It is well to keep in mind that clover failure is frequently due to other factors than unadapted seed. Good seed alone will not insure success with red clover. Even the hardiest of seed will often fail to come through the winter satisfactorily due to heaving. Heaving is influenced primarily by the soil condition, drainage in particular, but it is also the result of disease which may develop in our clover fields. I have observed that farmers generally attribute clover failure to poor seed. I have seen this done when the clover failed because of extreme soil acidity."

The Essential Points of the Pennsylvania Seed Law

All dealers offering agricultural seeds for sale for seeding purposes must attach to each package weighing 10 pounds or more a label giving: (1) The commonly accepted name of the seeds; (2) the percentage, by weight, of impurity; (3) the percentage, by weight of weed seeds; (4) the name and number per ounce of noxious weed seeds; (5) the percentage of germination of the seeds, with date of test; (6) the name and address of the vendor.

The following weed seeds are declared as noxious: wild onion or garlic, quack grass, doddies, Canada thistle, devil's paint brush, king devil, perennial sow thistle, horse nettle, bindweed.

It is unlawful to sell, offer or expose for sale or distribution any agricultural

seeds, or any mixture of the same, for seeding purposes, when the seeds or mixtures shall contain more than three per cent by weight, of weed seeds, or shall contain one or more seeds of dodder or one or more seeds of Canada thistle to five grams of such seed or mixture.

These provisions apply to every person or firm offering seed for sale for seeding purposes, farmer and professional dealer alike. Farmers may sell seed in bulk to dealers without the label.

Anyone may test his own seed but will be held responsible for the accuracy of the tests.

Samples may be sent to the Seed Analyst, Bureau of Plant Industry, Harrisburg, Pa. The law fixes a fee of twenty-five cents per sample and fees should accompany the samples.

The seed should be thoroughly mixed so that the sample taken from it, is representative of the lot. The value of the test rests on the careful taking of the sample which should consist of from two to four ounces.

Causes of Uneven Stands in Potatoes

"What is the cause of uneven stands in potatoes? Some of ours come up much quicker than others and there are quite a few hills which are missing entirely."

THERE are several causes for this. A disease known as rhizoctonia is one cause of uneven stands. This disease attacks the sprouts. It may kill the first sprout but a second or third one may succeed in living but naturally does not come up as quickly as a healthy tuber.

Another cause is rotting of the tuber. This may come as a result of certain diseases; perhaps coming at the same time as a long, cold wet spell which slows down sprouting. The Ohio Experiment Station has found that tubers in late plantings often rot in a hot soil. They found that this is not due to disease because tubers rotted just as rapidly when seed had been treated and planted in soil which had been sterilized. They found that when the soil temperature is over 70 degrees, seed is almost certain to rot.

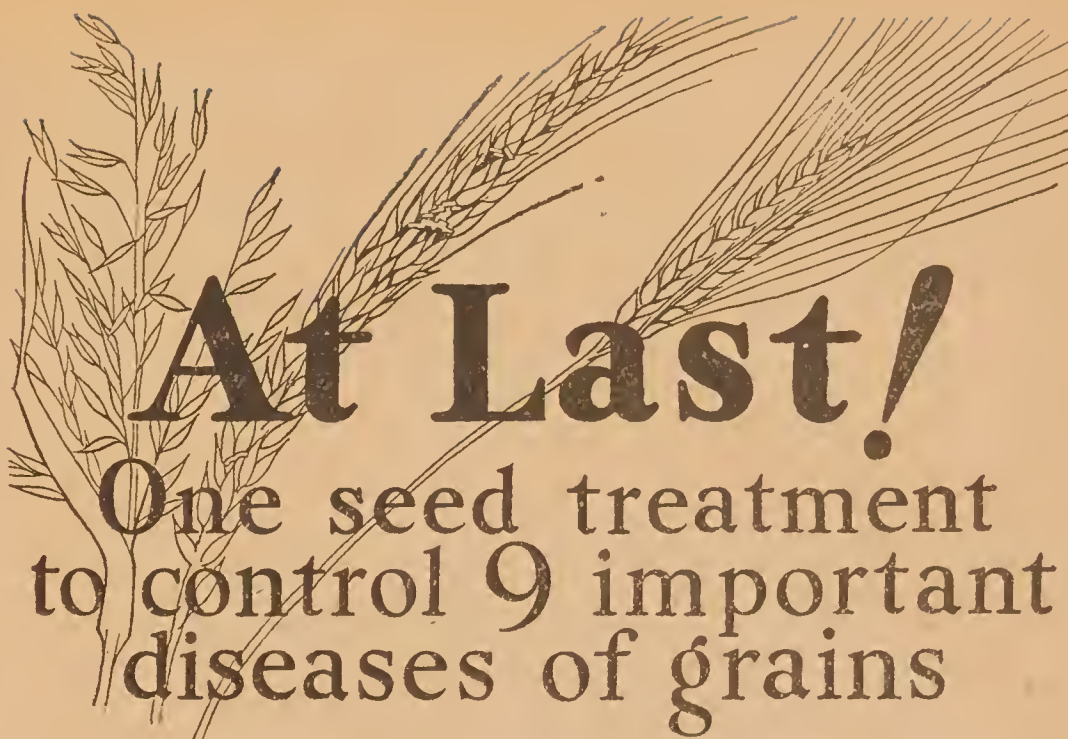
How Much Alfalfa Seed to Sow to the Acre?

ALFALFA seeding will soon be in order where spring sowing is planned and I am noting that there is a big difference in the amount of seed recommended per acre. One New York seed firm advises 30 pounds, another 25 pounds. It would appear to me that this advice will prevent many farmers from sowing this wonderful farmer's friend.

Eight years ago a six-acre plot of wheat on my own ground winterkilled so badly that I decided to drag the ground over and put in oats. I did so, and at the time of sowing the oats sowed all the alfalfa seed I had, which was exactly 30 pounds. This was sown evenly at the rate of 5 pounds to the acre and no one ever saw a better catch or a better average cut of hay.

Maybe this experience was exceptional. I expect it was as since then I have sown ten to twelve pounds to the acre and have not seen nearly as good results. Generally I sow 15 pounds and believe that if this seeding is not a good catch and eventually a good field that there was something mighty wrong with the seed or with the land.—E. H. B.

Sweet clover improves the soil so much that it runs itself out of a home by making the ground more suitable to other plants which can then crowd it off the ground.



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This new disinfectant is Ceresan. With it you can treat wheat, oats, barley, rye and sorghums—easily, quickly and economically.

Ceresan effectively controls 9 important diseases that annually steal millions of dollars from grain growers. Note, too, that Ceresan is harmless to seed and does not corrode metal parts of the drill.

Ceresan is new—but you need not hesitate to use it. Impartial experts of the U. S. Department of Agriculture and numerous State Experiment stations have proved the value of Ceresan in controlling important cereal diseases.

Wheat—Bunt or stinking smut, and seed-borne flag smut.

On 1928 spring wheat, Ceresan reduced smut to almost nothing the check plots had up to 32% of smut.

Oats—Both loose and covered smut.



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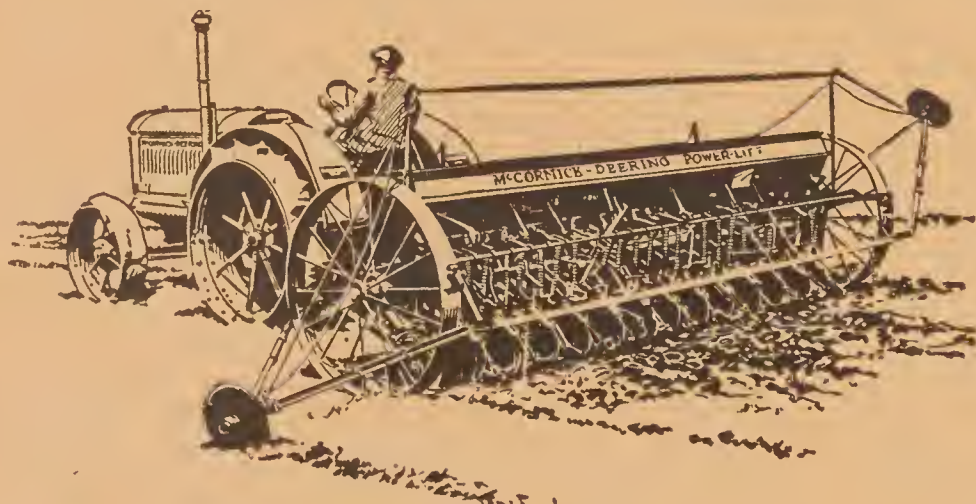
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The American Agriculturist Advertisers Are Reliable

The Livestock Situation in New England

(Continued from Page 3)

New England farmer can produce them. This is illustrated by milk production cost figures between New England and the North Central States. In the Boston milk shed the farm cost is about \$2.76, whereas in the North Central States it is \$2.10 a hundred, a difference of 66c. The difference is even more marked as between New England and the dairy sections west of the Mississippi from which many carloads of cream and sweet butter now reach this market annually.

Flood Caused Milk Shortage

Last year for the first time New England was faced for a short period with a fluid milk shortage. This shortage came upon the wake of the flood and in the face of the Thanksgiving holidays. The flood was given most of the credit at the time. This year, however, the condition recurred even more acutely, at Thanksgiving time. As a consequence on both occasions several cars of fluid milk were shipped in from the West. The New England Milk Producers' Association last November had to hasten forth and transfer milk from new creamery districts in order to shut out the flow of outside milk. There is still too much of a tendency for farmers to concentrate on late fall freshening with the result that November's milk supply is less than 70 per cent of the June supply from the same farms.

The New England price of milk is so attractive to outsiders, that if it were not for the quality demands and inspection requirements of the region, plus a slight excess in freight rates on such a bulky product, the section would be flooded with fluid milk from other producing regions. It is probable that these barriers will continue to function, at least as long as the New England farmer can produce enough milk at the present margin of cost, but the necessity for close cooperation between distributor and farmer for the farmers' best interests, is strikingly apparent. New England can increase its milk supply only so far as it pays producers to make milk, and so long as the price is not too attractive to more remote areas.

Competition from Manufactured Products

One of the ways in which the future is likely to see the greatest competitive inroads on the New England fluid milk business, is in tinned and powdered milk products, particularly the latter. However, in spite of the fact that science and experience are greatly improving these products, it seems logical to believe that good fresh milk will have the preference for drinking purposes. But as is the case with eggs, oranges or butter, if the price gets too high there is a noticeable tendency for the consumer to shift to other products. In the case of high-priced milk, the consumer is likely to buy less of it and more of the concentrated milk products.

Disease Problems

Two of the outstanding disease problems that the farmer has to cope with, are abortion of the infectious type and tuberculosis. Contagious abortion is a disease that has been very costly and discouraging to cattlemen.

Many things have been tried in an effort to overcome this cattle scourge. The best thinkers now, including many practical dairymen, believe that eradication of abortion reactors is the only satisfactory method of combatting this disease. Investigations as to the control of infectious abortion conducted at the Connecticut Agricultural College under the direction of Professor White and Dr. Leo F. Rettger and their associates, have yielded important results. The abortion reactors were removed from the college dairy herd in 1925, since which time the herd has been clean, and the premature calvings so extremely low as to be negligible. The milk yield has increased about 1,500 pounds per cow per year, and because of the improved opportunity to cull and select, the herd has improved in many ways.

The program in tuberculosis eradica-

tion has gone forward with definiteness since 1918. It has taken its toll of reactors especially in the older dairy sections of the northeast. Even so, the proportion of cattle that is actually condemned and slaughtered annually is not preponderant, and on the whole the livestock industry has nothing to lose from this project, claims Professor White. The carcasses mostly have been utilized, and the campaign against bovine tuberculosis has served to increase public confidence in the dairying and beef industries.

The New England States are right in line with the testing program and will eventually become tuberculosis free. Because of present high prices of dairy cows, the chief drawback to more rapid eradication is insufficient state and federal funds to pay high cost indemnities, which is essential if farmers are to test without a loss which will lead them to bankruptcy.

New England's Future Outlook

So far as poultry is concerned, eggs and meat enjoy the advantage of serving a special demand for fresh products. New England's place in egg production is in the producing of a high quality superior product with which no other region can compete. This can and is being done. High producers' standards, coupled with proper advertising, will hold the high class New England egg market for the New England poultryman. In recent years there has been a very marked percentage increase in poultry production. It seems as if New England producers are not apparently at the point where too rapid further expansion might prove unprofitable.

Professor White's contention is that so far as the larger meat animals are concerned, it is but natural that they will be grown, fattened and slaughtered most extensively in the area where feeds are produced. Hogs, like dairy and poultry, produce human foods from the raw products the most efficiently of any of our farm animals, but the violent fluctuations which the hog market undergoes due to the fact that swine can be raised quickly, make the cycle of prices both frequent and severe. Because of favorable wool, mutton and lamb prices in recent years, sheep have enjoyed increased popularity. The greatest weakness towards any marked increase in New England's sheep industry, lies in the fact that there are relatively few experienced sheep men left in this region.

Tendency Toward Larger Units

The tendency of the future for New England agriculture is towards larger units, according to Professor White. Small farms with small flocks and herds or small orchards or crop producing areas cannot yield an income sufficiently large to meet the present family needs. Things like autos, radios, college educations, and numerous others have greatly increased our needs for money in the city and the country alike. To set the table as the dietician thinks proper, to have our teeth looked after, to consult a lawyer or doctor, all requires real money and plenty of it. The farmer must of necessity do a larger business than formerly. This is being done on many larger farms by increasing the volume of enterprises or by adding new ones that are large enough to contribute considerable to the total farm income. The smaller farms in some manner, will have to be united into larger units to accomplish this end. The only alternative to this will be a small farm as a home and a minor income producing unit with employment by the wage earners during a part of the day in industrial and commercial pursuits.

Henry Morgenthau, Jr., had the high cow in the production of both milk and butter fat in the Dutchess Dairy Improvement Association last month. She gave 2,480 pounds of milk and 1,008.6 pounds of butter fat on four times a day milking.



With the A. A. Dairyman



The Livestock Outlook

ALL dairymen know that there is a shortage of dairy cattle. In 1926 there was one heifer for each 5.7 cows. Now there is one for each five cows. In New York State there was no change in the number of dairy cows in 1928, but the number of yearling heifers increased 25,000.

According to the Department of Economics at the New York State College, the present shortage of cows is primarily due to the slaughter of too many heifer calves in the eight years of depression. The worst milk prices occurred in 1924, and few heifers were raised in 1925. Only 168,000 were on hand January 1, 1926. Now there are 222,000 yearling heifers on hand, an increase of 54,000 since 1926. Had this number of heifers been raised every year, or one heifer to each 6 cows, there would probably be too many cows in the state. It will take several years before there will be too many, as there is a shortage in practically all ages of cows except those 9 years or older.

The lowest prices of milk occurred in 1924, when there were large surpluses of cows 5 to 8 years old, and no material shortage of cows of any age. This resulted in raising so few calves in 1925, that there is an extreme shortage of cows raised in that year. The greatest shortage and the highest price of cows will probably occur this year or next. In 1931, the increased number of yearling heifers now on hand will be three years old and there will be a large number of two-year-olds. Presumably the shortage will be a little less than at present.

How Is Your Horse Supply?

It is a good time to raise horses. The New York State College of Agriculture says that there are now 600,000 less horses on American farms than there were last year. Prices of horses are almost certain to rise materially in the next year or so.

Good Outlook for Hogs

Hog raisers can look forward with some certainty to rising prices. The number of hogs declined 5,400,000 in America in 1928. The number of sows now bred for next year, show that a further decline will likely occur.

There is also a short supply ahead in beef cattle. These coming shortages both in cattle and hogs indicate according to Dr. Warren of the New York State College, high meat prices for consumers in the next few years.

Sheep Men Watch Out

Sheep growers may well consider the fact that the prices of sheep are now apparently at their peak. There has

been a steady rise in sheep prices since 1920, and now all the signs point the other way.

Dairy Improvement Associations Coming Fast

ONE of the hopeful things in the dairy outlook is the increase in the dairy herd improvement associations. Last year there was a gain of 143 associations. Nearly one-half million cows are being tested each month through regular organized cow testing associations. Members of these associations are eliminating their poor cows and lowering their costs of production by better feeding practices.

Stabilized Fluid Markets

THE Dairymen's League Co-operative Association of New York City made better returns than ever before this fall and winter, but still there is not a reasonable profit allowed to producers in the prices returned. Fluid milk markets are limited now-a-days only by the area of inspection local board of healths want to cover. The New York market was faced with a shortage last November, and just now producers, state officials, and University experts are trying to work out a plan to increase production in the short period. Our New York shed has a surplus nine months of the year that lowers our price, and if we cannot devise means to furnish sufficient milk in November, the New York authorities will inspect more territory, thus increasing our surplus and lowering our prices. I believe most fluid markets are faced with the same problem of shortage and surplus.

A stabilized, even production is a most important element in any large fluid market. The basic price plan used by Philadelphia producers looks good. A member's production during Oct., Nov. and Dec. is his basic amount for which he is paid fluid prices all year and surplus for any above that amount. I understand this has the effect of creating a surplus in these months also, making the retention of old basic amounts necessary. I submitted the following plan which our League President rejected as too drastic, but we need a lot of drastic steps to break even.

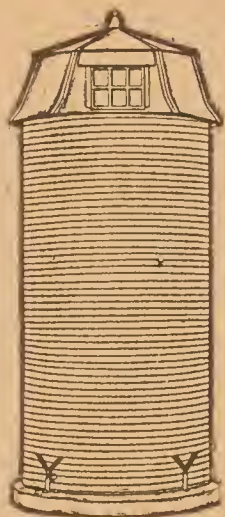
Divide the yearly production of each member into twelve equal parts. Find the percent of all milk that is sold as fluid, then pay fluid prices for this percentage of the equal monthly installments, and surplus for all over this

(Continued on Page 12)



—Courtesy, Kansas City Drover's Journal

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No one kind of Silo can be "best" for every dairyman. So Craine makes the FIVE best types—gives you full information about each of them—and lets you decide for yourself. Your chances of getting perfect Silo satisfaction are thus five times as great. Write for our free Catalog today—full of valuable information and describing

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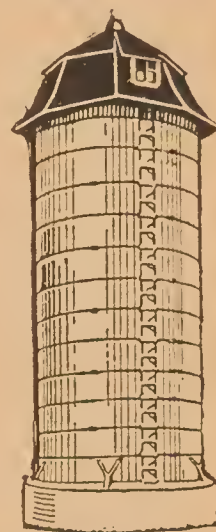
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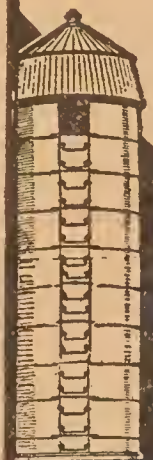


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AMERICAN AGRICULTURIST

Reviewing the Latest Eastern Markets

Milk Prices

The following are the March prices for milk in the basic zone of 201-210 miles from New York City.

Dairymen's League prices are based on milk testing 3.5%. Sheffield on the basis of 3%.

Class	Dairymen's League	Sheffield Producers
1 Fluid Milk....	3.37	3.17
2 Fluid Cream		2.30
2A Fluid Cream	2.46	
2B Cond. Milk..		
Soft Cheese..	2.71	
3 Evap. Cond. Milk Powder		2.30
Hard Cheese	2.40	
4 Butter and American cheese. Based on New York City Market quotations on butter and American cheese.		

The Class 1 League price for March 1928 was \$2.90 for 3.5% milk and Sheffield's \$2.80 for 3%.

The above prices in each class are not the final prices the farmer receives. The final price received from the dealer is the result of the weighted average.

February Prices Announced

The Dairymen's League announces the following pool prices for February for 3.5% milk.

Gross	\$3.03
Expenses .....	.06
Net Pool	\$2.97
Certificates of Indebtedness.....	.10
Net Cash Price to Farmers.....	\$2.87
Feb. 1928, Net CASH Price, 3.5% milk.....	\$2.70
Feb. 1928, Net POOL Price, 3.5% milk.....	\$2.80

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358 Greenwich St., New York City

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HIGHEST PRICES CHECKS SENT DAILY
Oldest Live Poultry house in New York City. Established 1883, offers you an unlimited outlet for your live poultry. Write for shipping tags and free holiday calendar folder K 27.

Krakaur Poultry Co. Inc.

West Washington Market, N. Y. City

Bonded Commission Merchant

Easter always makes money for Shippers (providing you ship to a good, reliable concern). Don't Delay Nor Experiment. SHIP March 23-25-26-27-28.

Live and Dressed Poultry, Calves, Lambs and Eggs

Write or wire for quotations, tags, market conditions, etc. Prompt returns—Top prices—Take advantage of 25 years experience.

JOSEPH C. BERMAN, Inc.,

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EGG CASES

Wholesale dealer and shipper of second hand egg cases. Car lots a specialty.

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Just Out! 553 Pictures, 134 Pages, Gas Stations, Boarding Houses, Camps, Homes and profit-producing farms equipped, 21 states. \$1000 Down Takes 130 Acres. Imp. Hway, stream-bordered; 7-room house, barns, poultry-brooder houses, fruit, wood, including 10 cows, pr. horses, hogs, tools and machinery. \$5000, 1/5 cash. Details page 61. Write Now for FREE copy. STROUT AGENCY, 255-R-Fourth Ave. at 20th St., N. Y. City.

Feb. 1927, Net CASH Price, 3.5% milk.....\$2.57

Feb. 1927, Net POOL Price, 3.5% milk.....	\$2.67
Feb. 1926, Net CASH Price, 3.5% milk.....	\$2.21
Feb. 1926, Net POOL Price, 3.5% milk.....	\$2.31
Feb. 1925, Net POOL Price, 3.5% milk.....	\$2.40
Feb. 1925, Net CASH Price, 3.5% milk.....	\$2.30

The Sheffield Producers announce the cash price to producers for 3% milk in the 201-210 mile zone, as \$2.82½ per hundred, (\$3.02½ for 3.5% milk.)

Feb. 1927 price to producer,	3% milk, \$2.67½; 3.5%, \$2.87½
Feb. 1926 price to producer,	3% milk, \$2.34 ; 3.5%, \$2.74
Feb. 1925 price to producer,	3% milk, \$2.60 ; 3.5%, \$2.80
Feb. 1925 price to producer,	3% milk, \$2.70 ; 3.5%, \$2.90

Butter Suffers Sharp Break

CREAMERY	Mar. 13	Mar. 6	Mar. 14, 1928
HIGHER than extra....	48¾-49½	51¼-52	50½-51
Extra (92sc).....	-48½	-51	50 -
84-91 score.....	46½-48¼	47½-50½	43½-49½
Lower Grades.....	45 -46	46 -47	41½-42½

In last week's report we made the statement that we would not be surprised if the market receded. However, no one expected the sharp break that has taken place. Even some of the best informed men in the market were "taken back" by the quick and sharp changes. On Monday, March 11, trade started in with a fair degree of activity. All indications pointed to a steady market. The supply was not burdensome and no heavy increases were looked for in view of the fact that country roads were in bad condition, interfering with the movement of cream and consequently the make. Tuesday dawned with an entirely different picture before the trade. It was very difficult to explain the change of sentiment but buyers showed an unmistakable disposition to hold off and test the position of the market more fully. Business immediately became available with concessions being readily offered.

On the 13th, receivers were bound and determined to find the point where the trade would take hold and prices were again reduced to the level given above. Even at 48½c for extras it is easier to buy than sell. In other words, the market is none too well established at the above rates.

Street stocks are not unusually heavy but they do contain a large percentage of fancy goods. With so much stock available naturally buyers are not showing any anxiety and it is keeping the selling element quite feverish.

The March 1 government report states that warehouses in the country hold 11,911,000 lbs. which are 2,493,000 lbs. less than a year ago.

Cured State Cheese Firm

STATE	Mar. 13	Mar. 6	Mar. 14, 1928
FLATS			
Fresh Fancy.....	27½-29	23½-25	22¼-23½
Fresh Average.....			
Held Fancy.....	23½-25	27½-29	29 -29½
Held Average.....			

New York State whole milk flats, well cured and of fancy quality, are meeting what is said to be a little better demand than heretofore. In fact some holders of extra fancy cheese are reported to be asking up to 30c for their best Junes. There is said to be a little firmer holding on the part of some Western cheese. Fresh cheese, on the other hand, is moving very slowly and it is only in rare instances that we hear of 24½c and 25c being paid. New York receipts of fresh cheese from the West of late are lighter than heretofore. Developments in the West are going to control in a large measure the outcome of the market. Holders of well cured cheese of high quality

exhibit considerable confidence in the market outlook on held cheese. They see no opportunity to make replacements with profit and as stated above some are actually asking slightly higher prices.

Eggs Sharply Lower

	Mar. 13	Mar. 6	Mar. 14, 1928
NEARBY WHITE ..			
Hen'y Sel. Extras....	35 -36	42 -43	34 -35
Hen'y Av'ge Extras..	-34	40 -41	32 -33
Extra Firsts.....	32 -33	39 -39½	30 -31
Firsts			29 -29½
Undergrades			28 -28½
Pullets			
Pewees			
NEARBY BROWNS			
Hennerly	33½-35	43½-44	32½-34
Gathered	-33	-43	29½-32

The egg market has continued to be an up and down affair from one day to another. It has been extremely sensitive and a slight accumulation here and there, or reports of heavier receipts on the way, or rumors of lower prices in the West have been sufficient to start a general flurry in the trade. The general trend since last week's report has been downward and most of the cause for this downward trend can be ascribed to heavier receipts of mixed colors from Western producing areas. The entire market is in a very sensitive condition and there is general anxiety to keep stocks moving. The Chicago market has suffered a sharp break carrying prices there below a parity with New York. Consequently the situation greatly favors the buyers and they are bearing down all they can.

As we stated last week, we are now in a rather critical period for we are rapidly approaching the period when eggs will be moving into cold storage in large numbers. The trade is widely divided as to what will be a safe storage price. The storage deal this year has claimed a lot of victims. There are some who made some money but there are a lot more who did not share a sufficient margin to pay for the handling and storage of the eggs, let alone interest, etc.

Eggs from the West are setting up a lot of opposition for nearby which are in plentiful supply. Under the circumstances nearby producers can best afford to ship only their choicer marks, for prices are now down to a level where commissions, handling expenses, etc. represent a larger increment of overhead.

Live Poultry Market Firm

	Mar. 13	Mar. 6	Mar. 14, 1928
FOWLS			
Colored	-33	31-32	26-28
Leghorn	-33	31-32	20-22
CHICKENS			
Colored	32-36	31-36	30-35
Leghorn	32-36	31-36	30-35
BROILERS			
Colored		35-45	40-50
Leghorn		35-42	40-45
CAPONS	35-45	35-42	45-50
TURKEYS	25-40	25-40	30-50
DUCKS, Nearby.....	-28	28-30	28-30
GEESE	20-22	20-22	19-20

Indications point to another good week in the live poultry market. Fowls are bringing a good price and meeting a demand that bids fair to hold values at a safe level. On the 12th, and 13th, the weather was extremely warm and there was some apprehension felt for the balance of the week. At this writing it appears that there will be no sharp modification.

Broilers have been selling very well but the market is widely divided as far as values are concerned. Some colored stock has been reported sold at 47c, other sales were at 45c and then there were reports here and there at values still lower. As a result it is impossible to establish any definite values on broilers and hence we omit quotation.

The warm weather reacted to the detriment of the live duck market and when over 12,000 ducks arrived on Wednesday, from the east end of Long Island, prices did not hold so firm.

Pea Beans Easier

Pea beans have slipped a little since last week, and the range of prices generally cover from \$10.50 to \$11. Red Kidneys still hold firm at \$8.25 to \$8.75, and Jumbo Marrows are from \$12.25 to \$13.25.

Only No. 1 Hay Wanted

Only No. 1 hay is worth consideration these days. That is the only grade

that is getting any call. Even No. 1 hay containing grass or clover mixtures is suffering a \$2 penalty. Grades under No. 1 are sharply lower.

Potato Market Very Dull

STATE	Mar. 13	Mar. 6	Mar. 14, 1928
150 lb. sack.....			3.75-4.00
Bulk, 180 lbs.....			
MAINE			
150 lb. sack.....	1.75-2.00	1.75-2.00	4.00-4.50
Bulk, 180 lbs.....	2.00-2.25	2.10-2.35	4.85-5.35
PENNA.			
150 lb. sack			
No. 1.....			
Bulk, 180 lbs.....	1.75-1.90	1.85-2.00	
LONG ISLAND			
150 lb. sack			
No. 1.....	2.00-2.25	2.00-2.35	4.75-5.00
Bulk, 180 lbs.....	2.35-2.60	2.35-2.60	5.50-6.00

The potato market is a more discouraging affair, it seems to the writer, as the season progresses. The market is very dull on old potatoes and prices are sustained with difficulty. The situation is now becoming even worse when we consider the fact that Florida is beginning to send heavier shipments

Market Reports Daily by Radio

Up-to-the minute market information and prices are broadcast daily for your benefit by American Agriculturist co-operating with the New York State and Federal Departments of Agriculture, through station WEAf. The reports are broadcast at 12:30 standard time.

of Spaulding Rose northward. Although the amount of stock that is coming forward now is rather light to have any effect on New York trade, nevertheless, early Floridas do eat into our better markets and they are the ones that are paying the best prices. On March 13, Florida Spaulding Rose grading No. 1 were quoted at \$9.50 to \$10, but at that quotation they were not moving freely and indications were that prices would move lower.

Feeds and Grains

FUTURES	Mar. 13	Mar. 6	Mar. 4, 1928
(At Chicago)			
Wheat (Mar.).....	1.25½	1.21½	1.38
Corn (Mar.).....	.96¼	.94¾	.95½
Oats (Mar.).....	.47½	.45½	.57½
CASH GRAINS			
(At New York)			
Wheat, No. 2 Red..	.160	1.55½	1.74½
Corn, No. 2 Yel....	1.16¾	1.13½	1.15¾
Oats, No. 2.....	.61	.60¾	.69¾
FEEDS			
(At Buffalo)	Mar. 9	Mar. 2	1928
Grade Oats.....	37.00	38.00	37.50
Spring Bran.....	31.00	31.50	39.50
Hard Bran.....	35.00	34.00	42.00
Standard Mids.....	30.00	30.50	39.50
Soft W. Mids.....	39.50	38.50	46.00
Flour Mids.....	35.50	36.00	40.50
Red Dog.....	38.00	38.00	41.00
Wh. Hominy.....	38.00		40.25
Yel. Hominy.....	38.00	38.00	39.50
Corn Meal.....	41.50	38.00	41.00
Gluten Feed.....	48.50	41.50	44.75
Gluten Meal.....		50.00	54.00
36% C. S. Meal....	46.00	60.00	48.00
41% C. S. Meal....	50.25	45.00	53.00
43% C. S. Meal....	52.25	50.50	55.00
34% O. P. Linseed Meal	57.00	57.50	53.50

The above quotations are those of the local Buffalo market and are F.O.B. They are reported in the weekly letter of the N. Y. State Department of Agriculture and Markets.

Stabilized Fluid Markets

(Continued from Page 11)

amount. Some surplus is always necessary to protect the market. For example, my own yearly production will be around 360,000 lbs. This gives us 30,000 lbs. a month. If the League sold on the average 70% of its milk as fluid, my allotment would be 70% of 30,000 lbs., or 21,000 lbs. a month. Each month I would be paid fluid prices for 21,000 lbs. and surplus for all over that amount. The annual increase in market needs could be taken care of by an increase in each member's allotment. When farms were sold the quota would go with the farm. It seems to me this plan would equalize and stabilize production, and also place the burden of the surplus squarely on the man who makes it. If he were paid accordingly how long would he make it? Now we all carry the burden of the surplus and have a shortage in addition.—R. C. FRAZEE.

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are offering a highly bred bull calf, born March 5, 1929—out of

FISHKILL ALKEN ORMSBY DEKOL

one of the best daughters of

Hengerveld Homestead DeKol 4th.

She made a record of production of 11,769 lbs. milk and 548 lbs. butter in 341 days, at the age of 3 years and 8 days. Her average test for one year in Class C was 3.96%. Her seven day record at the same age was 533 lbs. milk and 25.9 lbs. butter.

It is a son of this great producer we are offering and he is a bargain at

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If taken within 30 days

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Everything you do with your car depends upon the strength and endurance of your tires. Note the deep-grooved, sharp-edged, tough Firestone non-skid tread that grips the road, insuring safety on dirt, gravel or any pavement. The Firestone tread is made of the toughest rubber ever built into a tire. Firestone cords are gum-dipped and every fiber and every strand is saturated and insulated with pure rubber. These are reasons why Firestone Tires hold all records for safety, speed and endurance. The

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An RCA Radiola in the home quickly pays for itself—and no home today can afford to be without one . . .

INQUIRY among many families that have added an RCA Radiola to their home equipment shows that the Radiola soon pays for itself.

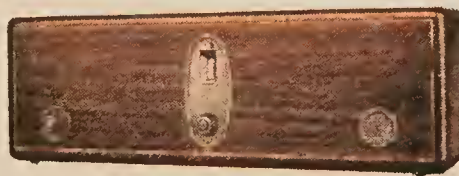
The market, crop and weather information that comes every day from the big broadcasting stations in Chicago, Washington, Pittsburgh, New York and other cities is invaluable. Sometimes this early information saves a heavy loss in marketing; at other times it points the way to larger profits.

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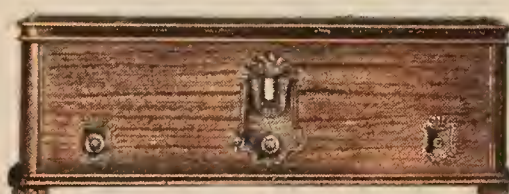
Musical entertainment of the highest character, addresses by noted men, speeches by the President and other high Government officers, sermons from great city pulpits,



RCA RADIOLA 16—6-tube receiver of the very efficient tuned-radio-frequency type. For battery operation. Single dial control. Sensitive and selective. Compact mahogany finished cabinet.
\$82.75 (including full set of Radiotrons)



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helpful talks on household problems by recognized authorities, the latest news "flashes" of important events—all are at the command of the owner of a Radiola, at the touch of a finger.

Radio has become one of the indispensable blessings of modern life. And its cost is very small compared with its worth.

It pays to have a good radio set in your home—and when you select an RCA Radiola you know you have the best.

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RCA Concerts for Schools

If you love good music, be sure to listen in Friday mornings at 11 (Eastern Standard Time) to the RCA Educational Hour conducted by Walter Damrosch under the auspices of the Radio Corporation of America.

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RCA LOUDSPEAKER 103—An improved model of the popular 100A, with tapestry decoration. (Shown in the Hendrickson drawing above.) . . . \$37.50

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What Is Doing at Albany

Farm News Direct from Legislative Halls

THE legislature held a hearing on March 12 on the various bills providing for a gasoline tax now being considered. Automobile clubs and representatives from the larger cities were on hand to oppose vigorously all of the gasoline tax bills. On the other hand, representatives of farmers supported the bills, providing due provision is made in them for using all of the money for highway purposes and returning a fair proportion of it to the counties for local highway work. It now seems likely that some kind of a gasoline tax bill will pass. On it hinges considerable of the farm relief program desired by both the legislature and the Governor.

There is a division of opinion between the Governor and the legislature on some features of the tax relief program. The Governor has proposed a 20 per cent reduction in all income taxes. This is opposed by the legislature, which wishes the direct state tax on real estate to be eliminated. A counter proposal is being considered by both sides which would reduce the tax on small incomes and at the same time make it possible to reduce all or a part of the direct tax on real estate.

The Governor and the legislature must come to some agreement if the program for helping farmers with their road taxes is to go through. The indications are now that an agreement will be reached.

Agree to Reduce School Taxes

In any case, there is practical agreement between the legislature and Governor Roosevelt on school tax relief and the two bills, one for the small village school with less than five teachers and the other for the one-room district school, will both pass. These will be of immense relief to rural school taxpayers.

AMERICAN AGRICULTURIST is much pleased with the accomplishment of this school tax reduction program for we have been working for it at Albany for years and the plan as now accepted by both the Governor and the legislature is practically that proposed by the Agricultural Advisory Commission, of which Henry Morgenthau, Jr., publisher of AMERICAN AGRICULTURIST, is chairman.

For Better City Markets

This Commission, at its last meeting, held in Albany on March 7, took up the problems of farmers' markets in the cities, and reforestation. Mr. H. Deane Phillips and Mr. Harry E. Crouch of the State Department of Agriculture and Markets, have been studying this problem for several years. They appeared before the Commission and laid out a plan for establishing primary and secondary farmers' markets covering the entire state.

The Commission heartily endorsed the principle of establishing such markets and recommended that a commission be appointed representing the Governor and the legislature, and farmers, to make a careful survey and study for locating and starting practical city markets for handling farmers' products. It is thought that if such markets can be established, they can do much to give eastern farmers a better hold on eastern markets which they have largely lost in recent years to

farmers from other sections and other countries.

The city of Newburgh has already taken definite steps to establish such a market in the near future.

Committees Refuse to Report Thayer-Gedney Bills

The Committees on Education in the legislature unanimously agreed to refuse to report out of committee the Thayer-Gedney-Esmond rural school bills. These are the bills supported by the Rural School Improvement Society which, if passed, would have handicapped progress toward rural schools in the State. At the hearing recently held before the legislative committees on these Thayer-Gedney-Esmond rural school bills, D. Boyd Devendorf made a speech which did much to injure the very cause that he was advocating. This is described in detail on the Editorial Page of this issue.

A great deal of excitement has prevailed in Albany during the last two or three weeks on what Governor Roosevelt was going to propose for a new water and power policy for the State. The Governor sent a special message to a joint session of the legislature on this subject on March 12 advocating a new plan for developing water power. It is claimed that the Roosevelt plan is not greatly different from that advocated by former Governor Smith. The legislature and Governor Smith were at odds over a State policy on this important subject for years.

Governor Roosevelt states that the "objective to be accomplished in this problem is, first, the physical transforming of falling water into electric current; second, the transmission and distribution of this current from the plant where it is developed to the industry and homes of the people of the State."

The principal features of the Governor's message and policy for water power development are as follows:

The development of the hydro-electric resources of the St. Lawrence River shall

be accomplished by the State through a board of trustees.

The distribution of the power shall be made by a private corporation. This distribution shall secure the lowest rates to the consumer compatible with a fair and reasonable return on the actual cash investment.

There are to be five trustees, including an engineer, a lawyer and a banker. They are to be "men in whom there is great public confidence, such as former Governor Charles Evans Hughes and former Governor Alfred E. Smith."

The trustees are to have power to issue tax exempt bonds, but not to pledge the credit of the State. They would receive no salary, but an appropriation of \$100,000 would be provided for expenses.

The power developed from the St. Lawrence River is to be transmitted and distributed, if possible, through the employment of private capital. There is to be adequate distribution throughout the State.

The plan is not to be effective until after the trustees work out the details of the water-power development and their proposal obtains legislative approval.

Important Reforestation Bills

TWO very important bills having to do with reforestation have been introduced in the New York State legislature. These bills are sponsored by Senator Hewitt.

The first bill would amend the Conservation Law making it possible for the State to acquire tracts of land containing not less than five hundred adjacent acres. The bill, if passed, would apply only to the counties outside of the so-called forest preserve counties, which are the counties in the Catskill and Adirondack Mountain regions.

Forest land so acquired by the State under this bill would be free from state

and county taxation, but would be subject to other local taxes.

The bill would make available \$120,000 for the starting of such forest preserves and providing young trees for them.

The other bill would permit counties through their board of supervisors to make appropriations for reforestation purposes. Land so purchased by the county would be exempt from state and county taxation. When such reforestation areas are purchased by the supervisors, if approved by the State Conservation Commissioner, the State may appropriate a sum equal to that appropriated by the supervisors, but not to exceed \$5,000, in order to establish the county forests.

Pennsylvania Farm Notes

KEYSTONE STATE automobilists are confronted with the threatened increase of a four-cent per gallon tax, a one-cent advance over the present rate. The State Highway Department and Governor Fisher conclude that such an increase is necessary for the State's continued advance in road building, while State Treasurer Lewis in recent speeches denies that a valid reason for a higher gasoline tax has been established. In the meantime, Grange and other farm organizations are opposing a higher tax on gasoline and it is now a problem for the legislature to decide.

Regardless of the extreme and sudden changes in climatic conditions, the growing cereals seem to have passed through the winter's ordeal with only normal harm through winter killing. Wheat fields look promising.

As a result of more rigid and exacting dairy laws there is a trend in the direction of higher prices for pure milk and fourteen per cent butter-fat cream. The owners of tuberculin tested cows are especially interested.

Published reports indicate an unusually large number of changes in farm or county agricultural agents throughout Pennsylvania.—O. D. S.

New York County Notes

Cattaraugus County—Professor Peck, of the Pomology Department at Cornell, with C. N. Abbey, Farm Bureau Manager, are giving pruning and grafting demonstrations in the county. Miss Mamie M. Saalfeld, Pomona lecturer, will attend the Third Annual School for Grange Lecturers at Ithaca, April 8-13. Miss Elva Terry, lecturer of Ischua Grange, and many others from the county will also attend. The June meeting of the Pomona Grange will be held at Cattaraugus. Mrs. Minnie Glover has been selected to succeed her late husband as a member of the Executive Committee. March 7 the worst blizzard of the winter raged doing considerable damage to buildings.

The first annual Cattaraugus County Agricultural Achievement Field Day, the first of its kind in the State, will be held by the Young Farmers' Club of the Little Valley High School, March 23, afternoon and evening. It is expected to be one of the biggest get-togethers of the younger generation of agricultural interests in the

county. There will be knot-tying contests, milk judging, Babcock testing demonstrations, etc. Twenty samples of grass, clover seeds, and feeds are to be judged. Students from other schools in the county are invited to enter. Lunch will be served by the Home Economics class of the school. There will be an address by A. K. Getman of Albany, and also motion pictures, awarding of prizes to winners and a basket ball game. Harry J. Shoup, teacher of Agriculture in the school, is in charge of the arrangements.

Professor V. B. Hart of Cornell, addressed a community meeting at Cattaraugus, February 27. The Grange served lunch.

C. N. Abbey, Farm Bureau Manager, will discuss "Reforestation versus Thornbush" and Professor Peck, "Small Fruit Trees for the Garden" at the County Grange meeting in Olean, March 7. The farm outlook is fairly encouraging for milk production which is typical of the county, although a fine dairy of 48 cows was sold at auction near Randolph this week. The crossroads in the county are drifted with snow.—Mrs. M. M. S.

Columbia County—Continued ice weather has been the rule. The men of the church in Viewmont have harvested about 600 cakes of 12 inch ice and stored it in church sheds. The Ichabod Crane School in Kinderhook has organized the first 4-H Club in the vicinity, which will be known as Happy Hustlers. They hope to exhibit the result of their work at Chatham Fair in September. The old Union Hotel in Valatie has been sold and will be converted into apartments.

Sigurd Johnson of Kinderhook School, answered correctly 43 questions out of 50 concerning the inauguration and won a prize. Visitors to Taconic State Park view the great work done there this winter by Contractor Wilkison. Miss Mildred Essick, assistant 4-H Club leader, is visiting schools in the county trying to interest them in the 4-H Club plan. She is doing this under the auspices of the Farm Bureau.

Fruit and dairy meetings held in Ghent, East Chatham, Copake, and New Lebanon, are under the management of Mr. Buckholz. Butter is selling at 48 cents a pound; eggs at 40 cents a dozen; honey at 20 cents a pound.—Mrs. C. V. H.

Rensselaer County—Plenty of icy roads but no big blizzards as yet. The Home Bureau and Granges have both arranged for regular publicity with the

Troy Times. Districts sending pupils to city on the bus are more than satisfied. The rural pupils in Troy High School have the same advantages as city children. Some are joining the new Eastern District orchestra. Troy High School pays special attention to music.—Mrs. F. F.

Jefferson County—More snow has come making it impossible for auto traffic in many places. Hay is picking up a little. Some of the buyers have offered \$14. New milch cows are being sold for \$100 to \$150 each. Many auctions are being staged. A large number of farmers are becoming discouraged and taking salaried jobs. Eggs are being sold from 35 cents to 45 cents a dozen which is far too cheap for this season of the year. Chickens shipped to New York City last week sold for 36 cents and 22 cents per pound locally.—Mrs. C. F. D.

Genesee County—There has been some very cold weather with plenty of snow. The cross roads have been kept open with a snow plow. The gripe is still prevalent and there have been numerous cases of pneumonia. A number of auctions will be held in this county within the next two weeks. The directors of the county fair held a special meeting at President Howard Bells' home. The continuance of the annual fair is still a great problem but few residents wish to see it discontinued entirely. Idle land survey cards have been sent out to farmers by the co-operative extension service in agriculture for the purpose of tree planting. The maple sugar season opened last week.—Mrs. R. E. G.

Nassau County Farm Bureau Finances Disease Study

THE Nassau County Farm and Home Bureau is financing a fellowship for the purpose of studying the control of several vegetable diseases which are causing serious concern to growers in the county.

The work will start April 1st and among the first problems taken up will be controlling carrot blight which was very serious last year. This work has been financed by the Farm Bureau as an organization rather than any particular group of growers.

Farm News From Washington

PRESIDENT HOOVER has called an extra session of Congress to convene on April 15 to give consideration only to the two great problems of farm aid or relief, and tariff adjustments. It is known that the President favors agricultural legislation that will create a Farm Loan Board to handle the crop surplus as well as additional assistance in strengthening cooperative marketing and the establishment of adequate warehouses. He believes in an upward revision of the tariff to protect the domestic market from foreign competition. It is believed that a revised McNary-Haugen Farm Relief Bill with the equalization fee eliminated meets very well the President's ideas on farm relief.

More Attention to Farm Marketing

Senator Borah of Idaho also announced that the nation should pay more attention to the marketing side of the farmers' problem. He has stated very emphatically that no farm relief would be complete that did not include an increase in

tariff rates on agricultural products and also that did not seek to control more closely commission dealers and merchants. He has prepared a bill under which commission men and concerns that do practically a commission business would be put under federal license and inspection, supervised by agents of the Department of Agriculture, in order to compel them to engage in fair dealing with the producers.

To War On Crime

Farm people are particularly interested in the emphatic statements made by President Hoover for sweeping reforms for war on crime. He expects to appoint a commission very soon to make a detailed inquiry on the crime situation, and in particular to look toward the better enforcement of all laws, especially the prohibition laws.

Of great interest also was the President's announcement on March 12 that there would be no more leasing of government lands for oil purposes. President Hoover has decreed a policy of complete conservation of natural resources and has emphatically stated that waste of such resources must be stopped.

Make Dimes Grow into DOLLARS



A CHICK worth about a dime may develop into a broiler worth over a dollar or into a pullet which will make you a number of dollars. But one thing is sure. The chick can't grow into money unless it has enough calcium in its diet.

Essential to Success

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Green Forest Husky Chicks

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Ship C. O. D. 25 50 100
S. C. White Leghorns.....\$3.25 \$6.25 \$12
S. C. Barred Plymouth Rocks.....3.75 7.25 14
Mixed Chicks.....2.75 5.25 10

Leghorns are out of hens with trapnest records of 291-300 eggs. We pay parcel post and guarantee 100% good, strong chicks on arrival. Free circular.

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The Largest Specialty White Leghorn Farms in the eastern states distribute a 64-page illustrated Yearbook—free—to poultry keepers east of the Mississippi.

Gives housing, trapnesting, pedigreeing, breeding and feeding plans our 25 years' experience has proved successful, and reasons why we can sell Chicks guaranteed to be more profitable than any others you can buy. LORD FARMS, 85 FOREST ST., METHUEN, MASS.



With the A. A.

Poultry Farmer



Hatching Eggs

WHEN your editor and I drew up

By L. H. HISCOCK

test,—part of your eggs at home and

certain subjects to be covered during the coming year, I inadvertently let the subject "Custom Hatching" go thru, and since I operate such a plant on a small scale, I feel unqualified to speak on the subject, and owe an apology all the way around. But, though it cost me many scores of eggs to do it, I can speak about hatching eggs, and help any man or woman who uses eggs for hatching purposes under hens, in small incubators, or for commercial hatcheries.



L. H. Hiscock

I have already touched upon this subject, and I mentioned especially the waste in eggs that never really should be hatched,—the small eggs, the poor shaped egg, the poor quality egg, etc. Frankly, I believe the best way to insure good hatches is to candle all eggs before they are set. Such a method insures the least amount of waste and a greater percentage from a hatching standpoint. In customers that came to me last year, none had better percent hatches than the two or three out of a hundred odd who were employing this method.

How to Care for Hatching Eggs
Closely allied with this same factor comes the actual care of eggs that are to be used for hatching. In general the fresher eggs are, the better they hatch, and yet you hit some funny propositions in this field. I had one hatch that averaged sixty-six per cent on one thousand eggs that came across the continent from the state of Washington. The significant part about these eggs was that they were individually wrapped with light paper, thus protecting them from air and evaporation. And that is the point I want to drive home: keep your eggs in good shape no matter where you are going to set them. Keep them in a temperature around fifty degrees (in no temperature below 45 degrees), so that it will prevent to some extent the action of heat and air. Also take your eggs up more than once a day; they will have better chances of hatching. They should also be turned or shuffled about twice a day to insure keeping the yolks in good position. If you can set your eggs in ten days, do; at the outside do not keep them longer than two weeks.

One of the factors that seems to influence incubation only slightly is dirt. I have hatched some mighty dirty eggs, and I was unable to establish at any time a correlation between dirty eggs and poor hatchability. I did find that eggs that were seriously covered with egg yolk generally tended to be unhatchable. Blood, on the other hand, was no serious drawback to an egg's hatching. On the other side of the proposition, it seems to me that a good care of nests during hatching season, and a frequent gathering of eggs is a wise precaution, for dirt and filth are never sanitary, and may even be the cause of spreading serious disease. Do not go to the other extreme, either, and wash your eggs, for a removal of the natural coating of an egg cannot help but let the air in more rapidly and thus hasten its deterioration.

We Are After Chicks
In the hatching of eggs the one thing you want is chicks. If a commercial hatchery can hatch these cheaper for you than you can do it yourself, or if they can produce more chicks or even better chicks than you can hatch at home, then you may find it best to follow such a course. Frankly, the best way to satisfy yourself, if you expect custom hatching done, is to run a

part at the hatchery. Such a method will give you accurate information on costs, percentage of hatches, and your labor versus the other man's price for the work.

What I Have Learned About Brooding Chicks

I HAVE learned to put my chicks into darkened brooder houses. This quiets them, rests them after their long journey, prevents their gobbling down all the nondescript stuff they find under their feet, and gives them a chance to quietly digest their egg yolk. I keep the brooder houses darkened until the chicks' first feed. Learning this one fact has, I believe, saved me hundreds of chicks.

I have learned not to feed too soon. Of course, the chicken boxes come already labelled when to feed. But, womanlike, I always have a fear that the little dears are hungry and must be fed at once. I remember the first chickens I got, four years ago. The boxes said plainly, "Give first feed Monday noon." But when I took the chicks out of the shipping boxes and put them into their cozy brooder house, well lighted, and they began to hop around and holler in lively fashion, I began to pity the hungry things. My neighbor came to look on and advise and she pitied them too. She looked darkly at me for starving them. So I fed them Sunday evening instead of Monday noon and thereafter, for several weeks, I had to kill off dumpy chicks. Seventy-two hours is not too long to make them wait for their first feed, especially if they are resting in darkened houses.

I have learned that newspapers are a woman's greatest aid in keeping brooder floors clean and sanitary. I have my floors covered with nice, dry sand. Over this I spread newspapers, changing them every day. Of course, this is a chore but it's not as hard as raking out sand and carting in fresh every week. As I brood 1200 chickens, I have to save papers all the year for this purpose and often call on my neighbors to get their cast away periodicals. I'm always careful to burn all the dirtied papers. I have learned that roofed scratch sheds with open fronts are essential for early chickens. With these, no matter what snow and blow are going on outside, the babies can get away from the heat of the brooder stoves and get tough and stout in the outdoor air and sun. All my brooder houses are now built with 8 x 10 scratch sheds.—J. D. H.

How to Control Coccidiosis With Skim Milk

Careful experiments at the California Experiment Station show that the feeding of sufficient milk is of great value in controlling outbreaks of coccidiosis. The mash used in the California experiment and with success on a number of poultry farms contains the following:

Dry Skim Milk.....40 pounds
Wheat Bran.....10 pounds
Yellow Cornmeal.....30 pounds
Ground Barley.....20 pounds

Rules for Feeding

The following rules for feeding are indicated as the result of the California experiments:

1. Start feeding the mash as soon as the presence of the disease is determined.
2. Keep the mash constantly before the chicks in hoppers or troughs constructed so as to prevent waste.
3. Provide sufficient hoppers so that all chicks can eat freely.
4. Feed grain once or twice daily but restrict the amount to from one-third to one-half the weight of mash consumed. (Continued on Page 18)

Baby Chicks

300,000
White-Brown
Buff Leghorn

CHICKS

Shipped C.O.D. Send No Money
PURE STRAINS—Tancred—Hollywood—Barron—American S. C. White Leghorns—Brown and Buff Leghorns—Eggs and Chicks Produced from some of the finest matings in Pennsylvania. Breeders Specializing in High Egg Production—Dependable Chicks for Commercial Poultrymen—100% Live Arrival—Send No Money—Chicks Shipped C.O.D.—Catalogue.

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S.C.W. & Br. Leghorns.....	\$3.50	\$6.00	\$12	\$57.50	\$110
S.C.B. and Wh. Rocks.....	4.00	7.50	14	67.50	130
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White Wyandottes.....	4.00	7.50	14	67.50	130
Assorted Chicks.....	3.00	5.00	9	42.50	80

100% prepaid safe delivery guaranteed.

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100% Live Delivery.

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Wh. and Br. Leghorns.....	\$6.00	\$11.00	\$52.50
Buff and Bl. Leghorns.....	6.00	11.00	52.50
Anconas.....	6.00	11.00	52.50
Barred Rocks.....	6.50	12.50	60.00
Wh. and Buff Rocks.....	6.50	12.50	60.00
SC and RC Reds.....	6.50	12.50	60.00
SC Bl. Minorcas.....	6.50	12.50	60.00
Wh. and SL Wyandottes.....	7.50	14.00	67.50
Buff Orpingtons.....	7.50	14.00	67.50

All absolutely first class purebred stock from culled flocks. Prompt shipments.

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BABY CHICKS

	25	50	100	500
White Leghorns.....	\$3.00	\$5.25	\$10.00	\$45.00
Barred Rocks and Reds.....	3.50	6.25	12.00	57.50
Heavy Mixed.....	3.00	5.25	10.00	45.00
Light Mixed.....	2.75	4.75	9.00	42.50
Pekin Ducklings.....	8.00	15.00	28.00	130.00
Mixed Ducklings.....	6.50	12.50	25.00	115.00

John Shadel Hatchery McAlisterville, Pa.
Route 2.

200,000 CHICKS 1929

Goodling's Super Quality. Healthy, Strong and Vigorous

	50	100	500	1000
Single Comb, White Leghorns.....	\$6.50	\$12.00	\$57.50	\$110
Barred Plymouth Rocks.....	7.00	13.00	62.50	120
S. C. Rhode Island Reds.....	8.00	15.00	75.00	
Broiler Chicks, Heavy Breed.....	5.50	11.00	52.50	100
Broiler Chicks, Light Breed.....	5.00	10.00	47.50	90

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SINGLE COMB VI. Certified: Tested free from B.W.D. Males from 200-300 egg hens. Pullets Started Chicks: 3000 Baby Chicks weekly: Circular.

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WYCKOFF and BARRON STRAIN. White Leghorn Chicks—11 cents each: \$100 per 1000. Prepaid and safe delivery guaranteed. Our 19th year. Circular free. \$1.00 books order. THE PENNSYLVANIA HATCHERY, Box W, Liverpool, Pa.

A Visit to a Fertilizer Plant

(Continued from Page 3)

complicated to describe here but in the first step it is shovelled into great furnaces. When I looked into one of these sulphur furnaces and saw the blue flames curling and licking upward, and smelt the fumes not unlike those one would get from the burning of a million old-fashioned sulphur matches, I was reminded of the vivid descriptions that the old-time ministers used to preach of a place where we poor humans were expected to go after we strayed from the "straight and narrow."

Sulphuric acid is a dangerous chemical. It destroys iron or steel and therefore the tanks in which it is manufactured or stored have to be made of lead. A small drop of it on your shoe or clothing will burn a hole, and on the flesh it makes one of the worst burns.

After the phosphate rock has been ground, it is treated with the sulphuric acid. The resulting superphosphate is dried or cured and is then ready to be shipped or to be mixed in proper proportions with the other elements, nitrogen and potash, to make a complete fertilizer.

The Age of the Chemist

All of the various ingredients, potash, phosphate rock and nitrogen, coming from so many different sources, vary more or less in quality, and in order to have a uniform, reliable and efficient product, it is necessary for the fertilizer manufacturers to maintain a chemical laboratory with trained chemists in charge. These men are busy all of the time sampling every ingredient that comes into the factory, and testing and analyzing it in order to make certain that the complete fertilizer has proper quality and uniformity.

The tendency in most fertilizer plants is toward higher grades, more plant food and less carrier. The plant superintendent told me that some of their mixtures still contain some sand as a filler or carrier because farmers have not yet gotten used to using concentrated mixtures, and also because farmers and local dealers still demand fertilizers at a low price. I was told, however, that most reliable manufacturers are trying to cooperate with the farm papers and the colleges of agriculture to show farmers that what actually counts in a ton of fertilizer is the amount of real plant food that it contains. A too low grade of cheap fertilizer may be the most costly in the end.

The plant I visited—and I believe this is true of most of the fertilizer manufacturing—takes a great deal of care to weigh and mix accurately the ingredients that go into the different mixtures. Unless the fertilizer is well mixed, a crop may get a too large proportion of one element and too little of another.

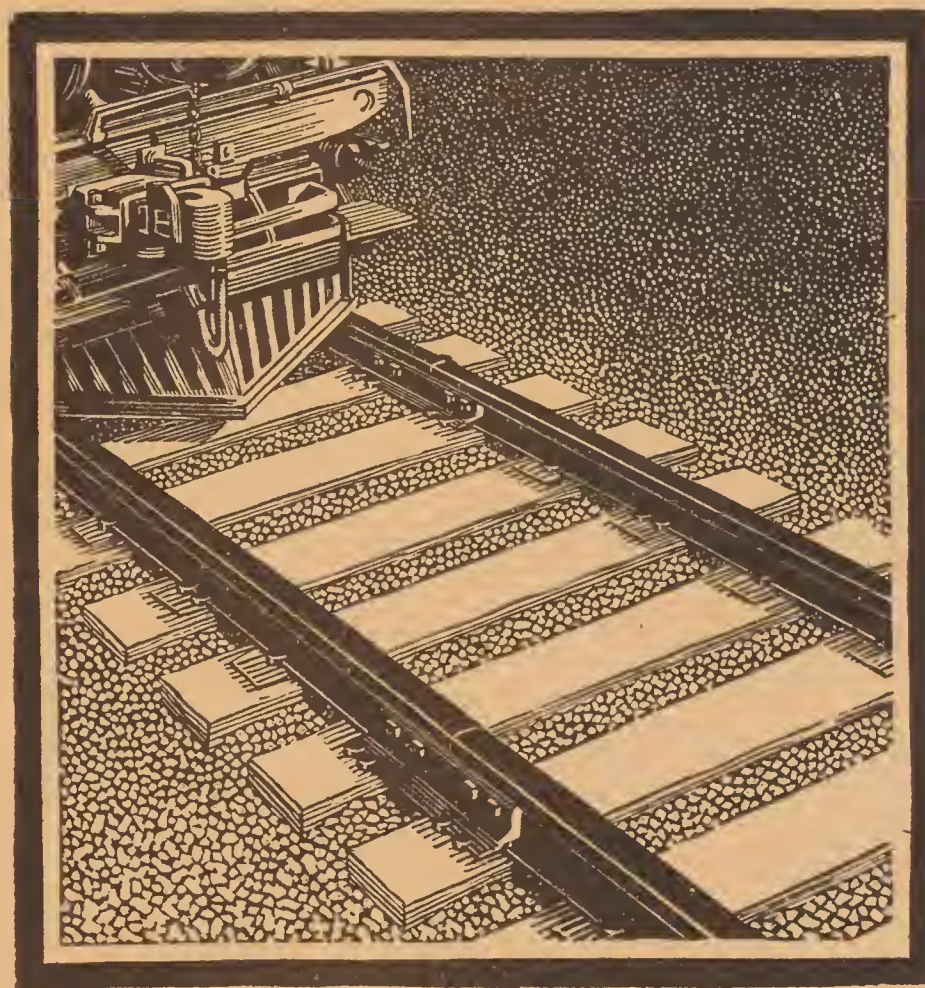
In this plant, the fertilizers are mixed twice; first when the mixture is made and stored in the big piles, and second just before it is finally bagged to be shipped out to the consumers. Weighing and mixing machines make it possible to get automatically exactly the right amounts of each ingredient into the final mixture.

Standing on a dizzy platform on the roof of the plant, I looked across great open bins at the largest supply of fertilizer I had ever seen together, and I asked the superintendent how much of it he had on hand. He said about thirty thousand tons, and then I had something of a vision of what all the fertilizers from this and other manufacturing would mean in better crops for American farmers.

One of the good things about the fertilizer business is the fact that as never before the farmer is getting away from haphazard methods of buying and applying fertilizers, and is feeding them to his crop on the same intelligent basis that the scientific dairyman is feeding his cows. In no two ways can a farmer waste money more quickly than by unscientific use of either fertilizers or feeds. It is a hopeful sign for agriculture that farmers are giving much more study and attention to these vital farm practices.

I am always interested in visiting

Resiliency . . .



GENERAL
MOTORS

The Chief Reason why Both Railroads and Fisher Body Can Find No Substitutes for Wood

RAILROADS use wood ties instead of steel ties, to obtain *resiliency*. This is the same reason why Fisher uses wood in building Fisher Bodies. Note, too, that a railroad track is of steel and wood construction—the same kind of construction used in Fisher Bodies . . . Both wood and steel have their own particular merits—but Fisher, by using *both* wood and steel, obtains the full

advantages of both materials . . . It costs Fisher more to use wood and steel construction—but the body which results is worth more to the automobile owner. It is worth more largely because the wood deadens rumble and vibration and because, through the use of wood, greater durability is obtained . . . That is why all Fisher Bodies, whether made for Chevrolet or Cadillac, employ wood and steel—the only structural principle compatible with sound body quality.

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Body by FISHER

any manufacturing plant or any other large organization where people are employed to note the conditions under which the men work. No matter how good these conditions are, I always conclude that any farmer can be thankful that he has the privilege of working most of the year out in the fresh air and sunshine. No matter how hard the employer tries, and conditions are infinitely better than they used to be, it is still true that working conditions in many factories are not as good as those that Nature has provided for the farmer.

The superintendent told me that the fertilizer plant is the coldest place in the world that he knows of in winter and the hottest place in summer. I do not think this particular superintendent has ever spent a night in Aunt Samantha's spare bedroom down in Maine in the winter time, for that certainly is the coldest place in the world! But maybe the fertilizer plant comes next.

It is necessary to keep it largely open and the only means of heating it were metal cans opened at the top where a little charcoal was burning in the bottom. If a man got too chilly he could stand over this can for a few moments and warm up a bit. This smoking charcoal together with the

dust and fumes from the fertilizer made the plant a rather murky place.

But contrary to general opinion, what little odor and smell there is about the fertilizer plant is pleasant rather than disagreeable. As stated above, animal products form a comparatively small part of the total amount of ingredients. Most of the ingredients are chemicals and where there is any odor at all it is clean and pleasant. I was informed that, strange as it may seem, there was little or no sickness among the employees of the plant and that even breathing the dust did not seem to be injurious. There was a bad epidemic of influenza in the section around this plant recently, but there was little of it among the workmen. The workmen believe, and I think it very possible, that the good health of the workers in the fertilizer plant is due to the chemically charged atmosphere in which they work. Sometime the doctors are going to know more about how to prevent and cure colds and I believe that the cures when found will be based on gases from some kind of chemicals.

Another interesting fact that impresses me in all of these big manufacturing plants is the large amount of work that is done by machinery. In great manufacturing plants, even more than

on the farm, men are being rapidly replaced by machines. What this will mean in our social and economic life twenty-five to fifty years from now it is hard to say, but we have been able to adjust our civilization to these rapid changes caused by machinery in the past so I think we will be able to continue to make the necessary adjustments in the future.

New Book on Horseshoe Pitching

THE National Horseshoe Pitchers' Association of America, with headquarters at London, Ohio, have just published a little book on horseshoe pitching which is the best and about the only book of its kind on this interesting, old-time game. The book gives all of the rules for playing the game officially, records of games that have been played, descriptions of contests in nearly every state in the Union, by-laws for organizing a horseshoe pitching club and in fact, full and complete information which every barnyard golf fan wants to know. The price of the book is 40c.

BABY

CHICKS

ATHENEON CHICKS

EXHIBITION QUALITY—BRED TO LAY



Atheneon Blue-Blood Chicks Best Investment In Poultry Field Today

Our matings from the world's finest egg laying strains. Pedigreed males from 300 egg dams. Every chick an actual Blue Blood. GENUINE TOM BARRON PEDIGREED MALES direct from the famous Tom Barron Farms of England head our Special Matings. Large 2-year-old dams of proven high egg production. Late moulters. Heavy layers of winter eggs.

MODERATE PRICES—COMPLETE SATISFACTION

You take no chances in buying Atheneon Bred-To-Lay Chicks. They grow faster, lay earlier and produce an easier profit than ordinary chicks due to careful and scientific breeding. Consider these high quality strains in our matings: Regal Dorcas W. Wyandottes, 200 egg pedigree line direct; Holterman's Aristocrat; Park's Bred-To-Lay Barred Rock, egg pedigree line direct; TANCRED WHITE LEGHORNS and OWEN'S S.C. REDS. Similar Atheneon quality in 14 Popular Money Making Varieties.

Our Grade A Chicks are from pure bred, egg bred stock, selected and culled by experts for vigor, size, type, health, color, head points and standard qualifications. Every male sired by valuable males of special breeding. Long experience in breeding and incubation makes it possible to price my chicks amazingly low for such quality.

You can order direct from this Ad—my liberal guarantee of 100% live delivery protects you against loss. References: Athens National Bank, Int. Baby Chick Ass'n.

PRICES ON GRADE 'A' CHICKS

	100	500	1000
S.C. Wh., Bf., Brn. Leghorns—Anconas	\$13.00	\$62.00	\$120.00
Barred & White Rocks—S.C. and R.C. Reds	15.00	72.00	140.00
White Wyandottes—Buff Rocks—Campines	16.00	78.00	150.00
Bf. Orpingtons—Wh. Minorcas—Sil. Wyandottes	17.00	82.00	160.00
Selected Heavy Breeds, Odd Lots	12.00	60.00	110.00

FOR GREATER PROFITS BUY HATCHERY CHICKS FROM

ATHENS CHICK HATCHERY

ATHENS

Box 96

OHIO

(Continued from Page 16)

5. Continue this system of mash and grain feeding as long as there is any indication of the disease.

6. Feed greens as usual.

7. Provide sufficient watering vessels so that the chicks can drink freely. (Keep the drinking vessels at least five feet from the mash hoppers.)

8. Do not neglect sanitation.

When coccidiosis appears:

1. Thoroughly clean the brooder houses or move the chicks to other brooders that have been cleaned and disinfected. Cover the floor with litter. Clean the houses and put in fresh litter daily.

2. Divide the chicks into as many flocks as the number of brooders available will permit.

3. Be sure that the brooder houses are kept warm enough and are well ventilated.

4. Separate the visibly sick chicks from those apparently healthy as soon as the disease appears. Kill the worst cases. Burn the dead.

5. Clean and plough or spade the yard.

Supplying Moisture to the Incubator

No satisfactory rules regarding moisture have been as yet evolved which will cover all conditions. Good hatches have been obtained both with and without using moisture, under apparently similar conditions. Too much moisture may prevent normal evaporation necessary to allow space for the chicks to turn in the egg and break the shell. Too little moisture may cause the chick to become dried and stick to the shell. The proper amount of moisture depends largely upon the condition of the room where the machine is run and upon the amount of ventilation. Incubators with rapid ventilation require more moisture than those where the movement of air is sluggish.

There are two means available of determining the moisture condition.

1. The rate of evaporation as indicated by the rise of the air cell, which should increase gradually in size.

2. The loss of weight due to evaporation of the moisture in the egg is a rather accurate guide regarding moisture conditions. Normally, eggs should lose weight during the hatch as follows:

During the first 6 days—3.5 to 4% loss.

During the second 6 days—4 to 4.5% loss.

During the third 6 days—4.5 to 5% loss.

Total—12 to 13.5% loss.—Lanowe Research Bulletin.

Should Eggs Be Washed Before Marketing?

THE following comment comes from Dr. A. E. Albrecht, Director of the New York office of the New York State Department of Agriculture and Markets:

"I have just noticed an article entitled 'Cleaning Dirty Eggs' on page 16 of the January 26th issue. I must take exception to the statement 'it is equally true that a clean egg sells better than a dirty egg, even though it is necessary to wash it to get it clean.'"

We most strongly urge farmers not to wash their eggs. Washed eggs deteriorate rapidly in quality and dealers always pay less for washed eggs than for clean eggs. The use of fine steel wool is perhaps the least objectionable method of cleaning eggs but I agree with the last paragraph that 'prevention is always better than treatment.'"

We thoroughly agree with the statement that prevention is better than treatment and are glad to give Dr. Albrecht's comments. However, there are

two situations to consider: first, the producer who ships to New York City, and second, the producers who sell to a local market. We still have a feeling that the upstate producer who sells locally gets better returns by washing his eggs when they need it. We will be glad to have our subscribers write us, giving their experiences along this line.

More About Picking Ducks

READ your item in the February 2nd issue about picking ducks. After picking as described in this article, paint the duck with melted paraffin and then scrape all off. This will leave them nice and clean.—Mrs. J. G. E.

In last week's article on battery brooders, mechanical factors made it impossible to give credit to the Edington Machine Works of Vineland, N. J., for the courtesy of the illustrative material.

PINE TREE

Your Safest Investment

Order your Chicks from the Oldest Established Hatchery. Pine Tree Chicks are the result of 37 years of select mating and breeding for high egg production.

Prompt March Shipments at These Prices

	25	50	100	500
S.C. White Leghorns	\$4.25	\$8.00	\$15	\$72.50
Barred Plymouth Rocks	4.75	8.75	16	77.50
Rhode Island Reds	4.75	8.75	16	77.50
Wh. Wyandottes & Wh. Rks.	5.50	10.50	20	97.50
Br. Leghorns & Anconas	4.75	8.75	16	77.50
Jersey Black Giants	7.75	14.75	28	137.50
Mixed Chicks	4.00	7.00	13	62.50

SPECIAL MATINGS—40 per chick higher.

Try some of these.

Postage Prepaid. Safe arrival guaranteed. Send check, money order or registered letter.

S. C. White Leghorn Pullets, 10 Weeks old. May delivery, \$1.00 each, express collect.

FREE Folder mailed tells the story of the Oldest Hatchery.

Write for your copy.

PINE TREE HATCHERY
Box 55, Stockton, New Jersey
Jos. D. Wilson, Founder and Owner Since 1892

BABY CHICKS

White Leghorn Baby Chicks a Specialty	Per 50	100	500	1000
S. C. W. Leghorns	\$6.50	\$12.00	\$57.00	\$110.00
Barred Rocks	7.50	14.00	67.50	130.00
R. I. Reds	7.50	14.00	67.50	130.00
Heavy Mixed	6.50	12.00	57.50	110.00
Light Mixed	5.00	9.00	42.00	80.00
Our White Leghorn Cockerels: Sire—from hen that laid 312 eggs per year. Hens—254-290 eggs. Actual 365 day trap nest record. All chicks Postpaid to your door. 100% live delivery guaranteed. Order direct or write for free circular.				
PENN HATCHERY , Dalmatia, Penna. Formerly Sunshine Hatchery				

Wyckoff Tancred CHIX White Leghorns

Book your order now for March and April Chicks.

\$12.00 per 100 \$57.50, 500 \$110, 1000

100% prepaid safe delivery guaranteed.

J. N. NACE POULTRY FARM, Box No. 50, Richfield, Pa.

HIGH GRADE CHICKS

Immediate and April delivery

	100	500	1000
White & Brown Leghorns	\$13	\$62.50	\$120
Bd. Rocks, R. I. Reds, Anconas	15	72.50	140
Wh. Rocks, Wh. Wyand., Bl. Minorcas	16	77.50	150
Assorted Light 10c, Heavy 12c; Pekin Ducklings 32c each, \$30 per 100. All chicks for May delivery 1c less. Also special mating blood tested chicks and two and six weeks old chicks. 100% Live delivery guaranteed. Order direct from adv. or write for circular. 10% books order, balance cash or C.O.D.			
TAYLOR'S HATCHERY , BOX 12, LIBERTY, N. Y.			

100% Live Arrival

	100	500	1000
Ferris Strain White Leghorns	\$12	\$57.50	\$110
Everlay Brown Leghorns	12	57.50	110
Basom's Barred Rocks	14	67.50	130
Owens' R. I. Reds	14	67.50	130
Black Minorcas	14	67.50	130
Mixed Chicks	9	42.50	80

JUNIATA POULTRY FARM
Box A Richfield, Pa.

CHICKS

Will ship C. O. D.	25	50	100
S. C. Reds	\$4.00	\$7.50	\$14.00
Barred Rocks	4.00	7.50	14.00
White Leghorns	3.50	6.50	12.00
Heavy Mixed	3.50	6.50	12.00
Light Mixed	2.75	5.00	9.00

500 lots 1/2c less, 1000 lots 1c less.

Free range. 100% Delivery. Circular.

W. A. LAUVER, McAlisterville, Pa.

HUBER'S RELIABLE CHICKS

MAKE EXTRA POULTRY PROFITS With HUBER'S

When we say RELIABLE—we mean RELIABLE in every way. Breeding stock of highest quality of 19 years of careful development. Special attention paid to health of flocks and records kept.

CATALOG FREE—CHICKS SENT C. O. D. IF YOU WISH
Write for details—get our illustrated catalog which tells all the story. Our prices reasonable. A book on Raising Chicks worth many dollars given free with each order of \$10.00 or more. Big discount for early orders.

HUBER'S RELIABLE HATCHERY, No. High St., Fostoria, Ohio

WOLF SELECTED CHICKS

BABY CHICKS C. O. D. Send only \$1

Don't miss this chance to get a start with Wolf's extra quality pure-bred high producing stock. Every breeder produced on free range and health of chicks is safeguarded. **Get Our Catalog and Price List**

Tells about prizes won by our birds. Read about Mary Hencel who made over \$1000 profit in one year with birds of our breeding. All leading breeds—prices very attractive. Write today. Chicks shipped C.O.D. Toe picking stopped instantly with Wolf's "No-Pick." Order box today. \$1.00 postpaid. Satisfaction guaranteed or money refunded.

WOLF HATCHING & BREEDING COMPANY, BOX 1, GIBSONBURG, OHIO

FOR YEARS WE HAVE HATCHED AND SOLD SATISFACTORY CHICKS

POSTPAID PRICES—AMERICA'S FAMOUS PRIZE WINNING STRAINS—

	25	50	100	500	1000
S.C. Wh., Br. Bf., Blk. Leghorns; Sheppard's Anconas	\$4.00	\$7.00	\$13.00	\$60.00	\$115.00
Bar., Wh. & Bf. Rocks; Bf. Orp.; Reds; Blk. Minorcas	4.50	8.00	15.00	70.00	135.00
Barron Wh. Leghorns; Wh. Wyandottes; Bf. Minorcas	4.75	8.50	16.00	75.00	145.00
Ex. Qual. Wh. Wyand.; Reds; Rocks; Wyand. W. Leg.; Wh. Min.	5.00	9.50	18.00	85.00	160.00
Heavy Mixed 50, \$6; 100 \$11.50; 500 \$55; 1000 \$105. Light Mixed 50 \$5; 100 \$9; 500 \$42; 1000 \$85. J. Blk. Giants 100 \$20. Wh. Pekin Ducklings 28c each. Not Postpaid to Canada.					
We have bred the Highest Quality for 21 years. Matings culled and selected by Experts for Heavy Winter Laying. Careful, personal service on all orders. We ship C.O.D. Bank References.					
THE NEW WASHINGTON HATCHERY CO. Box R, NEW WASHINGTON, OHIO					

BUY EASTERN QUALITY-PLUS BABY CHICKS

BIG HATCHES MARCH 19-26; APRIL 2-9-16-23-30. WE SHIP C.O.D.

	Per 50	100	500	1000
Large Barron English S. C. White Leghorns	\$7.00	\$13.00	\$63.00	\$125.00
Silver Laced Wyandottes, Barred Rocks, S. C. Reds	8.00	15.00	72.00	140.00
Mammoth Light Brahmas	9.00	17.00		

Sent parcel post prepaid, 100% live delivery guaranteed. 10% Books Order. Catalog free.

SHERIDAN POULTRY FARMS, Box 21, Sheridan, Pa.

BABY CHICKS

high class bred-to-lay stock. White, Brown, Buff Leghorns, Anconas \$14.00 per 100; Barred, White Rocks, Minorcas, Reds \$16.00 per 100; White Wyandottes, Buff Orpingtons \$17.00 per 100; Giants \$20.00 per 100; Heavy Broilers \$12.00 per 100; Light Broilers \$10.00 per 100; Pekin Ducklings \$30.00 per 100. Add 25c on orders for less than 100. Safe delivery guaranteed by parcel post.

Nunda Poultry Farm, Desk H, Nunda, N. Y.
Member of the International Baby Chick Ass'n. and the N. Y. State Co-Operative Chick Producers Ass'n.

BABY CHICKS ORDER DIRECT from this ad. and save time.

	25	50	100	500	1000
Wh. & Brown Leghorns	\$3.25	\$6.25	\$12.00	\$58.75	\$115
Ancona & Black Leghorns	3.25	6.25	12.00	58.75	115
White & Barred Rocks	3.75	7.25	14.00	68.75	135
Rhode Island Reds	3.75	7.25	14.00	68.75	135
Heavy Mixed Broilers	3.25	6.25	12.00	58.75	115
Light Mixed Broilers	2.25	4.25	8.00	38.75	75
Full count and quality guaranteed. Catalogue free.					
For Greater Profit ULSH POULTRY FARM & HATCHERY Hatchery Chicks. Port Trevorton, Penna.					

SPECIAL FALL prices for breeding Turkeys, Geese, Ducks, and Guinea. Write your wants and for mailing list. **PIONEER STOCK FARM, TELFORD, PA.**

QUALITY BABY CHICKS

Five extra given free with every box of one hundred ordered. April hatched chicks. Leghorns, White, Brown, Buff, Black—\$14.00 per 100; Barred Rocks, Reds, Minorcas, Anconas, \$16.00 per 100; White Rocks, Wyandottes, Buff Orpingtons, \$18.00 per 100. March, \$2 more; May, \$2 less; June \$4 less. Custom hatching. Eggs for hatching. Odds and Ends, Left Overs, Mixed broiler chicks, Light, 10c; Light and Heavy, 12c; All Heavy, 14c; Better order now. Will send C.O.D. Thousands hatching daily all year around. Active, husky, chicks hatched from healthy free range breeders that will live, grow and lay. Prompt shipments. Postage prepaid. Live delivery. Send for folder. **SCHOENBORN'S HATCHERY**, 335 Main St., Hackensack, N. J. Phone 1603 or 1604.

Justa Poultry Farm

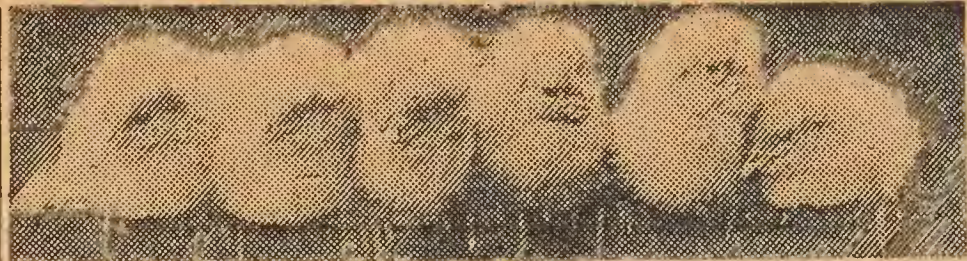
Southampton, N. Y.

White Leghorn Eggs—Chix—Pullets—18th year—Large Type—Prolific—Trap Nested—Blood Tested. "The Early chick does the Trick." "Our Stock will put the FIT into PROFIT for you." "We treat you [] the year O."

Write for interesting circular.

Hampton's Black Leghorn Day Old Chicks. The kind that lay. Circular free. A. E. HAMPTON, Box A, Pittstown, N. J.

BABY



CHICKS

5 Lb. Leghorns

The old reliable Heavyweight stock. Produced High Up on Pennsylvania's healthy mountain top. Get your chicks from certified record strains above 300 eggs. R.O.P. Hollywood, Tancred, Barron Matings. Hatch weekly pure white eggs up to 24 ounces per dozen. Beautiful Color Plate Leghorn Catalogue Free.

FARM SERVICE
ROUTE A10 TYRONE, PENNA.

HILLPOT Quality Chicks

Leghorns-Rocks-Reds-Wyandottes



Have This Important Book Before You When You Order Chicks This Year

This beautiful free book should be in the hands of every man and woman interested in making money with poultry which is one of the most fascinating means of increasing your income or of achieving financial independence.

The book, which is finely illustrated in four colors, describes my breeds fully; tells of my careful methods of mating and rearing; discusses the

most profitable sizes for flocks; contains house plans, construction details and concise and easily-followed Feeding and Rearing Charts. It is a book that you will find full of suggestions and inspirations and which you will want to keep handy for frequent reference. Some of my customers claim that they owe to it their first steps toward the comfort and peace of mind that come with an assured income.

W. F. HILLPOT, DEPT. 129, FRENCHTOWN, NEW JERSEY

FINGER LAKE REGION BABY CHICKS

with an official record. Ask for our Baby Chick Book describing our Pedigreed Cornell Chicks from stock that has laid from 200 to 312 eggs in their pullet year and mated to breeders that have averaged over 200 eggs in their pullet year. Also describes our 144,000 egg hatchery with 22 years' experience in hatching Baby Chicks, Leghorns, Reds, Rocks, Wyandottes, Minorcas, and Giants. The home of better Chicks at lower cost.

THE DEROY TAYLOR CO.,
NEWARK, NEW YORK

CHERRY HILL CHICKS

S.C.W. Leghorns—Wyckoff Strain.....	\$12.00
S.C. Everlay Brown Leghorns.....	12.00
Barred Rocks—Wm. Nace's select.....	14.00
S.C. Rhode Island Reds.....	15.00
Mixed or Broiler Chicks.....	9.00

1/2c less in 500 lots. 1c less in 1,000 lots.
25 chicks add 2c, 50 chicks add 1c. Full count. 100% live arrival guaranteed. Parcel Post prepaid. Bank reference. Order direct from this ad or write for free circular.
CHERRY HILL POULTRY FARM,
WM. NACE, Prop. McALISTERVILLE, PA.

EIGENRAUCH FARMS

RED BANK, NEW JERSEY

18TH YEAR

breeding White Leghorns for size, vigor and heavy production of large White EGGS. 8,000 LAYERS are housed on our farm.

Our Chick Guarantee

100% satisfactory arrival on the exact date we promise shipment. Every chick sold by us is hatched from eggs laid by breeders on our own farm.

Write for Free Folder and Prices on Pullets and Chicks
EIGENRAUCH FARMS Dept. G, Red Bank, N. J.

Hall's Chicks

Leghorns-Reds-Rocks-Wyandottes

"WELL BRED FROM WELL BREEDERS"

You can't fool the neighbors, and most of our output is sold to our neighbors. If you want really "better chicks" with some real breeding behind them, to make MORE MONEY for you, take advantage of our years of breeding. New England Accredited Stock. All breeders. 100% White Diarrhea free. Official Contest records. Circular.

Hall Bros. Poplar Hill Farm, Box 59 Wallingford, Conn.

BABY CHICKS

25	50	100	500	1000
S.C.W. Leghorns.....	\$3.25	\$6.50	\$12	\$57.50
Bd.Rocks & S.C. Reds	3.75	7.25	14	67.50
Heavy Mixed.....	3.25	6.50	12	57.50
Light Mixed.....	2.50	4.75	9	42.50

A Special Discount on orders placed in advance Will ship C.O.D.

PINECREST POULTRY FARM & HATCHERY

Herbert Miller, Prop. Box 12 Richfield, Pa.



Lone Oak Poultry Farm

A breeding farm where nothing but our own production and rearing is sold.

Chicks of Known Ability

Breeders used this season were sired by males whose dams' production records ranged from 200-278 eggs. This same blood is being intensified still more in the present flock matings. Make sure of the production ability of your future flock by securing chicks from these choice matings.

Choice breeding cockerels, priced right.

LONE OAK POULTRY FARM, Box 661, BABYLON, N. Y.

CLEAR SPRING QUALITY CHICKS

	per 100	500	1000
S.C. White Leghorns.....	\$11.00	\$2.50	\$100.00
Barron and Wyckoff Leghorns.....	12.00	57.50	110.00
Barred Rocks and R.I. Reds.....	14.00	67.50	130.00
Light Mixed, \$9.00 per 100; Heavy Mixed, \$12.00 per 100, for March and April. 100% live delivery. Postpaid. New circular free giving full details of all breeds.			

CLEAR SPRING HATCHERY, McAlisterville, Pa. Box 49

BABY CHICKS

FROM A HEAVY LAYING STRAIN. Three years blood tested for white diarrhea and under State supervision. Barred Rocks. White Wyandottes. Reds. White Leghorns. Moderately priced. Write for Catalogue and Prices.

BYRON PEPPER & SONS
BOX 11, GEORGETOWN, DEL.



Fairport Quality Chicks

are bred to make money for you. Strong, healthy, vigorous from the world's best and heaviest laying strains such as—Tancred, Ferris, Owen Farms, Daniels, Thompson, Martin, Shepard, Fishel and others. Free range flocks, scientifically culled and supervised. Smith Hatched. 100% live delivery guaranteed. 16 breeds 9c and up. Postpaid. Members International Baby Chick Association. Send now for free poultry book and prices. Buy Hatchery Chicks for Greater Profits.

FAIRPORT HATCHERIES Box 44 Fairport, N. Y.



Schwegler's "THOR-O-BRED" BABY CHICKS

THEY LIVE because they are bred from healthy, free range breeders that have thrived and gained in vigor for generations. They LAY because they are from selected and tested high egg power stock. White, Brown and Buff Leghorns, Barred and White Rocks, R.I. Reds, Anconas, Black Minorcas, Buff Orpingtons, White Wyandottes. 12c and up. 100% live delivery guaranteed. Postpaid. Member International Chick Assn. Write today for FREE Chick Book.

SCHWEGLER'S HATCHERY, 204 Northampton, BUFFALO, N. Y.

BABY CHICKS

100% live delivery guaranteed. Order from this ad, or write for free circular.
C. P. Leister, McAlisterville, Pa.

BABY CHICKS

25	50	100	25	50	100
Barred Rocks.....	4.00	7.50	14	3.50	6.50
S.C.R.I. Reds.....	4.00	7.50	14	3.50	6.50
500 Lots 1/2c less. 1000 Lots 1c less.					
Free Range Flocks. Live Delivery.					

B. N. LAUVER, McAlisterville, Pa.

HERE: NEARLY EVERYONE RAISES FULL BLOODED "AMERICAN" QUALITY CHICKS



	50	100	500	1000
American or Eng. SC. Wh. Leghorns.....	\$6.75	\$13.00	\$62.00	\$120.00
Hollywood Wh. or Brown or Buff Legs.....	7.25	14.00	67.00	130.00
Tancred Wh. Leg. Anconas—Barred Rocks.....	7.75	15.00	72.00	140.00
RC or SC Reds, Wh. Rocks, Parks Rocks.....	8.25	16.00	77.00	150.00
Wh. Wyandottes, Buff Orp., Blk. Minorcas.....	9.25	18.00	87.00	170.00
Brahmas, Col. Rocks, Blue Andalusians.....	11.25	22.00	105.00	200.00
Light Mixed \$9.00 a hundred. Mixed any breeds our selection \$10.00. Heavy Mixed \$12.00 a hundred.				

Get our NEW CATALOGUE—It proves to you the SUCCESS our Customers have with our chicks—Breeders culled and Bred for High EGG PRODUCTION in Winter when eggs are demanding large premiums. Reference, Curwensville National Bank—100% Live Arrival—Dependable Service. Order Early.

AMERICAN CHICKERIES, BOX 214, GRAMPIAN, PA.

BABY CHICKS

25	50	100	500	1000
Barred Rocks.....	\$4.00	\$7.50	\$14	\$67.50
S.C.W. Leghorns.....	3.50	6.50	12	57.50
Heavy Mixed.....			10	52.50
Light Mixed.....			9	47.50

These chicks are from free range and heavy egg producing flock. 100% live delivery guaranteed to your door. Write for Special Mating prices.

FRANK NACE, Cocolamus, Pa., Box No. 120

WYCKOFF AND TANCRED STRAIN

100% Arrival Prepaid to your office.
100 500 1000
White Leghorns.....\$12.00 \$57.50 \$110
THE RICHFIELD HATCHERY, Box E, RICHFIELD, PA.

New York State Certification Pays

The Key to Success and Greater Profits with Production Bred Poultry Today is Through the Purchase of High Grade Stock, Eggs or Chicks from Members of the

New York State Co-operative Official Poultry Breeders, Inc.
Formerly New York Co-operative Poultry Certification Association, Inc.
The Big 1929 Catalogue is off the press, and will be mailed Free to All Requests. Write.

M. M. Griffiths, Sec'y. Box Y New Hartford, N. Y.

National "Superbred" Chicks

500,000 SUPER-QUALITY CHICKS FOR 1929

Insure next winter's poultry profits by ordering NATIONAL "SUPERBRED" CHICKS NOW

We breed and hatch 13 of the leading Breeds. Send for our FREE illustrated catalog with prices on our utility and special mated chicks. All chicks sent prepaid. We guarantee 100% delivery of good lively chicks. Member of International Baby Chick Ass'n. You will save money by writing us now. National Chick Farms, Box 408, Mifflintown, Penna.



QUALITY CHICKS

S. C. White Leghorns per 100—\$11. S. C. Barred Rocks per 100—\$11. Light mix \$9 per 100. Heavy \$11. Special prices on larger lots. 100% live delivery, postpaid. New circular free.
EDGAR C. LEISTER, McAlisterville, Pa. Box B

To benefit by our guarantee of ads, say

"I saw your ad in American Agriculturist"

DUCKLINGS

\$33; EGGS \$14-100
"Duck News" Free.
ROY PARDEE,
Islip, L. I., N. Y.

We do the "Proving" for You!

WHEN you purchase an item of hardware from one of our Farm Service Hardware Stores you are certain of one very important thing: that is, that the article has been carefully examined and compared with others of similar construction. We make these comparisons—prove the claims and merits of the products we sell—in order to protect you from poor merchandise and the waste of your money.

Stop to think what a tremendous advantage it is for you to be able to buy specially selected hardware right in your home town at prices that are always low. Consider, too, what you get for your money in the way of personal service and upkeep help besides this careful selection of goods. You can easily see that you buy here for less.

NOW Come to one of our "tag" stores with the plans for your new barn or your ideas for fixing up your old one and let us help you with the selection of barn equipment of all kinds. Our local experience in helping others will be valuable to you.

Look for this tag in their window



Your Farm Service HARDWARE STORES

Where prices are lower because you get personal help in the selection and maintenance of your purchases.



**Prevents Rust
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My Pet Labor Saver

Even Dishwashing May Be Made Pleasant

WHAT's my best small labor saver? My dish drainer of course. There isn't any question in my mind about the answer.

When I was a child I had to wash nearly all the dishes and I detested the job. Often I declared I would buy some kind of a machine to do that when I had a house of my own—or I

pan I use for washing, using a good powder, mild soap or chips. A mop may be used for washing or a cloth that is kept clean. Glasses are washed first, rinsed and turned to drain while I wash, rinse and wipe the silverware. (There is a small compartment in the center of drainer in which silverware might be placed for rinsing and draining but this part I prefer to wipe carefully.)

By the time the silver is finished the glasses are ready to put on a tray or into the cupboard. Next come the cups, saucers, plates, sauce and vegetable dishes that have been carefully drained or scraped in order to avoid having food particles in my dish water. These are so arranged in the drainer that they can really drain and when all have been washed I empty a kettle of scalding water over the whole and lift the drainer from the pan, of course avoiding the spilling of the water from dishes onto the floor or tables. All cooking utensils are cleansed and rinsed; the one towel and mop or washing cloth is soon cleansed and hung in the open air and sunlight to dry. By the time the other kitchen work is done the dishes are dry and ready to be put away.

I no longer hate this dishwashing business. In fact, with the proper aids, I enjoy it.—LENNIE HOLLON LAND, Kentucky.

Three-Piece Ensemble



ENSEMBLE PATTERN No. 2730 is a charming and practical suit for spring use. It can be varied by using different materials for the blouse and the coat may be used with other outfits. Featherweight tweed for coat and skirt with blouse of plain or printed silk crepe would make an ensemble which could fill almost any demand except for evening wear. The printed linens are well adapted for such a design for summer wear. The pattern cuts in sizes 16, 18 years, 36, 38, 40 and 42 inches bust. The 36-inch size requires 4½ yards of 40-inch plain with ¾ yard of 40-inch figured material. PRICE 13c.

TO ORDER: Write name, address, pattern numbers and sizes clearly and correctly and enclose with correct remittance in stamps or coin (although coin is sent at own risk). Add 12c for one of the new spring fashion catalogs and send to Pattern Department, American Agriculturist, 461-4th Avenue, New York City.

Clever One-Sided Effect



2748

would have a hired girl to do it for me. Alas, machines that wash dishes are expensive and cannot be run without power other than elbow grease and most of the hired girls do not know how to wash dishes properly and keep dish towels clean!

The only alternative was to get all the helps I could for the odious task.

I had watched for twenty years for the drainer I now have. It is a round one which fits inside a big dish-pan. Long ago I found the square or oblong ones listed but they are more suitable for a sink and water system—which I didn't have. And when I found the drainer I wanted it cost only fifty-nine cents and postage!

No longer do I look forward to the season of dishwashing as drudgery and a task to be dreaded.

Now I prepare a good suds in the

STYLE No. 2748 with its chic one-sided effect is both popular and becoming. The snug hip and dipped hem line give the pattern an air of distinction. Faille silk crepe, georgette, chiffon or the sheer artificial silks are well suited to this design. Pattern cuts in sizes 16, 18 years, 36, 38, 40, and 42 inches bust measure. The 36-inch size requires 3½ yards of 40-inch material with ¾ yard of 36-inch contrasting. PRICE 13c.

Aunt Janet's Counsel Corner

We Get Great Pleasure Watching Nature Again Come to Life

JUST about this time every year we wonder how our reader-family fares in all the nooks and crannies where the A. A. goes to them. The breaking up of winter seems a sort of painful, messy business at times and it takes a good philosopher not to let it get on his nerves.

Instead of its being a don't-do-this and stay-in-out-of-the-mud, sort of season, what a relief it is to have the right sort of clothes and just enjoy it.

How fine it is to get out for a bit of exercise in a March wind that sends the rich red blood racing and sweeps away every trace of depression. If we open our eyes and our understanding to

The period of heaviest migration of birds from the south to northern points is usually around April 10th. Just try to see how many different birds you can identify.

Then see how many wild flowers you already know. And how many constellations in the heavens do you know by name? If we know these lovely, simple things that surround and permeate our country living, even the earliest of the spring brings a world of interest instead of being a period of shut-in misery.—AUNT JANET.

For Finishing Wood Floors

Homemade Floor Stain No. 1.

1 oz. permanganate of potash 1 qt. warm water
The solution made by dissolving the permanganate of potash in the water is violet colored, but when it is applied to wood a chemical action results and the wood is stained brown. The stain gives better results on pine than on oak flooring.

Homemade Floor Stain No. 2.

1 1/4 ozs. pulverized gilsonite 1 qt. turpentine
This is a brown stain that can be used on either softwoods or hardwoods.

Homemade Floor Stain No. 3.

1/2 lb. raw sienna (ground in oil)
2 ozs. raw umber (ground in oil)
1 pt. boiled linseed oil
1/2 pt. ground japan drier
pt. turpentine

Putting these materials into a bottle and shaking vigorously is perhaps the best way of mixing this stain. It has been found to give excellent results on oak.

Shellac Varnish.

2 lbs. gum shellac
1/2 lb. castor oil
1 gal. alcohol, denatured

(According to U. S. Internal Revenue Formula No. 1)

Put these ingredients into a well stoppered bottle in a warm place, and shake the mixture frequently until the shellac is dissolved. The alcohol should contain not more than 5 per cent of water, and care should be taken not to drop any water into it as it is being mixed with the dry shellac. The castor oil aids in making the varnish flexible and less brittle when dry, but may be omitted; in that case, the quantity of gum shellac should be increased to 2 1/2 pounds. If too thick, this varnish may be thinned by the addition of more alcohol.

Homemade Floor Wax No. 1.

1 pt. turpentine
4 ozs. beeswax
3 ozs. aqua ammonia (strength 10%)
1 pt. water

Mix the beeswax and the turpentine and heat them by placing the vessel in hot water until the wax dissolves. Remove the mixture from the source of heat, add the ammonia and the water, and stir vigorously until the mass becomes creamy.

On varnished or shellacked floors this wax should be applied lightly;

ammonia dissolves varnish and shellac. Unfinished oak flooring polished with this wax will be darkened somewhat as a result of the chemical action of the ammonia.

Homemade Floor Wax No. 2.

1/4 lb. beeswax 1 lb. paraffin
1/4 pt. raw linseed oil 1 1/4 pts. turpentine

Melt the beeswax and the paraffin, add the linseed oil and turpentine, and stir the mixture vigorously. Unfinished wood will be darkened somewhat by this wax as a result of the absorption of the linseed oil.

Hints on Spring House Cleaning

MY spring cleaning storms are a thing of the past. I have learned what I think is a better system. It is doing thorough cleaning along through the year, so that there is no necessity for any distressing upheaval twice a year. If a home should be kept clean at all it should be kept so every day. I have found that this can be accomplished by careful management and systematic work.

I plan to do some extra cleaning every day. Perhaps I'll clean out the bookcases rearranging the books, or clean out the linen closets. Tomorrow I may clean the pantry or bathroom.

Whenever I clean my curtains I



Our new book just off the press contains:

1. 200 attractive styles.
2. Slenderizing models for stouts.
3. Lingerie and home wear.
4. Cute styles for children.
5. Beauty article by Percy Westmore, the man who prepares the stars of First National Pictures.
6. A style article by Johanna Mathieson, costume designer for Universal Pictures.
7. Embroidery, hooked rugs, etc.

Send today 12 cents for your copy. It may save you 15 dollars in preparing your Spring wardrobe.

Address Pattern Dept., American Agriculturist, 461-4th Ave., New York City.

clean the windows and hang the curtains as soon as they are laundered. They look so much prettier when put up without having to be folded.

Drapes and hangings are freed of dust frequently, as it fades and rots the delicate fabrics to be allowed to hang dirty. Occasionally I paint a table or chair that has grown shabby, substitute new cretonne for cushion covers that have become faded. Other furnishings are replenished from time to time as they are needed.

And when the fresh clean March winds begin to blow, I fill every nook and cranny of the house with its clean fragrance. I sun the beds and wash the blankets. Then I request each member of the family to go through his own personal belongings, and discard all worn out shoes and clothing.

My methods can be summed up as follows: do systematic cleaning, and keep smiling.—Mrs. L. H. F., Mo.



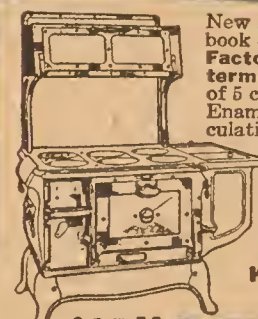
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Have a Debate in Your Grange

Send 2 cents to cover postage for an outline on the subject:

Should farmers adopt an 8 hour day?

American Agriculturist
461-4th Ave. New York City

Gay Frock for Little Sister



CHILD'S DRESS PATTERN No. 2743 is delightful when made up in the charming materials now available for children's dresses. Printed pique or linen, gay dimity or percale, cotton broadcloth or gingham, with a vestee and collar of plain material would be both practical and attractive. The pattern cuts in 2, 4 and 6 year sizes. The 4 year size requires 2 1/4 yards of 40 inch material with 3/8 yard of 27 inch contrasting. PRICE 13c.

Mother Nature's wonders, we can't harbor dark thoughts long at a time.

Spring time especially is full of interest when the birds begin to come back, the leaves unfurl and the wild flowers peep forth again. I wonder if you made note of the date when you saw the first bluebird this year, or robin. And when do you expect to see the dogwood in blossom or trillium? How long do the barn swallows stay when they come? These are things even a child can observe for himself, with a little help. One trip to the woods with a group of keen-eyed youngsters early some morning during the first or second week in April will furnish enough excitement to last for quite a while. A pair of field glasses to help pick out the little feathered friends will only add to the fun.

No. B 4483—25 cents



Here is a smart boutonniere which requires no knitting or crocheting. There are eight lovely color combinations, shades of rust and green; shades of blue; shades of tangerine, buff, green and brown; shades of mulberry, rose, tan and green; shades of rose, cardinal and pink; shades of orchid, lilac and peach; shades of green and ivory; shades of brown, buff, tan and ivory. Each is in a sealed envelope containing floss and all necessary materials together with instructions for making. Enclose 25 cents in stamps or coin (coin at your own risk), state color combination desired and send to Embroidery Department, AMERICAN AGRICULTURIST, 461-4th Avenue, New York City.

The Little Shepherd of Kingdom Come *By John Fox, Jr.*

At that very hour Richard Hunt was leading his regiment around the Ashland woods where the enemy lay; another regiment was taking its place between the camp and the town, and gray figures were slipping noiselessly on the provost-guard that watched the rebel prisoners who were waiting for death at sunrise. As the dawn broke, the dash came, and Harry Dean was sick at heart as he sharply rallied the startled guard to prevent the rescue of his own brother and straightway delirious with joy when he saw the gray mass sweeping on him and knew that he would fail. A few shots rang out; the far rattle of musketry rose between the camp and town; the thunder of the "Bull Pups" saluted the coming light, and Dan and Rebel Jerry had suddenly—instead of death—life, liberty, arms, a horse each, and the sudden pursuit of happiness in a wild dash toward the Yankee camp, while in a dew-drenched meadow two miles away, Chad Buford drew Dixie in to listen. The fight was on.

If the rebels won, Dan would be safe; if the Yankees—then there would still be need of him and the paper over his heart. He was too late to warn, but not, maybe, to fight—so he galloped on.

But the end came as he galloped. The amazed Fourth Ohio threw down its arms at once, and Richard Hunt and his men, as they sat on their horses outside the camp picking up stragglers, saw a lone scout coming at a gallop across the still, gray fields. His horse was black and his uniform was blue, but he came straight on, apparently not seeing the rebels behind the ragged hedge along the road. When within thirty yards, Richard Hunt rode through a roadside gate to meet him and saluted.

"You are my prisoner," he said, courteously.

The Yankee never stopped, but wheeled almost brushing the hedge as he turned.

"Prisoner—hell!" he said, clearly, and like a bird was skimming away while the men behind the hedge, paralyzed by his daring, fired not a shot. Only Dan Dean started through the gate in pursuit.

"I want him," he said, savagely.

"Who's that?" asked Morgan, who had ridden up.

"That's a Yankee," laughed Colonel Hunt.

"Why didn't you shoot him?" The Colonel laughed again.

"I don't know," he said, looking around at his men, who, too, were smiling.

"That's the fellow who gave us so much trouble in the Green River Country," said a soldier. "It's Chad Buford."

"Well, I'm glad we didn't shoot him," said Colonel Hunt, thinking of Margaret. That was not the way he liked to dispose of a rival.

"Dan will catch him," said an officer. "He wants him bad, and I don't wonder." Just then Chad lifted Dixie over a fence.

"Not much," said Morgan. "I'd rather you'd shot him than that horse."

Dan was gaining now, and Chad, in the middle of the field beyond the fence, turned his head and saw the lone rebel in pursuit. Deliberately he pulled weary Dixie in, faced about, and waited. He drew his pistol, raised it, saw that the rebel was Daniel Dean, and dropped it again to his side. Verily the fortune of that war was strange. Dan's horse refused the fence and the boy, in a rage, lifted his pistol and fired. Again Chad raised his own pistol and again he lowered it just as Dan fired again. This time Chad lurched in his saddle, but recovering himself, turned and galloped

slowly away, while Dan—his pistol hanging at his side—stared after him, and the wondering rebels behind the hedge stared hard at Dan.

All was over. The Fourth Ohio Cavalry was in rebel hands, and a few minutes later Dan rode with General Morgan and Colonel Hunt toward the Yankee camp. There had been many blunders in the fight. Regiments had fired into each other in the confusion and the "Bull Pups" had kept on pounding the Yankee camp even while the rebels were taking possession of it. On the way they met Renfrew, the Silent, in his brilliant Zouave jacket.

"Colonel," he said, indignantly—and it was the first time many had ever

give you a week or two at home before we get that exchange."

"Don't make it any longer than necessary, please," said Harry, gravely.

"We're coming back again, Mrs. Dean," said the Colonel, and then in a lower tone to Margaret: "I'm coming often," he added, and Margaret blushed in a way that would not have given very great joy to one Chadwick Buford.

Very leisurely the three rode out to the pike-gate, where they halted and surveyed the advancing column, which was still several hundred yards away, and then with a last wave of their caps, started in a slow gallop for town. The advance guard started suddenly in pursuit, and the Deans saw Dan turn in his saddle and heard his defiant yell.

The Story Thus Far

CHAD leaves "Lonesome" with his dog "Jack." His foster parents are both dead from the plague and plans have been laid to bind Chad out to a hard fisted neighbor. After the funeral, Chad collects a rifle, some powder, and shot and a haversack and with "Jack" by his side, starts out for unknown parts. He meets the sons of Joel Turner from over the mountain who take him home. Chad's cleverness at school gains the admiration of Caleb Hazel, the schoolmaster. They become close friends. Hazel tells Chad of the "Bluegrass Country" beyond the hills. Logging operations take Chad to a distant city where he gets lost and starts home on foot. He is picked up by Major Calvin Buford. It appears that Chad is also a Buford and is believed to be a kinsman of his new found friend, who takes him to his home in Lexington in the heart of the "Bluegrass." Chad accepts the Major's offer of a home and an education. Chad enters into the social life and becomes very popular at school. He falls in love with Margaret Dean, daughter of General Dean, neighbor of the Bufords. Meanwhile feeling grows bitter between North and South and war clouds gather. Chad joins the Union forces under Grant. His command takes him back to Lexington.

heard him open his lips—"some officer over there deliberately fired twice at me, though I was holding my arms over my head."

"It was dark," said Colonel Hunt, soothingly. "He didn't know you."

"Ah, Colonel, he might not have known me—but he must have known this jacket."

On the outskirts of one group of prisoners was a tall, slender young lieutenant with a streak of blood across one cheek. Dan pulled in his horse and the two met each other's eyes silently. Dan threw himself from his horse.

"Are you hurt, Harry?"

"It's nothing—but you've got me, Dan."

"Why, Harry!" said Morgan. "Is that you? You are paroled, my boy," he added, kindly. "Go home and stay until you are exchanged."

So, Harry, as a prisoner, did what he had not done before—he went home immediately. And home with him went Dan and Colonel Hunt, while they could, for the Yankees would soon be after them from the north, east, south and west. Behind them trotted Rebel Jerry. On the edge of town they saw a negro lashing a pair of horses along the turnpike toward them. Two white-faced women were seated in a carriage behind him, and in a moment Dan was in the arms of his mother and sister and both women were looking, through tears, their speechless gratitude to Richard Hunt.

The three Confederates did not stay long at the Deans'. Jerry Dillon was on the lookout, and even while the Deans were at dinner, Rufus ran in with the familiar cry that Yankees were coming. It was a regiment from an adjoining county, but Colonel Hunt finished his coffee, amid all the excitement, most leisurely.

"You'll pardon us for eating and running, won't you, Mrs. Dean?" It was the first time in her life that Mrs. Dean ever speeded a parting guest.

"Oh, do hurry, Colonel—please, please." Dan laughed.

"Good-by Harry," he said. "We'll

Margaret ran down and fixed her flag in its place on the fence—Harry watching her.

"Mother," he said, sadly, "you don't know what trouble you may be laying up for yourself."

Fate could hardly lay up more than what she already had, but the mother smiled.

"I can do nothing with Margaret" she said.

In town the Federal flags had been furred and the Stars and Bars thrown out to the wind. Morgan was preparing to march when Dan and Colonel Hunt galloped up to head-quarters.

"They're coming," said Hunt, quietly.

"Yes," said Morgan, "from every direction."

"Ah, John," called an old fellow, who, though a Unionist, believed in keeping peace with both sides, "when we don't expect you—then is the time you come. Going to stay long?"

"Not long," said Morgan, grimly. "In fact, I guess we'll be moving along now."

And he did—back to Dixie with his prisoners, tearing up railroads, burning bridges and trestles, and pursued by enough Yankees to have eaten him and his entire command if they could have caught him. As they passed into Dixie, "Lightning" captured a telegraph office and had a last little fling at his Yankee brethren.

"Head-quarters, Telegraph Dept. of Ky., Confederate States of America"—thus he headed his "General Order No. 1" to the various Union authorities throughout the State.

"Hereafter," he clicked, grinning, "an operator will destroy telegraphic instruments and all material in charge when informed that Morgan has crossed the border. Such instances of carelessness as lately have been exhibited in the Bluegrass will be severely dealt with."

"By order of

"LIGHTNING,

"Gen. Supt. C. S. Tel. Dept."

Just about that time Chad Buford, in a Yankee hospital, was coming back

from the land of ether dreams. An hour later, the surgeon who had taken Dan's bullet from his shoulder, handed him a piece of paper, black with faded blood and scarcely legible.

"I found that in your jacket," he said. "Is it important?"

Chad smiled.

"No," he said. "Not now."

XXV

AFTER DAW'S DILLON—GUERRILLA

ONCE more, and for the last time, Chadwick Buford jogged along the turnpike from the Ohio to the heart of the Bluegrass. He had filled his empty shoulder-straps with two bars. He had a bullet wound through one shoulder and there was a beautiful sabre cut across his right cheek. He looked the soldier every inch of him; he was, in truth, what he looked; and he was, moreover, a man. Naturally, his face was stern and resolute, if only from habit of authority, but he had known no passion during the war that might have seared its kindness; no other feeling toward his foes than admiration for their unquenchable courage and miserable regret that to such men he must be a foe.

Now, it was coming spring again—the spring of '64, and but one more year of the war to come.

The capture of the Fourth Ohio by Morgan that autumn of '62 had given Chad his long-looked-for chance. He turned Dixie's head toward the foothills to join Wolford, for with Wolford was the work that he loved—that leader being more like Morgan in his method and daring than any other Federal cavalryman in the field.

Behind him, in Kentucky, he left the State under martial sway once more, and, thereafter, the troubles of rebel sympathizers multiplied steadily, for never again was the State under rebel control. A heavy hand was laid on every rebel roof. Major Buford was sent to prison again. General Dean was in Virginia, fighting, and only the fact that there was no man in the Dean household on whom vengeance could fall, saved Margaret and Mrs. Dean from suffering, but even the time of women was to come.

On the last day of '62, Murfreesboro was fought and the second great effort of the Confederacy at the West was lost. Again Bragg withdrew. On New Year's Day, '63, Lincoln freed the slaves—and no rebel was more indignant than was Chadwick Buford. The Kentucky Unionists, in general, protested: the Confederates had broken the Constitution, they said; the Unionists were helping to maintain that contract and now the Federals had broken the Constitution, and their own high ground was swept from beneath their feet. They protested as bitterly as their foes, he it said, against the Federals breaking up political conventions with bayonets and against the ruin of innocent citizens for the crimes of guerrillas, for whose acts nobody was responsible, but all to no avail. The terrorism only grew the more.

When summer came, and while Grant was bisecting the Confederacy at Vicksburg, by opening the Mississippi, and Lee was fighting Gettysburg, Chad, with Wolford, chased Morgan when he gathered his clans for his last daring venture—to cross the Ohio and strike the enemy on its own hearth-stones—and thus give him a little taste of what the South had long known from border to border. Pursued by Federals, Morgan got across the river waving a farewell to his pursuing enemies on the other bank, and struck out. Within three days, one hundred thousand men were after him and his two thousand daredevils, cutting down trees behind

(Continued on Page 24)

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LIVE STOCK

(See Page 26)

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BUCHER SUPER-QUALITY CHICKS from inspected free range money-making stock. Reds, White Wyandottes, White Barred Rocks, Giants, Black Minorcas, Anconas, White and Brown Leghorns. Booklet Free. Low Prices. Pure Breeds. BUCHER BROS., HATCHERY, Dept. C, Bucyrus, Ohio.

EVERLAY BROWN LEGHORNS. Tormohlen Famous strain. Baby chicks, eggs for hatching. SUNNYSIDE FARM, Emporium, Pa.

NEAL'S QUALITY CHICKS: Rocks, Reds and Leghorns priced right, 100% live delivery guaranteed. Write for price list. WINGATE NEAL, Denton, Md.

POULTRY

Baby Chicks, Breeding Stock, Eggs

PUREBRED DAY OLD CHICKS—Sturdy, rugged. White Leghorns, Rocks, from blood tested 250-290 egg high producing ancestry. Pennsylvania State Supervision your guarantee. Ask for "More Profits." JUST A MERE FARM AND HATCHERY, Box A, Milan, Pa.

CHICKS C.O.D.—100 Rocks or Reds, \$14; Leghorns, \$12; heavy mixed, \$12; light, \$9. Delivery guaranteed. Feeding system, raising 95% to maturity, free. C. M. LAUVER, Box 26, McAlisterville, Pa.

CHICKS OF KNOWN quality bring greater returns. 16 breeds. Circular free. How to raise Better Chicks. PERRY POULTRY FARM, Perry, N. Y.

STATE TESTED and Accredited S.C.R.I. and white Leghorns. Chicks healthy. High producing Birds. W. W. HAM, Branford, Conn. Phone 141.

SINGLE COMB WHITE Leghorn chicks from two and three year hens only. 18c. Hatching eggs. 9c. RED BRIDGE POULTRY FARM, Centre Moriches, N. Y.

WOODSIDE POULTRY YARDS, chicks, Tom Barron S.C. White Leghorns Imported 250-298 egg strain Breeder of legghorns for 28 years. Catalogue. DAVID HAMMOND, Cortland, N. Y.

CHICKS—PULLETS From Barron's White Leghorns, Imported annually from Barron, England; Big females, long bodies, large eggs. Catalogue free. BISHOP'S POULTRY FARM, New Washington, Ohio.

BEST WHITE LEGHORN Chicks, Tancred strain. Satisfaction guaranteed. Circular free. FREE RANGE POULTRY FARM, Richfield, Pa.

GIANT LIGHT BRAHMAS. The ideal farm flock. Eggs 10c, \$9. hundred. E. P. ALLEN, Delhi, N. Y.

SOLD OUT of W. Leghorn chicks for April. Can book few more orders for May. R. B. PEARSALL, Groton, N. Y.

BABY CHICKS 25,000 weekly. White, Brown, Buff Leghorns and Anconas \$12, and Reds, Rocks, Wyandottes, Orpingtons \$14. Per 100. Also Pigeons, Hares, Mice, Parrots. J. A. BERGEY, Telford, Pa.

HEAVIEST LAYING BARRED Rock pen all eastern contests two consecutive years. Records to 2347. Circular. Chicks \$25 per hundred. Cockerels \$5. H. VAN WINKLE, Box A, Camden, N. Y.

POULTRY

Baby Chicks, Breeding Stock, Eggs

10 WHITE ROCK COCKERELS from heavy laying stock, beauties. H. C. BEARDSLEY, Montour Falls, N. Y.

CHICKS, LARGE TYPE, Leghorns, Rocks, Reds, Wyandottes, Turkeys, Geese, Ducks, Guineas, Stock, Eggs. Catalog. PIONEER FARMS, Telford, Penn.

CASH ON DELIVERY, Wyckoff Tancred strain. White Leghorn chicks. Our own production bred flock. 100 chicks \$10.50, 500, \$50. Write BROOKSIDE POULTRY FARM, McAlisterville, Pa.

BABY CHICKS HATCHING Eggs 8 and 10 weeks old Pullets single comb White Leghorns only. Write for price. ALTOONA FARM, R. Neal Marshall, Honesdale, Pa. R. 4.

BABY CHICKS: From heavy laying strains of Rocks and Reds \$12. White and Brown Leghorns \$10. Mixed \$9, prepaid. Member I. B. C. A. SUNNYSIDE HATCHERY, Liverpool, Pa.

POULTRY

Turkeys—Ducks—Geese

HORNINGS CHAMPION WINNINGS Bourbon Red's. Book your hatching eggs early. FLORA HORNING, Owego, N. Y.

TURKEYS—LARGE, PUREBRED, Mammoth Bronze Dark colored. Very beautifully marked. Best strain. Yearlings and young stock. MRS. ARTHUR INGER-SOLL, Lowville, N. Y.

BRONZE TURKEYS—PUREBRED. Eggs for sale from 60 females mated to 50 toms. Heaviest pullet 8 months 20, nine month toms 30 to 36. Fed cod liver oil, semi-solid, and green food. MULFORD De FOREST, Duaneburg, Schenectady Co., N. Y.

DUCKLINGS, MAMMOTH WHITE Pekins, \$30, per hundred. Eggs \$12. L. HAMBLIN, Wilson, N. Y.

TURKEYS—Large, purebred, Mammoth Bronze, vigorous, healthy birds, highest quality, splendid markings, satisfaction guaranteed. CLIFTON LEE, Lowville, N. Y.

LIVESTOCK ADVERTISING

After the issue of March 30th advertisements for livestock (cattle, swine, sheep, horses and goats) will not be accepted for the classified page.

All livestock advertising will be grouped together on one page under the heading "LIVESTOCK - BREEDERS". A special reduced rate of 50c per agate line, or \$7.00 per column inch, will be given this type of advertising.

In figuring the cost of your advertising seven words of type will average a line. Make some allowance of space for proper display.

This action is taken for the convenience of readers and also to make livestock advertising of greater value in the columns of AMERICAN AGRICULTURIST. This display advertising, while producing better results for advertisers will, in most instances, cost no more than classified.

MINIMUM SPACE—Four lines averaging 28 words costing \$2.00 for each insertion is the smallest order accepted.

COPY must be received eleven days prior to the issue in which the advertisement is to appear.

TERMS—Cash must accompany all orders for less than \$10.

REFERENCES either from your bank or from two reputable business men in your community are required from new advertisers. These references are required for the protection of both our readers and other advertisers.

For further information in regard to livestock advertising write—Advertising Department, AMERICAN AGRICULTURIST, 461 Fourth Ave., New York City.

POULTRY

Turkeys—Ducks—Geese

MAMMOTH BRONZE TURKEYS. Fine, healthy stock. JAMES P. HOWLAND, Walton, N. Y.

EXCEPTIONALLY FINE MAMMOTH Bronze Turkeys. Hardy, vigorous, free range stock with massive frames and finest markings. Eggs 10-\$7.50. Infertiles replaced. MAPLE DRIVE FARM, Dansville, N. Y.

RAINBOW CHICKS, DUCKLINGS, noted for type, production, livability. Let Rainbow chicks and ducklings prove their superiority. Satisfaction guaranteed. Write for our low prices and circular. Bank reference. RAINBOW HATCHERY, New Washington, Ohio.

GIANT MAMMOTH BRONZE turkeys, vigorous, healthy, fine markings, satisfaction. JOHN WILLIAMSON, Hammond, N. Y.

WHITE WYANDOTTE: MAMMOTH PEKIN Duck eggs. Pearl Guineas eggs. LAURA DECKER, Stamfordville, N. Y.

ONE BLACK TOM, four hens, no disease, all vaccinated. NORA ZELLWAGER, Point Peninsula, N. Y.

TURKEYS, FOUR BREEDS. Ducks, Geese, Guineas. Pet Stock, Eggs and Chicks. EDWIN SOUDER, Sellersville, Pa.

MAMMOTH WHITE PEKIN Duck eggs for hatching, ten cents apiece, delivered, satisfaction guaranteed. JES. KENNEL, Atglen, Pa.

FOR SALE THOROUGHbred Bourbon Red Toms \$10 each, also old Holstein Friesian Herd Books. MRS. JEROME HIBBARD, Evans Mills, N. Y.

TURKEYS—PUREBRED MAMMOTH Bronze, Bourbon Red, Narragansett and White Holland Hens, Toms, unrelated pairs and trios, also eggs. WALTER BROS., Powhatan Point, Ohio.

MAMMOTH BRONZE TURKEY eggs from healthy free farm range stock. 100 eggs \$45. 50, \$23.50. 12, \$6. Prepaid. Fertility and safe delivery guaranteed. Valuable instructions with order. HIGHLAND FARM, Sellersville, Pa.

MAMMOTH TOULOUSE GEESE Eggs. From large old breeders, 50-\$23.50. 12-\$6.00. Prepaid. Pekin Duck eggs, 100-\$11.00, 50-\$6.00, 12-\$2.00 prepaid. Ducklings \$30.00. Satisfaction guaranteed. HIGHLAND FARM, Sellersville, Pa.

FARM EQUIPMENT

ROOFING PAPER, 3-ply, \$1.35 per roll, 100 sq-ft. Prepaid. Asphalt shingles, roofing, paint. Send for price list. WINIKER BROS., Millis, Mass.

EXTENSION LADDERS, 20 to 32 ft. 25c per ft. 32 to 40 ft. 27c per ft. Freight prepaid. ARTHUR L. FERRIS, Box A, Interlaken, N. Y.

On account of sale of farm, we offer following tools in good working order: Bean triplex sprayer, fine shape; McCormick reaper and binder, very good. Eclipse 1-horse corn planter, walking & riding cultivators, 1-horse weeder, manure spreader, lime spreader, hand & horse rollers, Moline seeder & fertilizer drill, Syracuse sulky plow, cutaway and spring-tooth harrows, water cart and pump, one and two-horse mowers, tedder and rake, fanning mill, snow plow, set bob-sleds, small tools, etc. Worth a call to look them over. MEADOW FARM, Hartsdale, N. Y.

SEEDS—NURSERY STOCK

HIGH GRADE SEED Potatoes—Russets. Green Mountain, Gold Coin, Cobbler, Banner, Walter Raleighs and Carman No. 3. Prices right. Catalog free. THE KEYSTONE POTATO FARMS, Richfield, Pa.

Additional Classified Advertising

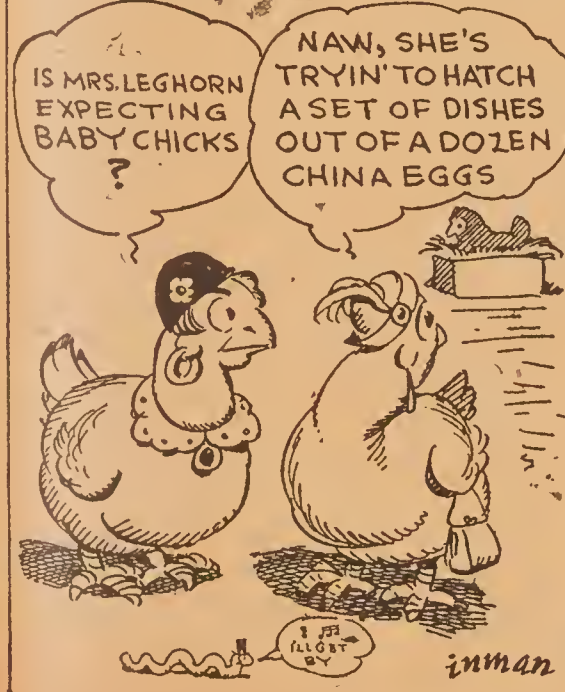
On Page 24

HANDY ANDY Says "Here's How"

To Raise Healthy Chicks

By Ray Inman

YOU ARE EXPECTING A BABY CHICKS



Your brooder house should be made to allow 40 sq. ft. to 100 baby chicks



LOCATE IT ON GROUND WHERE NO CHICKENS HAVE RUN FOR A YEAR



if it is not portable, build a pen in front of house with 1/4" wire mesh floor 2" from the ground



Livestock Breeders

CATTLE

CATTLE



It All Depends On You!

The prosperity of many thousand farm families depends upon the profitableness of their dairy cattle. The cost of feed and labor for maintenance is about the same whether the cows are good or poor individuals.

Jerseys are known for their ability to produce the highest quality milk at low feed cost. They are particularly efficient and profitable.

For valuable free booklets on Jerseys and Dairying, write

The American Jersey Cattle Club
324E West 23rd Street New York, N. Y.

HORSES

PERCHERON HORSES



EASY KEEPERS

It takes less feed to keep this kind of a big horse fat

If you want a stallion or a pair of mares write us. We will help you find them. Send for the 1929 Percheron Review. Free. Address PERCHERON SOCIETY OF AMERICA, Ellis McFarland, Secy., Union Stock Yards, Chicago

GOATS

EASTERN HERD, FINEST in America, California Purebred Nubians; Toggenburgs; soon fresh, for invalids, babies, fine Bucks, Kids, Pairs, Trios, herds, wholesale prices. GOLDSBOROUGH GOATERY, Mohnton, Pa.

SWINE

Pigs From Reliable Stock

Buy where quality is never sacrificed for quantity. We sell only high grade pigs, fast growers, that will prove a good investment—thrifty and rugged, having size and breeding. Will ship C.O.D.

Chester and Yorkshire—Berkshire & Chester
7 to 8 weeks old.....\$4.00
8 to 10 weeks old.....\$4.25
Satisfaction guaranteed, or money refunded. 10 days trial allowed. Crates supplied free. A. M. LUX, 206 Washington St., Woburn, Mass. Tel. Wob. 1415.

PIGS FOR SALE OLD RELIABLE STOCK

Heavy legged, square backed, Chester and Yorkshire crossed, Poland China and Chester crossed, Barrows, boars or sows—8 to 10 weeks old, \$4.00 each. Fancy Berkshires, also Chester Whites, 2 months old sows and unrelated Boars, \$5.00 each. 10 days trial or your money back. Shipped C.O.D. Crating free of charge. Yours for quality hogs.

ED. COLLINS, 35 Waltham Street, LEXINGTON, MASS.

BEST GRADE Chester, Berkshire and Poland China Pigs. 3 months old, \$12.00 each; 6-8 weeks old, \$7.00 each. (Express Paid). Bred Sows and Boars. C. E. BOSSERMAN, York Springs, Pa.

Additional Classified Advertising

WANTED TO BUY

WANTED—HAY, GRAIN, Potatoes, Apples, Cabbage, Carloads. Pay highest market prices. THE HAMILTON CO., New Castle, Pa.

WANTED TO BUY old bags. We pay excellent prices. Write for prices. OWASCO BAG CO., Rochester, N. Y.

WANTED SECOND HAND Garden Tractor, WM. VOIGHT, R. 3, Hammondon, N. J.

WOOL—HIDES—FURS

MUSKRAT FURS WANTED. Black—Large \$3.50. Medium \$2.50. Brown—Large \$2.50. Medium \$1.50. All furs wanted. EVERETTE SHERMAN, Whitman, Mass.

WOOL AND SHEEP Pelts Wanted. I specialize in Wool and Pelts. Hundreds of satisfied shippers. Write for prices. ALVAH A. CONOVER, Lebanon, N. J.

WOMEN'S WANTS

TWELVE ARTISTIC BIRTHDAY Cards, no two alike, fancy lined envelopes, postpaid \$1.00. SOUTH-WORTH'S, Milford, Conn.

TOBACCO

HOMESPUN TOBACCO: Chewing 5 lbs. \$1.50; Smoking 5 lbs. \$1.25. Fifty cigars \$1.75. Pay when received. Pine free, FARMERS UNION, Paducah, Ky.

LEAF TOBACCO—Good sweet chewing, 3 lbs., 90c; 5, \$1.25; 10, \$2.00. Smoking, 3 lbs., 60c; 5, 90c; 10, \$1.50. UNITED FARMERS, Mayfield, Kentucky.

CIGARS FROM FACTORY, trial 50 large Perfectos postpaid, \$1. SNELL CO., Red Lion, Pa.

6 COWS, 11-2 year old heifers, 6 bulls 3 to 18 months old. 4 calves 3 months old, 2 registered guernsey calves 3 months old TB Tested. SPOT FARM, TULLY, N. Y.

REGISTERED GUERNSEY HEIFER calves and Shetland ponies. STEPHEN KELLOGG, Burdette, N. Y.

FOR SALE—At all times Guernsey and Holstein cows and heifers in earload lots. FRED JENSEN, Waupaca, Wis.

ORCHARD GROVE MILKING Shortborn Herd founded 1887. Young stock at reasonable prices. Come or write. L. R. DATCHIKISS, West Springfield, Erie Co., Pa.

MAPLE LAWN MILKING Shorthorns for sale, red bull calf sired by a son of the many times grand champion Duke of Glendale, his eight nearest dams average better than 10,000 pounds milk. Herd accredited. W. W. CURTIS, Hilton, N. Y.

PUREBRED OR HIGH Grade Holstein Cattle. Heifers and Springers—all tuberculin tested. Springers on hand at all times. "Tell us what you want and we will have it." Carload or less than carload lots. STRUBLE & MARTIN, Milford, Pa.; Newton, N. J.

SWINE

FARMERS BUY FROM FARMERS

Let us suggest to you as breeders the best kind of a pig to start to raise is a good one. You save time and money. We sell all pigs with a trial of two weeks, and then if dissatisfied, return pigs and we will return your money.

7-8 wks. old, \$4.00 ea.; 8-10 wks. old, \$4.50 ea. Breeds—Chester and Yorkshire cross, and Berkshire and Chester cross. Crating free. These prices F.O.B. our depot. Will ship any number C.O.D. or send check or money order.

MISHAWUN STOCK FARM, MISHAWUN ROAD, WOBURN, MASS. P. S. No pigs sold at the farm; only by appointment.

GOOD HEALTHY FEEDING Pigs for sale. No farm has any better pigs. Chester & Yorkshire crossed 7 weeks old \$4. each. Berkshire & Chester crossed 7 weeks old \$4. 9 weeks old either sex crossed \$4.25 each, also some nice Chester Pigs 7 weeks old \$5. each. Sold subject to approval C. O. D. Keep the pigs 10 days, if not satisfied return them and your money will be refunded. MICHAEL LUX, Box 149, Woburn, Mass.

REGISTERED DUROC GILTS large type due to farrow April 1st. Bred to the Grand Champion King T. 220053. Also pigs. R. W. HAMILTON, Home, Pa.

AGENTS WANTED

AGENTS—Make \$25.—\$100 weekly, selling Comet Sprayers and Autowashers to farmers and Autoists. All brass. Throws continuous stream. Established 35 years. Particulars free. RUSLER CO., Johnstown, Ohio. Box C12.

WANTED TO WORK on a small farm, single middle aged man. MICHAEL KETCHAM, Oswego, N. Y.

AGENTS: SELL TROUSERS, Overalls, Dry Goods, Etc. Some advertised brands. Write FREEMAN E. HUNTER CO., Riverton, N. J.

MAKE \$50 to \$75 weekly this Spring taking orders for our quality Nursery Stock. Fruits from our trees have won first prize at the Syracuse State Fair for years. Free replacements. No investment. No experience necessary. Free outfit. Pay weekly. KNIGHT & BOSTWICK, Newark, New York State.

SITUATIONS WANTED

DO YOU NEED FARM HELP. We have Jewish young men, able-bodied, some with, but mostly without experience, who want farm work. If you need a good, steady man, write for an order blank. Ours is not a commercial agency. We make no charge. THE JEWISH AGRICULTURAL SOCIETY, Inc., Box A, 301 E. 14th Street, New York City.

LICENSED CHAUFFEUR DESIRES position, Honest, reliable, temperate man. Experienced truck and tractor operator. References. Write, FLOYD PULVER, Pine Plains, N. Y.

NOW IS THE TIME to give in your orders for good reliable Gardeners, Farmers, Milkmen, Laborers (all kinds of help) state wages and write to GERMAN EMPLOYMENT AGENCY 228 E. 74th. New York City. Free of charge to Employers.

The Little Shepherd of Kingdom Come

(Continued from Page 22)

him (in case he should return!), flanking him, getting in his front, but on he went, uncaught and spreading terror for a thousand miles, while behind him for six hundred miles country people

American Agriculturist, March 23, 1929 lined the dusty road, singing "Rally 'round the Flag, Boys," and handing out fried chicken and blackberry-pie to his pursuers. Men taken afterward with typhoid fever sang that song through their delirium and tasted fried chicken no more as long as they lived.

(To be Continued Next Week)

Additional Classified Advertising

SEEDS—NURSERY STOCK

100 MASTODON EVERBEARING \$1.85. 300, \$5. Illustrated Plant, Seed Catalogue free. CHAMPION ORIGINATOR, New Buffalo, Michigan.

C. O. D. FROST PROOF Cabbage plants. Leading varieties now ready. 500, 65c; 1000, \$1.00; 5000, \$4.50. FARMERS PLANT CO., Tifton, Ga.

CERTIFIED BERRY PLANTS. Columbian purple also Kansas, Cumberland, Plum Farmer, Black Caps. Prices 60c doz. \$3. hundred delivered. CHAS. WHEELER, Mannsville, N. Y.

SEND NO MONEY. C.O.D. Frost proof Cabbage and Onion plants. All Varieties now ready. 500, 65c; 1000, \$1.00; 5000, \$4.50. STANDARD PLANT CO., Tifton, Ga.

CABBAGE PLANTS, NOW Ready. My frost proof Cabbage plants will head three weeks earlier than home grown plants. Varieties: Jersey and Charleston Wakefield, Succession, Flat Dutch, Golden Acre and Copenhagen Market. Prices by parcel post postpaid: 500, \$1.25; 1000, \$2.25. Express: 1000, \$1.00; 5000, \$4.50; 10,000, \$7.50. Bermuda Onion plants same prices as Cabbage plants. Roots wrapped in moss and shipped promptly. Satisfaction Guaranteed. P. D. FULWOOD, Tifton, Ga.

STRAWBERRY, BLACK, PURPLE and Red Raspberry plants, let us mail you our circular, giving description and prices. Our plants are strictly fresh dug from new fields. F. G. MANGUS, Maple View, N. Y.

CERTIFIED SEED POTATOES, Smooth rural type. High yielding strain, grown by APPLETON BROS., Canandaigua, N. Y.

FREE SAMPLE CLARAGE SEED CORN—Clarage produced world's highest yields. Write Dunlap & Son, Williamsport, Ohio.

PAY THE POSTMAN. Send No Money. Frostproof Cabbage and Onion plants. Leading varieties, 500, 65c; 1000, \$1.00. ALBANY PLANT CO., Albany, Ga.

DAHLIAS—25, \$2.00; 75, \$5.00; not labeled, 20, \$2.00; 60, \$5.00; labeled. Perennial phlox, mixed, mammoth scarlet canna, 15, \$1.00; 50, \$2.00. MRS. HOWARD HOLSINGER, Denton, Md.

EARLY VEGETABLE PLANTS. Frostproof Cabbage: Wakefields, Copenhagen, Golden Acre, Flat Dutch, Bermuda Onions, Beets, Lettuce. Postpaid: 100, 40c; 500, \$1.25; 1000, \$2.25. Collect: 1000, \$1.00; 5000, \$4.50. Tomato Plants: Earliana, Bonny Best, Baltimore. Postpaid: 100, 50c; 500, \$1.50; 1000, \$2.50. Collect: 1000, \$1.75; 5000, \$7.50. Write for prices on Potato, Pepper, and Egg Plants. Carefully Packed, Varieties Labeled. Delivery Guaranteed. PIEDMONT PLANT CO., Albany, Ga.

FREE GLADIOLUS BOOK—36 pages, 45 illustrations. Describes 171 exquisite varieties, many new. Tells how to grow. It's free! The famous beautiful Rainbow Collection of thirty bulbs, all different, \$1. postpaid. HOWARD GILLET, Gladiolus Specialist, Box J, New Lebanon, N. Y.

SPECIAL LOW PRICES on pedigree Green Mountains, Russets and Cobblers, Catalogue. ROY HASTINGS, Malone, N. Y.

RAISE BEARDLESS BARLEY. New two rowed, stiff strawed, heavy yielder. Also Burbank Oats and Gold Nugget Corn. Descriptions and samples free. LONG-ACRE FARM, Route 2, Geneva, N. Y.

EARLY JUNE RED Raspberry sets for sale. The earliest, largest, heaviest bearing berry grown. Send for literature telling what the New York State Experiment Station says of the June. LESTER BENNETT, Victor, N. Y.

TIFTON'S RELIABLE PLANTS. Frostproof Cabbage, Bermuda Onion Plants. Wakefields, Dutch Ballhead, Copenhagen, Golden Acre, Postpaid, 500, \$1.50; 1,000, \$2.50. Express paid, 500, \$1.25; 1,000, \$2.15; 5,000, \$9.40. Early Tomato, Pepper, Cauliflower, Egg Plant later, write TIFTON PLANT CO., Tifton, Ga., Box 57.

COOK'S CERTIFIED POTATOES. Cobblers and Russsets. Better than ever. Attractive prices. We pay freight. IRVING E. COOK, Munsville, N. Y.

PAY ON ARRIVAL—Frostproof Cabbage Plants immediate shipment. 75c-1000. EMPIRE PLANT CO., Albany, Ga.

FROSTPROOF CABBAGE PLANTS. Order today. Pay postman. 500-60c, 1000-\$1. POSTAL PLANT CO., Albany, Ga.

GLADIOLUS 12 LARGE bulbs \$1. Dahlias 6 bulbs \$1. Choice varieties, all different. WM. EATON, Putneyville, N. Y.

MILLIONS FROST PROOF Cabbage Plants, postpaid: 250, 50c; 500, 75c; 1000, \$1.50. Expressed, 10,000, \$7.50. Satisfaction guaranteed. WALTER PARKS, Darien, Ga.

CHOICE YELLOW EYE Seed Beans, Tested by Geneva Experimental Station. Germination 99% purity 99.9 plus. Good yielders \$10 per hundred. ROY WILLIAMS, Middlesex, N. Y.

HARDY ALFALFA SEED 93% pure \$10.00 per bushel; Sweet Clover 95% pure \$3.00 per bushel. Return seed if not satisfied, GEO. BOWMAN, Concordia, Kansas.

BERMUDA ONION PLANTS—Grow bigger and better Onions. Frostproof. Postpaid 200, 55c; 500, \$1; 1000, \$1.75. Cabbage Plants 3 Doz. 40c; 100, \$1. PORT MELLINGER, North Lima, Ohio.

STRAWBERRY, RASPBERRY, BLACKBERRY, Dewberry, Loganberry, Wineberry, Grape, Juneherry plants; Asparagus, Rhubarb, Horseradish roots; Hardy Perennial and Annual Flower plants; Roses, Vines, Shrubs, Hedge plants. Catalogue free. HARRY E. SQUIRES, Hampton Bays, N. Y.

VEGETABLE SEEDLINGS—Ready now for you to transplant into cold frames or greenhouse. \$3. per 1000. Postpaid. Peppers—Ruby King, Worldbeater, Bull Nose, Sunnysbrook, Sweet Cheese, and Chinese Giant. Tomatoes—Langdon's Earliana, Penn State Earliana, Marglobe, Chalk's Early Jewel, Bonny Best, John Baer, Stone and Matchless. Send for list of other plants. PAUL F. ROCHELLE, Morristown, N. J.

SEEDS—NURSERY STOCK

CERTIFIED ITALIAN OATS and Alpha Barley seed. Our fields of these Cornell varieties College inspected. Also select Canada Field Peas. JONES & WILSON, Hall, N. Y.

FROST PROOF CABBAGE Plants. The kind that will stand a freeze. Six leading varieties. Prices: 500, \$1.25; 1,000, \$2.25 postpaid. By express: 1,000 to 5,000, \$1.00 per thousand; 10,000 and over at 75c. Bermuda Onion Plants same prices. Write for prices on Tomato, Pepper, Egg Plant, Cauliflower and Lettuce plants. BLUE RIDGE PLANT COMPANY, P. O. Box 583, Greenville, S. C.

OLD FASHIONED HARDY Flower Plants. Hollyhocks, Delphiniums, Bleeding Hearts, Anemones, Blue Bells, Canterbury Bells, Columbines, Monksheads, Hardy Carnations, Hardy Chrysanthemums, Hardy Lilies, Hardy Phloxes, Lupines, Hardy Pinks, Oriental Poppies, and 240 other Perennials that will bloom this summer; Pansies, Asters, Salvias, Petunias, Zinnias, Snapdragons and other annuals; Roses, Vines, Shrubs, Hedge Plants; Berry plants, Asparagus roots. Catalogue free. HARRY E. SQUIRES, Hampton Bays, N. Y.

MISCELLANEOUS

WANTED USED BAGS any quantity and grade. Highest prices and freight paid. HOFFMAN BROS. BAG CO., 39 Gorham St., Rochester, N. Y.

LEARN AUCTIONEERING at home. Every student successful. SCHOOL, Box 707, Davenport, Iowa.

BARRELS OF SLIGHTLY damaged crockery—Hotel chinaware — Cookingware — Glassware — Pottery. E. SWASEY COMPANY, Portland, Maine.

SUPERIOR GRAFTING WAX for Successful grafting. 1 lb. 50c; 3 lbs. \$1.25 postpaid. D. VICTOR MFG. CO., So. Weymouth, Mass.

KILL THE LICE. Battenkill Farm Louse Powder almost 100% active ingredients. Two large boxes for \$1. Satisfaction guaranteed. BATTENKILL FARM, Greenwich, N. Y.

PATCHWORK: Rayon, Percelle, Printes, 3 lbs. \$1. 100 assorted pieces. 6x8, \$1. Special trial package, 50 cents, postpaid. NEW ENGLAND PATCHWORK CO., Hartford, Conn.

HONEY: 60 lbs. finest buckwheat \$5.40. Clover \$5.60 not prepaid. Satisfaction guaranteed. F. W. LESSER, Fayetteville, N. Y.

HARDWOOD ASHES 10 per cent Potash, \$18 per ton. Write for carload prices. C. W. STEVENS, Yorkshire, N. Y.

UNIVERSAL AND PERFECTION milkers, Taylor vacuum and a Waterloo 5 h.p. engine. Guaranteed. O. B. DEYO, Little Falls, N. Y.

AVIATION—If you are interested in aviation instruction and earning while learning, write WEEKS AIRCRAFT CORPORATION, Dept. B11, for free information without obligation, Milwaukee, Wis.

USED CIVIL WAR ENVELOPES with flags, designs, etc., \$1 to \$15 paid. Other stamps on envelopes before 1871 bought. Three-face lamps and old glassware bought. W. RICHMOND, Cold Spring, N. Y.

ARE YOUR BEES Paying? Are they in as good shape as you would like to have them? If not, perhaps we can help you. Send for our free booklet, "Bees for Pleasure and Profit." Tells how to start right. Our free leaflet on transferring bees tells exactly how to get bees into better hives. Address A. I. ROOT CO., 231 Liberty St., Medina, Ohio.

FARMS FOR SALE

DEL-MAR-VA—THE PENINSULA OF PLENTY. Three to ten hours by motor truck to markets supplying twenty millions of people. Pennsylvania Railroad permeates entire Peninsula. Low-priced farms, town and waterfront homes. Very little snow and freezing. Finest concrete highways, Good Schools, low taxes. Handsome descriptive booklet, FREE. Address 164 Del-Mar-Va Building, Salisbury, Md.

FARM RENT FREE two years for taxes and improvements; permanent tenants, financing themselves. MISS TOMPKINS, Pleasant Hill, S. C.

FOR SALE TO Close Estate. Two adjoining dairy farms of 100 and 200 acres respectively; 15 miles south of Syracuse, N. Y. Two sets buildings in best of repair and painted, including milkhouse, icehouse, chicken house and garage. Never failing spring piped to barn and milkhouse. Enquire at farm, Pompey, N. Y. of Roy R. Partridge or Harry I. Partridge, Executor, 19 Woodlawn Ave., Buffalo, N. Y.

PRINTING—STATIONERY

200 FINE WHITE ENVELOPES neatly printed with your return corner card, postpaid, \$1.00. Samples free. PRINTER HOWIE, Beebeplain, Vt.

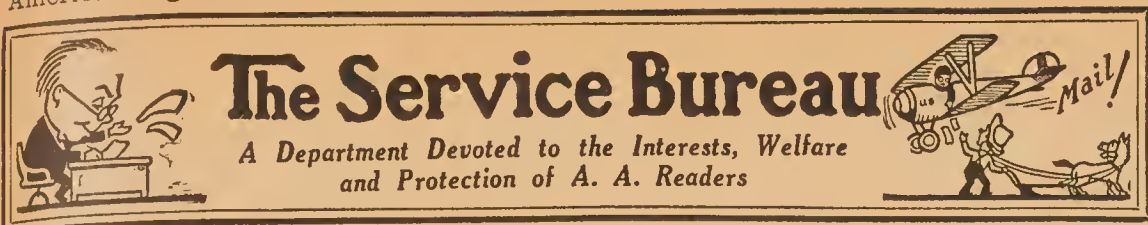
GUMMED MAPLE LABELS—Guaranteed stick to tin. Beautifully printed in colors. You need them. Samples free. PRINTER HOWIE, Beebeplain, Vt.

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On Buying Texas Real Estate

EDITOR'S NOTE: We are publishing the following letter from a Pennsylvania reader with the thought that it may save money for some of our readers:

AGENTS are canvassing this state and probably other northern states for the purpose of selling citrus lands in Texas. The proposition doesn't look good to me as they offer to plant and care for the land for three years—at whose expense they don't say. Land at \$400 an acre is too expensive to be left to the care of strangers even though they should do the work free of charge. I can't see any sure profit in exchanging a climate which is frigid in winter for one which is torrid in summer even though the prospect for fortune is better. But in my opinion that prospect is only a mirage, or picture in the clouds and just about as permanent as the cloud itself.

We came in contact with The Standard Education Society of Chicago and they have threatened to sue us and have had the claim in the hands of several collection agencies who have threatened to sue us and stop our credit. We have in every instance invited them to go ahead with it, yet in seven years we have not had a summons nor failed to get all the credit we want. I notified Mr. F. E. Compton, of F. E. Compton & Company, Book Publishers, an officer of the Subscription Book Association and he went over to the Standard man and made him promise to be good but he kept on after a time, but I have a letter from H. C. Johnson, Esq., attorney for the Association, saying, "We doubt that you will hear anything further if you continue to ignore the letters that are received."

Mr. Compton will be glad to receive any particulars of illegal or unethical transactions of agents of book publishers and will prosecute if sufficient evidence is furnished. His address is, 1000 North Dearborn Street, Chicago, Illinois.

Tipster Sheet Advice

I have received a letter from the editor of the Wall Street Messenger saying that I am one of a select few whom they have chosen to receive free of charge their publication because they understand that I am an investor of means and therefore in a position to profit by real stock market advice and positive advance information.

They admit that their offer is a selfish one as they expect to show me that their service is indispensable to me.

I suppose that I should feel flattered to know that I have so much credit in Wall Street, but if anyone wants to sell me stocks which will pay for themselves they can keep them for me until such time and then send them on. I know a dozen bankers who will gladly give me all the advice I want on any financial question and will furnish funds on credit if necessary. I have lived over seventy years without Wall Street advice and don't expect to die for lack of it.

Congratulations on your Reference number.

Investigate Before You Ship

"My son and I shipped to Strum & Pressner, 32 Harrison Street, New York City, a case of eggs on February 4. We have written to them several times but they have paid no attention and as yet we have not received returns. Can you help us out?"

THIS is the third claim we have against the firm of Strum & Pressner. Our letters remain unanswered, but upon personal investigation we learn that the firm has gone out of business and the premises are occupied by another firm. However, we understand that Mr. Strum at times calls at the old stand, and we are hoping that we can convince him of his liability in

these cases. The chances are, however, that we will not be successful and that our subscribers will be obliged to accept the loss.

Once more we are called upon to warn our readers against doing business with any firm without first consulting the Service Bureau. Strum & Pressner was not licensed and bonded and therefore not under the jurisdiction of the Department of Agriculture and Markets. Write us for a list of reliable commission merchants, mentioning the commodity you contemplate shipping.

American Medical Association Exposes Brinkley's Hospital

"For some time I have been listening to talks over the radio from the Brinkley

Hospital at Milford, Kansas. Could you tell me if this would be a reliable place to go for a man suffering with rheumatism?"

WE are very glad that you wrote us before corresponding with Brinkley. On investigation we find that the American Medical Association recently published a long article exposing Brinkley's activities. The article is headed, "John R. Brinkley—Quack" and goes into his record in great detail. In the first place, one of the diplomas in the possession of Brinkley was issued by W. P. Sachs, who was later arrested for operating a so-called diploma mill for a cash consideration. Sachs later admitted under oath that he never met Brinkley and that this diploma was issued for a cash consideration without an examination.

According to the article mentioned, persons who get on Brinkley's "sucker list" receive a letter from him every fifteen days for at least a year. Each letter urges the receiver to make reservations in the Brinkley Hospital at the earliest possible moment. The article further says: "From what has been written, it is obvious that John R. Brinkley is a blatant quack of unsavory professional antecedents."

Money Paid to A. A. Subscribers During Feb., 1929

Insurance Indemnities

To February 1st, 1929.....	\$122,256.14
During February, 1929.....	3,032.11

\$125,288.25

Robert D. Crane, Wantagh, L. I.....	\$20.00	Arthur E. Lovejoy, Pittsford, Vt.....	30.00
Struck by taxi—broken nose, cut face.		Auto collision—contusions of chest.	
John Simmons, Sr., Auburn, N. Y.....	60.00	Martin Woodward, Friendship, N. Y.....	40.00
Travel accident—fractured ribs.		Auto accident—bruised chest.	
Victor J. Wood, Penn Yan, N. Y.....	30.00	Claude Ketcham, Canandaigua, N. Y.....	20.00
Auto collision—cut head, face.		Auto hit tree—contused right chest.	
Anthony Palasiewsky, Northford, Conn.....	57.14	Fred A. Eastman, Charlton City, Mass.....	40.00
Auto collision—lacerated head, contusion.		Travel accident.	
John F. Harrison, Florence, Vt.....	40.00	Nellie Scouten, Spartansburg, Pa.....	40.00
Travel accident—contusions, fractures.		Auto collision—cracked ribs.	
Hiram Smith, Middletown Springs, Vt.....	14.28	Thomas Bowen, Blooming Grove, N. Y.....	107.14
Travel accident—cut lip and eyelid.		Travel accident—hernia.	
Mary E. Babbage, New Columbia, Pa.....	100.00	Anna Wright, Martville, N. Y.....	130.00
Auto accident—fractured ribs, contusions.		Auto accident—sprained back and bruises.	
S. D. Babbage, New Columbia, Pa.....	88.57	Calvin D. Braham, Sr., E. Rochester, N. Y.....	20.00
Auto accident—contusions of back.		Auto accident—dislocated shoulder.	
George H. Whaley, Hastings, N. Y.....	20.00	John Kommer, Palmyra, N. Y.....	20.00
Auto skidded, struck train—cuts.		Auto accident—dislocated shoulder.	
Dwight H. Marvin, Colchester, Ct.....	20.00	Simeon Sammons, Fonda, N. Y.....	25.00
Auto collision—scalp wound.		Auto accident—fractured ribs, bruises.	
Edw. Ahlgren, Roxbury, Conn.....	20.00	John Atwater, Garfield, N. Y.....	40.00
Auto tipped over—lacerated hand.		Truck overturned—lacerated thigh.	
J. E. Coleman, Jr., Dundee, N. Y.....	58.57	Susanna W. Nifong, Benson, Vt.....	70.00
Auto struck by train—fractured ribs.		Auto accident—fractured elbows, knee, foot.	
Chas. H. Schaner, Galetton, Pa.....	87.14	Homer G. Beecher, Brooklyn, Conn.....	70.00
Travel accident—dislocated shoulder.		Auto collision—lacerated face.	
Charles H. Schoenthal, E. Aurora, N. Y.....	12.86	Charles H. Hunt, Victor, N. Y.....	14.28
Struck by auto—cut knee, bruises.		Auto overturned—injured chest.	
George D. Strong, Mt. Upton, N. Y.....	58.57	Nora L. Nelson, deceased, Pearl Creek, N. Y.....	1000.00
Team ran away—injured hip.		Auto accident—mortuary.	
Martha J. Green, Arcade, N. Y.....	130.00	Mrs. John Pierce, Woodburne, N. Y.....	58.57
Auto tipped over—fractured clavicles.		Auto collision—contused knee, leg, shoulder.	
Myron H. VanWormer, Homer, N. Y.....	30.00	Leslie W. Hazzard, Randall, N. Y.....	20.00
Travel accident—ruptured knee.		Auto accident—contused and lacerated hand.	
George J. Kancher, Jr., Holland, Pa.....	60.00	Fred Stoke, Spartansburg, Pa.....	40.00
Travel accident—fractured wrist.		Auto collision—contusions.	
Santa Crisfulli, Fulton, N. Y.....	14.28	Dale Smith, Middleport, N. Y.....	30.00
Travel accident—lacerated forehead.		Auto overturned—fractured ribs.	
Frank Bosley, Mooers Forks, N. Y.....	95.71	Lewis S. Mayer, Lockport, N. Y.....	130.00
Auto accident—fractured jaw.		Auto overturned—hand crushed.	
James H. Parsons, Rome, N. Y.....	40.00		
Wagon tipped over—fractured ribs.			
Andrew Toka, Columbus, N. J.....	30.00		
Struck by auto—scalp wound.			

\$3,032.11

Service Bureau Claims Settled

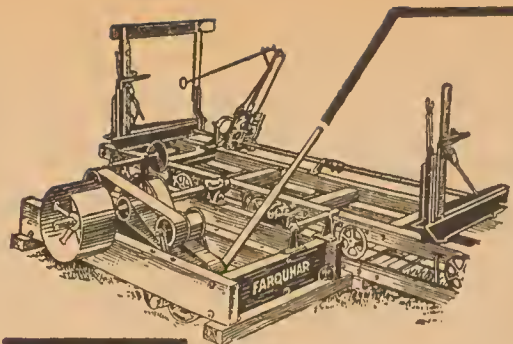
A. Kimple, LaSalle, N. Y.....	48.53	Daniel C. Ifert, Gaithersburg, N. Y.....	45.82
(Refund on radio set).		(Returns for cream).	
Mrs. W. H. Bell, Mercer, Pa.....	10.30	Miss Anna Patnode, Churubusco, N. Y.....	11.10
(Refund on oil burner).		(Refund on returned merchandise).	
J. M. Farrar, Stepney, Conn.....	62.30	Mrs. Marion E. Green, Gansevoort, N. Y.....	5.00
(Returns for lumber sold).		(Allowance on sewing machine).	
J. C. McKinney, Freeville, N. Y.....	10.00	William Whaley, Coldbrook, N. Y.....	4.05
(Settlement on automobile accident).		(Refund from commission merchant).	
Mrs. Jos. Mariett, Ashville, N. Y.....	1.30	Miss Ella Goodrich, New Berlin, N. Y.....	5.64
(Adjustment from mail order house).		(Returns on work done).	
A. J. Kishpaugh, Great Meadows, N. Y.....	11.00	Mrs. Leon Backus, Burlington Flats, N. Y.....	1.95
(Adjustment on freight by railroad).		(Returns for work done).	
A. Lehnhardt, Ghent, N. Y.....	5.57	Clarence Van Hoesen, Ravena, N. Y.....	120.00
(Payment of work performed).		(Pay for milk sold).	
Gustave Thiel, Cincinnati, N. Y.....	11.69	Fred C. Clark, Venice Center, N. Y.....	65.28
(Payment for eggs).		(Returns on vegetables sold).	
Caleb Ritter, Holland Patent, N. Y.....	19.50	Mrs. Theo. Fornwalt, Baldwin, Md.....	3.00
(Refund on unfilled order).		(Refund on live stock).	
Mrs. E. L. Cheney, Barnet, N. Y.....	20.00	Edward Streiff, Syracuse, N. Y.....	45.00
(Refund on unsatisfactory deal).		(Refund on unsatisfactory dog).	
Mrs. J. M. Mariett, Ashville, Pa.....	36.85	G. L. Hornbeck, Ferndale, N. Y.....	7.50
(Refund from mail order company).		(Refund on dog).	
W. H. Decker, Rhinebeck, N. Y.....	3.39	Walter Drean, Lawrenceville, N. Y.....	8.00
(Refund on radio equipment).		(Refund on dog).	
Mrs. Lewis H. Knight, Central Square, N. Y.....	3.00	D. F. Casey, Jamesville, N. Y.....	3.35
(Refund on returned merchandise).		(Returns on bags sold).	
Leeman Thompson, Pierrepont Manor, N. Y.....	14.00		
(Refund on oil burner).			
Earl Adams, Erieville, N. Y.....	15.00		
(Returns on eggs sold).			

\$598.12

General Claims Adjusted Where No Money is Involved

R. D. Showers, Cato, N. Y.....	Walter Clemens, East Rochester, N. Y.....
(Merchandise order replaced).	(Order filled).
A. E. Spear, Vineland, N. J.....	Mrs. Nelson Littlefield, Troy, N. Y.....
(Radio order filled).	(Adjustment from mail order house).

Total Paid to Subscribers \$3,630.23



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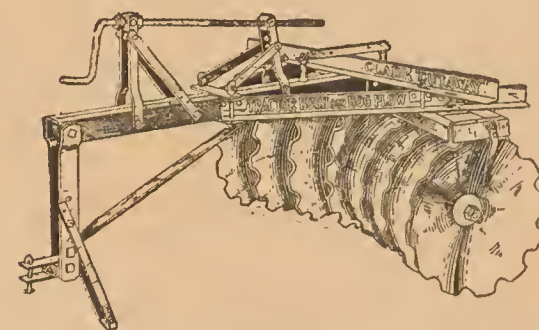
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For this sturdy machine, with its extra heavy disks easily and quickly breaks up and pulverizes soil that's too tough for the average plow or harrow. The CLARK CUTAWAY Bush & Bog Plow and Harrow is an investment that pays for itself many times over because it makes productive land out of waste land.

Equipped with Heat treated disks of cutlery steel forged sharp for better and longer service. For all tractors, also 2 and 4 horses.

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Send me Free catalog, prices and FREE book, "The Soil and Its Tillage."

Name

Address

What Is "Good Seed"

(Continued from Page 5)

important except as it indicates health and freedom from damage. Sometimes discoloration is caused by disease organisms. In other cases it may be merely due to staining by bad weather at harvest time. In such cases if the variety and germination are right, it may well be disregarded.

A third general characteristic of good seed is freedom from seed borne diseases. Some kinds of diseases can be eliminated by seed treatment. In any case it is worth while in purchasing seed to obtain it as disease free as possible. Field peas are as striking an example of this as any. Only clean seed should be sown. Wherever diseases can be remedied by seed treatments, such precautions will add materially to the seed value.

Lastly, but not least, seed should be clean. I have mentioned this feature at some length and will merely add that insistence that all seed purchased be free from impurities, especially weed seed is a precaution which no farmer can afford to overlook.

How to Grow Soybeans

The soil. This crop is not particular as to soil. It grows well on light soils or on clays. It will grow on land too wet for alfalfa or clover. It will make a fair crop on land that is not in a high state of fertility. Like other legumes, it responds to lime but it will stand more soil acidity than clover or alfalfa.

Seed-bed. The preparation of the seed-bed should be similar to that for corn. If possible the land should be plowed fairly early and the weeds given a chance to be killed by thorough harrowing.

Time of sowing. The soybean is a hot weather plant. A week or two after corn planting is about the best time to sow.

Methods of sowing. The best way to sow the crop for hay is with a grain drill. The seed may be broadcast by hand and harrowed in, but a peck more of seed to the acre is generally required to secure as good a stand as with drilling.

Care must be taken not to cover the seed too deep. It will not stand as deep covering as corn. If the soil crusts over the seed a light harrowing would be in order.

Amount of seed. The amount to use will depend somewhat on the size of the seed. With varieties having seed of average size such as Wilson, and with drill sowing, 5 pecks to the acre is about right. The beans should be spaced about 3 to 4 inches apart in the drill. It is a good plan to test out the spacing before planting actually begins.

Inoculation. If the crop is being grown for the first time on a field, the seeds should be inoculated. Although soybeans will make a better growth without inoculation than alfalfa or clover, especially on good land, it usually pays to inoculate the crop.

Fertilization. On good land the only fertilizer needed is acid phosphate. On land that is poor to fair, a mixed fertilizer such as a 3-12-3 might well be used. From 200 to 400 pounds per acre is about the range of application. On poor land manure would be a great help.

Since soybean plants are easily burned by direct contact with mineral fertilizers, heavy applications should not be made directly in the row. No harm should result, however, if not more than 300 pounds of fertilizer per acre is sowed with a grain drill, all the holes being used.—New Jersey State Bulletin.

Possible Causes of Clover Failure in the East

1. Poor drainage.
2. Lack of plant food in soil.
3. Insufficient lime.
4. Absence of the proper inoculating bacteria.
5. Too heavy nurse crop robs crop of moisture.
6. Insect pests and diseases.

Potato Yield Increased 100 Bu. per Acre with "AA QUALITY" Fertilizer

IN a season like last, when potato prices are out of line, it takes a big yield of No. One quality to come out ahead. The experience of Smith-Canastota, Inc., which operates the Sky High Farm, Canastota, Madison Co., N. Y., shows how "AA QUALITY" Fertilizers safeguard profits in an off-price season and ensure extra profits in seasons when potato prices are what they should be. Read the following letter from Mr. J. H. Coulter, Treasurer of Smith-Canastota, Inc.:

This season we grew 5 acres of potatoes, which produced a yield as high as 550 bu. to the acre and on the 5 acres averaged better than 400 bu. to the acre.

In this 5-acre field we set aside an experimental plot of ½ acre. The plot did not receive any fertilizer. The yield and quality on this plot were so poor we did not feel that it would pay for the cost of harvesting, therefore we did not dig the crop. The other 4½ acres received an application of 1,600 lbs. of "AA QUALITY" Fertilizer per acre, which was entirely responsible for the high yield, as the same care was given to both plots.

We have used your Fertilizers for the past 3 years, and during the past season used 87 tons. Previous to that time we used various other makes but discontinued their use in favor of "AA QUALITY."

Comparing the yield of our potatoes with potato crops grown in this section on other makes of fertilizer, we find we have an increase in yield of 100 bu. to the acre.

SMITH-CANASTOTA, INC.,

Oct. 16, 1928.

Per J. H. Coulter, Treas.

Note particularly what Mr. Coulter says about increased yields obtained with "AA QUALITY" Fertilizer. Hundreds of farmers have written similar letters, covering every crop grown in this part of the country. Take beans, for instance. Mr. Edmund Chadwick, of Rock Stream, N. Y., tells of a record crop which was planted, harvested and sold in three months. His letter follows:

My beans were planted July 4, 1928, about five weeks later than beans are usually planted in this section. The crop was planted, harvested and sold within three months, which is a record-breaker. The crop yielded 24 bu. per acre, and sold for \$8.50 per bu.

Your "AA QUALITY" Fertilizer deserves full credit for the phenomenal crop. I am convinced that your fertilizer is the best on the market.

Oct. 26, 1928.

EDMUND CHADWICK.

Every farmer who wants to make the most profit out of his crops should act on these facts. "AA QUALITY" Fertilizers contain the choicest plant-food materials, scientifically blended, mixed and cured to assure perfect mechanical condition.

Larger yields of better-quality crops—and bigger profits—make "AA QUALITY" Fertilizers by all odds the cheapest you can possibly buy.

See the nearest "AA QUALITY" dealer at once or write us for quotations.



Above is Mr. J. H. Coulter, of Smith-Canastota, Inc., Canastota, Madison Co., N. Y., who authorizes the statement that "AA QUALITY" Fertilizer produced 100 bu. more potatoes per acre than were grown with other makes of fertilizer.

Long Island Grower Gets Big Yield. . . Messrs. Andrew Pierson Strong and Stanley Talmage Strong, of Wainscott, Suffolk Co., L. I., write:

We planted about 70 acres in potatoes this season and averaged about 300 bu. per acre of fine-quality Green Mountain Potatoes. We used "AA QUALITY" Fertilizer at the rate of 2,500 lbs. per acre. On one field of 20 acres, which by the way has been planted in potatoes continuously for over twenty years (with exception of one year) we obtained the excellent yield of 350 bu. per acre. Manure has never been used on this field during the entire 20 years. Nothing but "AA QUALITY" Fertilizer. ANDREW PIERSON STRONG, Oct. 11, 1928 STANLEY TALMAGE STRONG

19¼ tons of silage corn per acre, 17 feet high. . . Blair Bros., of Mooers, Clinton Co., N. Y., write:

For 12 years we have used "AA QUALITY" Fertilizer; prior to that date we used other makes of fertilizer. We prefer "AA QUALITY" because it produces better crops. For the past two years we have used AGRICO for Corn ("AA QUALITY") and it sure has produced the best crops of corn we ever raised. This year we raised 19¼ tons of ensilage corn per acre. Some of the corn measured 17 feet in height.

Oct. 12, 1928.

BLAIR BROS.

Our "Agricultural Service Bureau," under the direction of Dr. H. J. Wheeler, formerly Director of the Rhode Island Agricultural Experiment Station, will be glad to answer inquiries about crops, soil or fertilizers. Send for our Booklets. Please state the crops in which you are interested.

"AA QUALITY" FERTILIZERS



Manufactured only by

The American Agricultural Chemical Company

Executive Offices:

420 Lexington Avenue, New York

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APR 17 1929

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APR 28 1929

\$1.00 Per Year

March 30, 1929

Published Weekly



The Eternal Feminine

SPECIAL ISSUE FOR WOMEN

Little Recipes for Little Cooks

Read this about Betty!

LITTLE Betty is a real girl. She lives on a great, big farm in Brown County, Minnesota. Betty is fortunate, for her mother has had special training in diet and nutrition so that she knows just what things are best to make strong and happy little folks. Betty's grandfather was selected as a Master Farmer, which is about the highest honor that a farmer can achieve, and her grandmother was selected as one of the Master Homemakers of America, an honor just as great as that of a Master Farmer. To have Betty's help is a real treat for little farm girls.



by

Betty

I am going to tell other little girls how to cook lots of good things—just like my mother has told me!

This is the first of a great, long series of these full page recipes for little girls. If you have never learned to cook, or mother has been too busy to help you, be sure to read every word on this page, for you will enjoy it. Then watch for another one that will be ready by little Betty in just four weeks.

Dear Little Cooks:

Of course I have helped mother at the cooking ever since I was big enough to stand on a chair by the mixing board and tease for bread dough for biscuit. I wasn't much help, I guess, and the biscuits were more like bullets when I had them baked but it was fun.

Mother was quite patient and willing to let me too, unless she was just awfully busy and then I had to wait till next time with my cooking.

Daddy helped with my cooking too by bringing in pigeon eggs for my baking. They were just right for the little recipes I used because they were about one-fourth the size of a regular hen's egg and one-fourth was the size of recipe mother usually gave me.

After I have tried the little recipe a few times, mother gives me the family sized recipe and then I can make enough for all of us. Daddy is always SO pleased when I make muffins for his supper.

So many girls would like to learn to cook, but mother says often they can not because their mothers are afraid they wouldn't have good luck and the sugar and butter and all the other good things they used would be wasted.

So I thought maybe I could send my little recipes to the girls who read the Children's Page and perhaps they could have as much fun cooking as I do.

This is just a kind of a get-acquainted letter and just one real little recipe for you to try.

Remember I will have some more things for you to try in just four weeks. Watch for them!



To Mothers of Little Cooks

THIS week we are beginning some simple lessons in cookery for the girls who read the Children's Page. These lessons are intended to help busy mothers who would like to teach their daughters to cook and yet find it hard to take the time for it.

The recipes will be small in order that the beginners' failures (for we must expect there will be a few) will not be too expensive. The larger recipe will be given too so that as soon as results with the small recipe justify, the little cook may be allowed to try making enough for the family.

With three little daughters, all eager to try their hand at cooking, it has taken some time and a lot of patience to let them, but now that the oldest (eleven) has mastered enough simple dishes so that she can be trusted to prepare a meal alone when it is necessary, I feel that it has been worth while.

Having learned to do some of the more simple things a little girl has a good foundation upon which to build a more thorough knowledge of cookery almost certain to be very useful to her later on. She finds pleasure in such cookery lessons and in addition her mother soon begins to receive dividends on the time and patience she has invested.

So we ask you, mothers, to be interested and to help these little cooks in order that they may get as much fun and benefit as possible from these lessons.

—Mrs. R. C. Dahlberg,
Betty's Mother.

A Nice Baked Apple

There is an old saying about "An Apple a Day Keeps the Doctor Away" and so apples are one of the things we don't economize on at our house, though there are lots of others that we do.

Quite often mother lets me bake an apple for my school lunch and this is how I do it: First I pick out a nice, smooth, sound looking apple, wash and dry it. Then I take out the core with an apple corer. Usually I bake my apple in a small basin or pie plate and I put in just enough water to cover the bottom of this dish. Then I put in the apple.

Into the hole where the core was I put sugar (white or brown) enough to fill it well and the apple is ready to put in the oven. I can't tell you just how long to leave your apple in to bake because the kind of apple makes a difference, some apples bake quicker than other kinds, and the heat of the oven counts too. Thirty minutes seems about right for most apples.

When the apple has baked about long enough I test it to be sure before I take it out. I stick a fork or a toothpick into it and if it seems soft all through I know it is done.

I like to put this plain baked apple on a pretty dish when I serve it and if I can have a spoonful of whipped cream for the top and a tiny bit of bright red jelly to drop in the center of the cream it looks just as pretty as can be.

Next time I bake an apple I am going to try something different. I shall stuff the hole in the middle with raisins or dates or figs because I like a change even with anything as good as baked apples. Once I surprised our family by filling the hole in a plain baked apple with jam before I put on the cream. They all liked that.

I have another recipe for next month, please watch for it.

P. S. Mother says I ought to tell you to try putting red cinnamon candies into the center instead of sugar and see how pretty and good that is.

Betty

A Scrap Book for You

Betty wants you to save every one of these pages of Little Recipes for Little Cooks, so she has asked us to fix up a dandy scrapbook that you can easily paste them into. We have them all ready and have put in a lot of other things that will help you in learning to cook and bake as you take these lessons. To get one, all you have to do is send us your name, address and age with ten cents or have Mother do it, and ask for one of Betty's scrapbooks. We will send it to you in the first mail. Address your letter to Betty, care of THE AMERICAN AGRICULTURIST, 461 Fourth Ave., New York City

The Tourist Home and How To Furnish It

Comfort and Attractiveness Are Vital Factors in Its Success

EDITOR'S NOTE: The tourist home as a possible way of earning money appeals to a great many farm people. But many tourists have had unfortunate experiences and are wary about stopping at any tourist home. Therefore if the confidence of the traveling public is to be kept and if this source of income to rural people is to continue, tourist home managers will need to take advantage of every helpful suggestion. For that reason AMERICAN AGRICULTURIST is printing a short series of articles by specialists at the New York State College of Home Economics on how to have a tourist home the traveler will like. The first articles of the series follow:

HOW can I earn money at home? This question is being asked by women all over the country. Many have found the answer. One answer is "the tourist home."

For a successful home, "the first important thing," says Mrs. C. B. Maybury, for four years manager of a tourist home near East Homer, New York, "is an attractive sign. I have made a study of signs through New York and New England and when I came to make my sign I tried to have something that would say what I wanted to say in a concise, dignified manner. The signs reading 'Tourist Home—Bath, Garage, Meals' did not appeal to me. My sign reads:

Tourist Home
All Accommodations

I feel that answers the purpose splendidly. I had my sign made by a professional sign company. Many remark upon its attractiveness. People frequently pass to turn around

By NANCY K. MASTERMAN and
DOROTHY BARNARD SCOTT

N. Y. State College of Home Economics,
Ithaca, N. Y.

and come back and remain over night. The sign helped bring them back."

This discussion of signs with Mrs. Maybury reminded me of a conversation not long ago with a man who travels the highways of the state. "Why is it," he said, "some signs say 'Rooms for Tourists with Bath' and some say just, 'Rooms for Tourists'?" Evidently the latter are not so particular." The operator of a home for tourists cannot be too particular in this matter of signs. To have a tourist home you must first catch the tourist. The first bait is an attractive sign.

From the sign one's eye travels over the grounds. A well kept lawn with flowers and shrubs is a second inducement to stop. Restful shade, inviting vistas to the fields beyond add attractiveness. There should be no farm machinery standing around bespeaking the careless farmer. The house itself must be bright, cheerful and homelike. Many of the old brick houses are handicapped from the beginning because they present a gloomy, dark, brooding exterior.

Cleanliness should be the keynote of the entrance and porch and indeed of the entire home. Comfortable chairs, benches, possibly a swing or hammock should be provided. More than one porch is an advantage where there may be several parties of guests. Grass rugs are attractive on porches and are easy to clean.

Simplicity makes for charming interiors. All unnecessary furniture, bric-a-brac and things that clutter the house should be eliminated. The housewife must look at her rooms through the eyes of her guests. She will save much time and energy spent in dusting by studying her rooms and eliminating everything that does not add to the usefulness or beauty of the room.

The country is the place of fresh
(Continued on Page 9)



This attractive tourist home with its equally attractive sign under the elm in front is called "Elmdale." It is operated by Glen L. Mickel at Hector, N. Y.

A Remedy for Neighborhood Quarrels

A Full Program Keeps the Community Out of Mischief-Making

By PROFESSOR RALPH A. FELTON

Dept. of Rural Social Organization
N. Y. State College of Agriculture, Ithaca, N. Y.

QUAKERTOWN is just a small shoe-string settlement with a dozen old-fashioned homes scattered along two miles of dirt road, with a school, a church and a cemetery at the center of population. Most of the farms have been in the same families for years, some well over the century mark. The old Quaker habiliments are no longer worn by the residents of this Western New York State settlement but the neighborly spirit of home-spun days is kept alive in the heart of Quakertown by—well, Mrs. Hall, one of the leaders in the community life will tell about it in her way.

"You just can't be mad at your next door neighbor," Mrs. Hall says, "even if his cows did get into your garden and eat all your cabbage, if you are wearing his great grandmother's wrapper which he dug out of the attic, in the next pageant. Neither can you hate someone even if his dog did kill your pet rooster, if you are to have a tete-a-tete a-la-hero and heroine in the next play".

"We find that the best way to be happy and contented is to be busy. We have put on five home talent plays in the last five years, real plays, for which we have charged admission, and we've had a remarkably good time doing it. We have no neighborhood quarrels or scraps, we're too busy planning our next entertainment or social".

"It's true that Mrs. Brown may become peeved at Mrs. Green and refuse to speak to her at the Ladies' Aid, but before the meeting's over they are sure to be deep in the mysteries

of what is best for an Indian costume or how to make three pumpkin pies with only five eggs to take to the next community supper".

"Personally, I believe that in our Community Club lies the secret of our success", Mrs. Hall continues. "This is the organization under whose auspices we produce our plays and hold our socials. Our president is a genial personage, one of the few who is blessed with tact and patience. We all tell him our woes and imagined grievances. He listens most sympathetically and that makes us feel good, then he turns and does exactly as he pleases and somehow makes us like it".

"Of course we have mortgages, taxes, and all the other evils known to farmers, and we prac-

tice a play or have a picnic when we should be hoeing potatoes or planting corn, but if one of us gets too far behind we all pitch in and help him out. None of us women are too good to don overalls and ride the potato planter if need be".

Mrs. Hall then proudly told how she helped plant several acres of potatoes one day and in the evening had a good time taking the part of the heroine in a play.

Everybody Is Invited

"We don't have any stated invitation lists like they do in the city", explained Mrs. Hall. "Everybody is invited and everybody comes. Besides our Community Club, we have a Home Bureau, a Church and a Sunday School and of course the Ladies' Aid. Everyone takes turns being an officer and refrains from criticising his fellow man, knowing full well that next year he may be wearing the other fellow's shoes".

When asked if the movies were hurting the life of the community, Mrs. Hall dismissed the question with a smile. "I don't believe a dozen of us have been to the movies in the past ten years", she explained. "We're too busy putting on our own entertainments, our suppers, plays and socials and most of us have four or five small children to care for".

"We don't need any 'back to the land' or 'stay on the farm' movement. Most of us married the 'boy next door' and we're happy and contented with farm
(Continued on Page 7)

A Country Mother's Prayer

By MRS. J. P. NAWROT

LORD, I am thank-

ful for the precious gift which led me down into the shadowed valley to lay claim to it, returning with another's life upon my breast. I am thankful for the brown childish face which laughs at me as he comes home from play, and little hands which sometimes blunder in forbidden places but reach for me in every time of need. For this clean air he breathes, for this broad playground of the prairie, and for the food which builds his growing body I am thankful. Teach me that he, his dad and I have that which is worth more than all the world: loved ones, a home upon a hill, and happiness.

I am thankful for that love of fields

and open sky which brought a mother and father here, and for the strength which led us toiling up this hill to make our home. Grant, Lord, that true love and strength be my boy's, that the clear sunlight shall keep glowing in his face the light of joy, that the warm wind shall breathe into his body the pureness of the sky from whence it came, that sights of deepening sunsets and returning dawns shall speak to him life's truth and beauty, and that the broadness of our country shall give of its great spirit to enlarge his soul. This grant with years for me to love and labor for my farmer boy who sleeps so sweetly on his mother's arm.

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Farm Women In World Affairs

THAT rural women are stepping right along with their menfolks is proved by their forthcoming international organization which will occur in London on April 30th. The International Council of Women will be a council devoted especially to the interests of rural women. Just think of it! The stay-at-home rural woman is beginning to be recognized as a factor in world affairs and it signifies a real step forward that a definite organization devoted to her interests is to be formed.

Another cause for gratification is that two New York State women are to be there at the Council meeting, representing the Country Life Association and the New York State Home Bureau Federation. Mrs. G. Thomas Powell of Glen Cove, and Mrs. A. E. Brigden of Marathon, both past-presidents of the Home Bureau Federation, will be traveling in Europe and have been authorized to represent the two organizations named.

The good wishes of their many friends and of AMERICAN AGRICULTURIST in their mission will attend them.—G. W. H.

A Word for the High School

"There is too much fuss made about high schools. They are breeding criminals and are boosted by paupers and dumbheads. These high schools are hot beds of disease, dishonesty and sickness. This is not a free country. We encourage debts and murder and all kinds of wrong."

THE above is a portion of a long letter filled with similar sentiments from a woman who says she is a mother. What a terrible thing it must be to go through life believing that everything and everybody are wrong. Worse still, how terrible it is for children to have parents who always take this attitude.

It is an amazing fact that there are a few people still holding views like the above in nearly every neighborhood. They are the modern counterparts of those who in early times always opposed all educational advance because they claimed that it was dangerous for the masses. But when the liberty-loving pioneers began to settle America, the demand for education was in the very air of their new country, and the erection of the log schoolhouse was only second to the building of the log home and church.

Driven back by advancing civilization, the opponents of education retreated only a little ways

and entrenched themselves behind the claim or idea that the education of the masses should be limited only to the male sex and should never under any circumstances extend beyond the three R's. Girls were not admitted to schools in early colonial times. Slowly but surely the forces of ignorance have been conquered by public opinion until the curriculum has been added to and enriched to meet the needs of the changing times and until finally the people of America began to see that elementary education was not enough and to demand that their boys and girls should go to high school.

One of the finest things about American parents has been their determination to give their children better educational advantages than they themselves received. Unable to leave them any great amount of wealth, they have determined to give them a still better legacy in the form of an education, something that "neither moth nor rust doth corrupt, and thieves break through nor steal."

All educational methods and institutions have their faults. The high schools, of course, are not perfect, but the charge that they breed immorality is an insult to the millions of fine young people now in high school, to their parents and to the great body of teachers who are doing so much for young America. The boys and girls of today will measure up to the young people of any other generation or time.

The best answer as to what the fathers and mothers think of the high schools is in the number of boys and girls who are now attending them. In spite of all the opposition to education, there are now 28,000,000 children in our various educational institutions in America and more than half of our boys and girls of high school age are in high school at the present time. In these figures, we have the best assurance of the future success of the nation.

What Farmers Are Reading

DURING the month of February, the New York State College of Agriculture received 8,000 separate postcards and letters, asking for bulletins and circulars on various farm subjects. As a result of these and other separate requests, the College sent out a total of 184,000 bulletins during this one month. If we add to this the material furnished to farmers by the State and Federal Departments of Agriculture and all of the other experiment stations and colleges of America, together with the literally millions of requests for similar information that come to the farm papers, we get a grand total of requests from farmers for agricultural information that is simply astounding. Never in the history of agriculture have farmers shown as much determination to learn and practice the science on which their great calling is based as they are showing at the present time.

Watch Your Seed Corn

REPORTS from seed corn growing sections indicate that there is a lot of poor seed corn on the market this year. It is discouraging after spending money for seed, fertilizer and labor to fit the ground, to find when it is too late that because of poor seed there is only one-half to two-thirds of a good stand. No single farm practice pays better results than the use of good seed. It is a simple matter to test seed corn for germination. There is a special need of doing it this year.

The Joy of Living in the Country

THE fields are more than ground to be plowed, the trees more than wood for winter fires and a fine day can be appreciated far more than being good for drying the wash. Sad is the state of the man or woman who sees nothing more than the practical uses of the things with which the countryside is filled.

Springtime is thrilling with the new tender

flowers and leaves and the general unfolding of nature. Any day's plowing is made more pleasant by a look across the fields at the greening woods. The mere feel of warm sunshine and the look of a bright sky is uplifting if we only tune ourselves to enjoy these simple pleasures.

Growth and progress distinguish the human from the lower animals and pleasant surroundings make it all the easier to respond to the urge of ambition. Making the farmstead a more beautiful and inspiring spot is within practically everyone's grasp. On page 5 are some practical suggestions as to bringing this about and you will enjoy reading them.—G. W. H.

Farm Bureaus Growing

NEARLY thirty-one thousand farmers now belong to the county farm bureaus of New York. This is over four thousand more than had joined last year at this time. It is evident that more and more farmers are coming to appreciate the fine work these county organizations are doing.

When Farm Prices Go Up

WALLACE'S Farmer of Iowa, a Standard Farm Paper, calls attention to an interesting situation in the production and marketing of prunes. In 1914 there were only 82,000 acres of bearing prunes in California with the result that it was one of the best paying crops of California farmers. But because it did pay, by 1927, there were 165,000 acres or more than double the number in 1914 and the prices dropped so that they cannot be produced at a profit.

Wallace's Farmer concludes that this is what happens when the price of any single farm product is high. It is surely followed by over-production and ruinous prices because other farmers turn to the crop that does the best. "Therefore," says Wallace's Farmer, "when the farmers of the country go to a higher place on the income scale, they must go in a body unless there is a general increase in prices all along the line. Folks in the less favored occupations are going to swing in and bring about over-production in lines that are momentarily profitable."

We think that the editor of Wallace's Farmer is only partly right in his conclusion. We certainly agree with him that prices of all farm products should be higher, but just as surely as the sun shines, when they do go higher, more people are going to stop leaving the farm for the city, more ex-farmers from the cities are going to come back to the farms and soon there will be over-production all along the line.

This sounds discouraging. What is the answer? Well, the first answer is that all farm prices can go up quite a ways before there is much danger of over-production. The main answer to the problem, however, is in better farming. The man who has kept abreast of scientific knowledge, follows the best production practices, keeps records on his crops, animals and business transactions, and in general runs his business on a business-like basis, is able to stand the ups and downs of farm prices. In good times he will make good profits; in bad times he will make a living. That is about all that can be expected from any business or profession.

Aunt Janet's Chestnut

THE traveling salesman came down to the hotel dining room. He had been up late the night before, business was poor, he had a headache and was feeling blue. So he said to the waitress:

"Nellie, all I want for breakfast this morning is two soft-boiled eggs, a cup of coffee and a few kind words."

The waitress returned with his order. He said, "Nellie, here are the eggs and the coffee, but where are the few kind words?"

"Don't eat them eggs," said Nellie.

Put the Farm's Best Foot Forward

Well-Planned Grounds Make Good Impression on All Who See Them

A STRANGER approaching a farmstead gets a very definite impression of its people before he sets an eye on one individual living there. He can see at a glance the farmhouse, the barns, their condition of repair, and the general effect, attractive or otherwise, of the plantings which dot the grounds.

Most old farmsteads have trees, shrubs and flowers, some of them wonderfully fine specimens. Yet the finest individual trees or shrubs can present a cluttered, untidy effect unless care is taken to make them a part of a well-ordered whole scheme. It is not easy nor is it always necessary to move large shrubs on an old established place, yet one misplaced planting may spoil the entire effect.

If an entirely new lawn is being started the problem is simple in that it does not involve both digging up and digging in again somewhere else. But no matter whether an old lawn is being re-landscaped or a new one is being started, a definite plan should be worked out on paper beforehand. This saves a great deal of miscalculation and disappointment because it helps to visualize in the mind's eye just how the finished product should look. In this way it is easier to determine just how many plants are needed and how far apart they should be.

Nothing gives a more attractive approach to a house than a stretch of open lawn. True, there should be shrubs and flowers and shade trees too, but they look far more lovely when arranged to form a sort of frame for the lawn and house, rather than being scattered at random. Shade trees should be placed where they will do the most good, for instance, near a porch where the shade will provide additional comfort. Among the trees suited for lawn shade are the sugar and Norway maples, the oaks, linden, American elm and black cherry.

As for shrubs, their chief use is to act as clothing for the house. Shrubs well placed bring out the attractive features of a house just as a becoming hat and dress heighten a woman's loveliness. And it is not necessary to have only flowering shrubs. All should be selected for their appearance the year around; some evergreens should be included in the lot for their winter effect.

The old-fashioned flowering shrubs are always popular, lilac, flowering almond, spiraea, snowball, hydrangea. Many of these have been improved upon as to variety and now form some of our choicest shrubs. Rhododendrons, mountain laurel, the azaleas, viburnums, honeysuckles, and many, many other shrubs offer a wide choice as to height, color of flower, and leaf texture. Japanese barberry with its red berries, Virginia rose with its red twigs and berries, the coral berry, the snow berry, the red stem dogwood with its blue-white fruit and red stems, the arrowwood with its black fruit and the hawthorn with its red fruit make the winter landscape more interesting because of the extra color afforded by fruit or berry. The junipers, arbor vitae, hemlock, spruce, and other cedars make a fine contrast because some have a blue-green foliage while others are yellowish green. The fact that they are green the year round prevents the bareness which comes when leaves fall. Flowering shrubs are seen to good effect against a background of dark green cedars or other evergreen.

Planted near the buildings or as borders for

the lawn shrubs fill their mission best. Incidentally, these borders may have a gently curving effect where space allows such treatment. The corners of buildings are set off by the tallest shrubs, while showier specimen shrubs are better near the main entrance or doorway. In order to present the best appearance, low-growing shrubs should be planted in front of taller ones whose bare trunks would be unattractive. Groups of shrubs at entrance walks or drives furnish a sort of accent to such useful features of the grounds.

If one can afford the services of trained nurserymen in selecting and planting the trees and shrubs, that is the quickest way to get results.



The plantings around this comfortable farm home in Erie County, New York, give the effect of "dressing up" the house. They soften lines which otherwise would appear harsh and give the house an air of belonging right there.

But it is entirely possible, if one has the time, to transplant from the woods or even to grow from seeds or cuttings many beautiful shrubs.

While trees are in leaf, they can be marked by a piece of cloth tied very firmly to a branch. Then, in the fall or very early the next spring the tree or shrub can be transplanted. This requires care if the tree is to survive. With a pick and shovel the soil around the roots can

be first loosened, then shoveled out away from the roots, taking care to damage them as little as possible. After the tree is removed from the hole, wet burlap bags wrapped around the roots help to prevent too much drying-out. In fact the larger the ball of earth which can be kept intact around the roots, the better the chance the tree will have to live. A tree to be transplanted should not be over one half inch in diameter at the height of your chest.

The holes should be made ready before the trees are dug up. Allow several shovelfuls of well rotted stable manure for each hole; dig this in well, and, if the soil is poor, have rich garden soil ready for packing around the roots. The tree should be stood straight, half a pail of water poured into the hole, and the loose earth tamped down hard. A saucer-shaped depression around the tree helps to hold moisture. Forty feet should be allowed between trees. If

you have no trees in your own woodland suited for transplanting and if your neighbor has none he cares to let go, growing from seed is entirely possible.

Most any farm could spare a row or two across the garden for growing shrubs until they are from three to five years old. They could then be transplanted to their permanent places. One of the chief weaknesses of amateur planting is that not enough allowance is made for growth. Shrubs that meet across the walk or extend over the entrance steps show this failure to allow for increase in size.

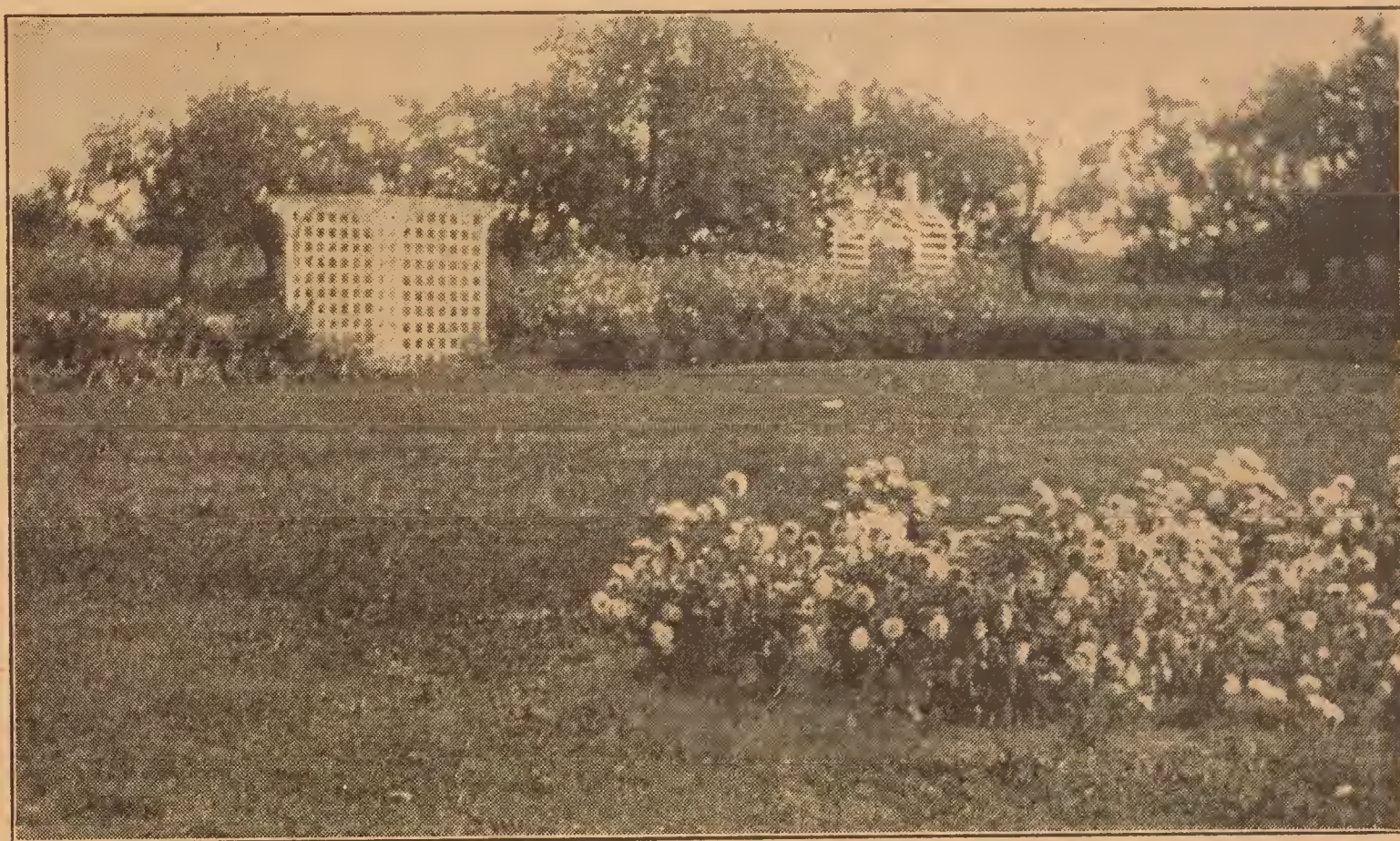
All this transplanting means that the men of the family have to be interested enough to furnish the brawn for the job. Just how to go about getting them interested requires the greatest diplomacy—sometimes mine does not work! Perhaps one argument that will fetch even the most hard-boiled husband will turn the trick this time—good looking grounds increase property values! And I venture to predict that even if there is considerable mouthing about using up good land for nothing that is good to eat—you know all about it—the time will come when he points with pride to "my" trees or "my" garden.

Some shrubs thrive in semi-shade, others require full light. Some want rich soil, others not so rich. Any reliable shrub-planting table gives this information. If you have a nurseryman, he decides those questions for you. If you are doing your own "scaping, your state agricultural college will be able to supply such a table for your state conditions.

Nothing quite takes the place of flowers. On the farm perhaps the most satisfactory are the perennials as they come up year after year. Peonies, hollyhocks, irises, roses, and the bulbs are sources of delight and give a great deal of pleasure with a minimum of labor. Light colored flowers should be planted near the house rather than dark ones. Again does the artistic principle prevail as to the open lawn. Flower beds which break up that smooth green expanse of lawn would be placed better if they were in borders in front of the house or along the edge of the lawn.

Annuals to be convenient for cutting are best if planted in rows along the edge of the vegetable garden. This adds a decorative note to that highly useful part of the farm. The perennial bed will look better if filled out somewhat with annuals which bloom at different seasons. If rose

(Continued on Page 6)



This sweep of lawn belongs to Master Farmer Harry E. Wellman of Kendall, New York. The rose-trellises form part of a flower-bordered walk while the group of asters in lower right hand corner definitely mark another boundary of the lawn.

autos . . . radios . . . silk stockings . . . and soil fertility

"THE management of the soil has a lot to do with electric lights, running water, furnaces, silk stockings and vacations," says a well-known middle-western County Agent.

It is the old adage expanded—"Feed your soil and it will feed you." Experiments have proved, and agricultural authorities agree, that one dollar judiciously invested in the proper fertilizer will return an average of three dollars. Five dollars and up to ten are not unusual.

There is no other investment that a farmer can make with equal assurance of the return of capital and two hundred per cent, or more, profit. And this is a single crop growing season.

Doesn't this suggest a way to get that radio, that new automobile, or water system? Make an investment in fertilizer up to the needs of your farm. Next fall, unless Nature is unusually niggardly this summer in moisture and warmth, you will have your fertilizer dollars back with multiple interest.

Then you can buy that new radio or automobile you need, or install the new water system, or farm lighting plant.

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A.A.'s Western New York Farm and Home Talk

What Accounts Have Done For Me

WE have just had
our "Outlook

By M. C. BURRITT

in advance very
closely what expenses

for 1929" meeting in this county, together with a local farm management meeting to discuss crop costs, returns and plans for 1929. This type of community meeting is somewhat new but very valuable. It comes at a time when nothing is more important to successful farming than careful planning of enterprises in relation to competition, relative costs and returns. Our federal and state institutions have for several years gotten out these outlook reports but never before has there been a systematic attempt to make its application on a county and local basis as this year. It is decidedly desirable and worth while as is evidenced by the intelligent interest of about 125 men who left their other work and interests in this county (Monroe) and spent the whole day at such an outlook meeting.



M. C. Burritt

It is unfortunate that so many farmers do not keep farm records and accounts and that they seem to regard them as unnecessary work. My own view is that intelligent farm planning and accounting is as necessary to success in these, modern times as any other farm operation. Perhaps this emphasis comes natural to me for my father kept farm accounts carefully and I have his records, on this farm where I live, which have been kept every year since 1849. Following in his footsteps I have kept farm accounts for 27 years myself with the records very complete since 1910. They have taught me many things.

I find it hard to understand the viewpoint of the man who says—and several have said this to me—"If I kept complete cost accounts and records that way I would have been bankrupt long ago." As if keeping records of facts changed the facts! Perhaps the trouble with many of us farmers is that we are bankrupt and don't know it! Certainly many of us are working for very low wages and throwing in our investments without interest. It seems to me essential in order that we may get a sound view of our business, that we know what men, horses, tractors, trucks, etc. are costing us per hour, just what our overhead costs are and the relative profit or loss on various enterprises. It does not follow that we will abandon every enterprise that does not show a profit. Unfortunately the farmer is in a position where he cannot always do this. But he can choose the most profitable and cut down—or out—the least profitable and he can study how to reduce costs and increase income.

Estimating Probable Income and Expenses

During the course of a year, in my relation to our local farm loan association, I am called upon to appraise a considerable number of farms. In this way I come to see the details of the operation of many farms. I would say that the outstanding weakness of most of them is that there has not been enough careful planning of income. Even if weather and prices were favorable and there were no unusual setbacks, the total income would not have been large enough to pay expenses and leave a margin. And if things go against the operator he inevitably suffers a financial wreck. Every farmer ought to plan for an income large enough to more than cover expenses with a margin for hard luck. If he does, he is much more likely to get the income he needs than if he does not so plan.

Estimating Probable Income and Expenses

It is perfectly possible to estimate

will be during the coming year on one's enterprises. This is especially true when one has careful records of what his expenses have been in past years. For example I have tables made up showing the expenditures for all major items over a series of years. With these and my plans for the year before me I can—and do—estimate probable expenses for the year with a percentage of error of only from five to thirteen per cent. So a farmer can—if he will—sit down and list his expenses like this, for example: Interest, \$300, taxes \$200, labor \$1000, seed \$100, fertilizer \$200, machinery repairs and additions \$200, real estate repairs and improvements \$250, etc., etc., total \$3,000.

Planning Is the First Step

When he has done this he knows that he must get at least \$3,000 or he will suffer financial loss. Then it is a matter of planning those crops and keeping those animals which his experience tells him—and again records of past income make this easier—will produce this income and more. With a probable expense of \$3,000 one should plan at least \$5,000 income for a margin of safety and profit. Now I do not say that planning this income on paper will necessarily bring it. It is only the first step. But I do say that the needed income is much more likely to be had with a plan than without it.

To the housewife may I say that the same principle applies to household expenses. And it is most interesting to know what it costs to live on a farm and to raise and educate the children. M. C. Burritt, Hilton, N. Y., March 17, 1929.

Put the Farm's Best Foot Forward

(Continued from Page 5)

arbors or garden seats are used, they belong as part of a hedge or background, never as separate distracting units which break up the openness of the lawn. Lily pools and bird baths make charming accessories to a garden. The glint of sunlight on the water, the pretty water plants, the attraction a bath always provides for the birds will make such a place interesting at any hour of the day. A barrel half filled with rich soil and sunk slightly below the level of the ground offers a chance for a wee lily pool. If one is fortunate enough to have a running stream, the possibilities for loveliness are indeed ideal. I think of one hillside farm where a spring farther up the hill supplied the water for the house and made a lovely little rill that danced and sang through one side of the yard. Such a place need never be unattractive; there is the interest of contrast, of movement and of a variety of plants which drier soil could never support. Lacking such a convenient spring, an artificial pool is the next best substitute. This means, of course that the water supply has to be fairly plentiful. But it does add much in beauty and pleasure.

The annual Flower Show at Grand Central Palace in New York bore testimony to what can be done with flowers and shrubs of all descriptions. From the most luxuriant blossoms raised by the skilled green house grower down to the simplest country door yard effect, all possible skill of science and art, and in many cases, money, had been combined. Yet almost every garden display there had features which could be used to beautify the farm.

The rustic gates, the flat stone walks or terracing with moss or grass peeping between, the rock garden with its scraggly plants, the free use of flowering shrubs, and, above all the effect of simplicity can be produced almost anywhere in this part of the country by the clever use of the material at hand.

Grow Better Fruit



This lead seal of the Massachusetts Fruit Growers' Association certifies that the Kelly trees you buy are true-to-name. It remains on the tree until it fruits. You take no chances.

Write for 1929 Catalog and price list. We have no agents—you deal direct.

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Established in 1880

KELLYS'
Certified
True to Name Fruit Trees



With the A.A.
FRUIT GROWER

Profitable Apple Varieties

I recently noticed a recommendation that Northern Spy, Greening nad McIntosh were good varieties of trees to set out at this time. Is there any real evidence that these varieties are likely to prove more profitable than others?—D. A., New York.

THE Farm Management Department at the New York State College has kept records on apple prices for many years and reports that the returns for McIntosh, Spy and Greening have been gradually increasing, while the returns from most other varieties have been standing still or getting poorer.

Oil Spray for San Jose Scale

Will a 2% oil spray kill scale on plum trees?—D. W., New York.

A 2% spray may not kill all the scale but there will be less danger of oil injury than there will be if you use a 3% oil spray. There is also a tendency to have a cumulative injury where an oil spray is applied year after year. Scale is not ordinarily difficult to handle. A 3% oil spray put on before the buds start will usually hold the trouble in check for several years. The spray should not be put on when there is danger of freezing before it has an opportunity to dry.—P. R., New York.

How to Propagate Currants

Which is the correct method of propagating currants?—C. W., New York.

CURRANTS can be propagated by cutting the new shoots into eight-inch lengths along in February, packing them in sand or sawdust, and planting them in rows as soon as the ground can be worked in the spring. It is also possible to make these cuttings and plant them directly in the ground in the spring, if it is done before the buds start. Another method is called "mound layering". In this method, dirt is heaped up around the bush early in the season and every shoot will then send out roots. Later these can be cut out and planted.

Wealthy Good for Pollinating Greenings

What varieties would you recommend for pollinating Greenings?—F. M., New York.

MCINTOSH will pollinate Greenings but Greenings are not the best pollinators for McIntosh. Another objection here is that these two apples need different soil. Greenings need a heavy soil, while McIntosh will have better color on a light soil. Wealthy is a good variety for pollinating the Greening and so is the Northern Spy.

What Causes Russetting?

What is the cause of russetting of apples?—J. R., New York.

RUSSETING of apples was especially bad last season and was noted both in orchards that were sprayed and in unsprayed orchards. Apparently, weather conditions were just right for this trouble. Lime sulphur dry-mix will give cleaner fruit but will not control scab quite as efficiently as lime sulphur 1-40.

A Remedy for Neighborhood Quarrels

(Continued from Page 3)

life. It is doubtful if Quakertown could be called a whale of a success as a farming community, but as a good, clean, live place in which to live and make a living it can't be beaten. As an all-around good neighborhood that believes in "flowers for the living", our community is it."

"You ask what has made our neighborhood what it is—the Community Club. Have a club," she concluded, "and keep the neighborhood fires burning."

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"Everything For the Farm"

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APPLE TREES

Baldwin, Cortland, Delicious, Greening, McIntosh Red, Northern Spy, Wealthy, 2 yrs., 4 to 5 ft., 25c each. \$20.00 per 100.

PEACH TREES

Elberta, Hale, Rochester, Yel. St. John, 3 to 4 ft., 20c each; 2 to 3½ ft., 15c each; \$10.00 per 100.

CONCORD GRAPE VINES

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HARDY HYDRANGEA BUSHES

2 to 3 feet..... 25c each
Many other items at special prices. All stock offered strictly first-class, fresh dug and guaranteed absolutely true to name. Catalog free.

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"The Home of Good Nursery Stock"
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STRAWBERRY PLANTS

Now is the time to start that Strawberry patch. Luscious berries. Real profits. Start right with the finest plants you can buy—Healthy, Vigorous, Well-rooted, True-to-name. Here's the price list. Order direct to save time because early planting pays.

VARIETIES	25	100	250	1000	5000
Aroma	\$0.30	\$0.90	\$1.60	\$5.00	\$21.25
Big Joe .....	.40	1.00	1.90	6.00	25.00
Big Late (Imp.) ..	.40	1.00	1.90	6.00	25.00
Chesapeake .....	.50	1.10	2.15	7.00	30.00
Champion (Ever) ..	.50	1.30	2.35	8.00	35.00
Dunlap .....	.30	.90	1.60	5.00	21.25
Gibson .....	.40	1.00	1.90	6.00	25.00
Gandy .....	.40	1.00	1.90	6.00	25.00
Haverland (Imp.) ..	.40	1.00	1.90	6.00	25.00
Klondyke .....	.25	.70	1.25	4.00	17.50
Lupton .....	.40	1.00	1.90	6.00	25.00
Mastodon (Ever) ..	1.00	2.40	4.35	15.00	65.00
Missionary .....	.25	.70	1.25	4.00	17.50
Premier .....	.40	1.00	1.90	6.00	25.00
Sample (Imp.) .....	.40	1.00	1.90	6.00	25.00
Wm. Belt .....	.50	1.10	2.15	7.00	30.00

All prices F.O.B. Salisbury, Md. Illustrated, descriptive catalog free. "You get your money's worth with ALLEN'S Plants." We guarantee our plants to reach you in good growing condition. Prompt shipment.

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SENSATION—One of the most productive oats in cultivation. 75 bu. and upward per acre are frequent, with large, white, meaty grains weighing 44-46 lbs. per measured bu. of the highest quality. We are making an exceptionally low price in quantities. You should buy all means try these oats. Also Early Clange and White Cap Seed Corn, Bearded and Smooth Barley, Soy Beans and Sweet Clover. Write us for samples and prices.

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Spring and Fall. Great yielder of big beautiful berries. Write for FREE Catalog of Berry Plants, Trees, Shrubs, Vines, Perennials, etc.
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"The Strawberry Man" for 46 Years

Certified Seed Potatoes

Green Mountains, Irish Cobblers, Smooth Rurals and Russet Rurals—College inspected. Satisfaction upon arrival guaranteed. Write for prices. We pay the freight.
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Eureka Potato Machines take hard work out of potato growing. They reduce time and labor costs. They assure bigger yields.

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Cuts uniform seed. Operates with both hands free for feeding.

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One man machines doing five operations in one. Over twenty-three years' success.

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Insures the crop. Sizes, 4 or 6 rows. 60 to 100 gallon tanks. Many styles of booms.



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Breaks crusts, mulches soil, and kills weeds when potato crop is young and tender. 8, 10 and 12 ft. sizes. Many other uses, with or without seeding attachment.

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LIVERMORE'S PEDIGREED SEEDS

Potatoes - Oats - Barley - Silage Corn
Husking Corn - Cabbage

From HIGH YIELDING, TESTED STRAINS. Inspected for disease-freedom and purity.

K. C. LIVERMORE, Box A, HONEOYE FALLS, N. Y.



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American Agriculturist, 461 Fourth Ave., New York City.

Gentlemen: Kindly classify and insert my advertisement of words to appear times in your paper. Enclosed find remittance of \$..... to pay for advertisement, which reads as follows:

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Just Dip and Plant



Semesan Bel instantaneous seed treatment gives potato yields like this!

SEMESAN BEL treated seed produced this heavy crop of high quality potatoes on Reed Bros. farm, Aroostook County, Maine.

Don't waste time on old-fashioned, often harmful soak treatments when the Semesan Bel instantaneous dip method gives yields like this.

Thousands of growers have already learned that seed treatment with Semesan Bel is a sure, safe way to healthy potato yields. Last year alone enough Semesan Bel was used to treat the combined potato acreage of Idaho, Illinois, Ohio, South Dakota and Texas.

Seed is Seldom Disease-Free Even certified seed will not make your crop immune to disease, for most seed carries some infection. Dr. Wm. H. Martin, of the New Jersey Experiment Station, warns: "There is no state that does not permit at least 10% of scab and Rhizoctonia."

Be safe; treat all your seed with Semesan Bel and protect against losses from surface-borne scab, Rhizoctonia and black leg of white potatoes. Effective, too,

against black rot and scurf or soil stain of sweet potatoes. No soaking; no hot water. Just dip and plant!

Quick, Safe, Inexpensive

Semesan Bel may be used on whole, cut and even sprouted seed, which older treatments often injure. No costly equipment required. One man can treat 200 to 400 bushels of seed a day. A pound treats 22 bushels of whole or large seed, or 16 bushels of small or cut seed at very low cost.

Semesan Bel Increases Yield

F. F. Ebert, of Indiana, used Semesan Bel on certified seed and dug 7½ bushels more per acre. W. H. Gordon, of Texas, had an increase of 19 bushels per acre, and C. E. Randolph, of Maine, of 21 barrels per acre.

Diseases of many other crops can be controlled with Du Bay Seed Disinfectants. Mail the coupon below for information, or ask your seedsman, druggist, hardware dealer or general merchant for pamphlets on Ceresan, for seed grains; Semesan Jr., for seed corn; and Semesan, for vegetable and flower seeds and bulbs.

BAYER-SEMESAN COMPANY, INC.,
Successors to Seed Disinfectants Divisions
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Instantaneous Seed Potato Dip



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With the A. A. Vegetable Grower



Soil for Hotbeds and Plant Boxes

Can you give me information on ground and fertilizer to use in a hot house? I want to try and raise some lettuce, radish and tomato plants for spring. How deep should the trays be for dirt? What temperature would be best? I want to try this in one side of my brooder house where the sun comes through.—C. A. J., New York.

SOIL for greenhouse culture for plants ought to be prepared at least the previous season and many like to get started with it 18 months ahead. The idea is to have a moderately light sandy loam, but containing enough fine material to give it good moisture-holding capacity, abundant well rotted manure for plant food and for good physical character and finally freedom from disease. If you can lay hands on a good rich sandy loam and have some thoroughly rotted manure, you can make a fairly satisfactory soil by mixing about two parts of the loam to one of the manure. If this could be composted for several months and turned a couple of times, it would be greatly improved. You will not likely have to use commercial fertilizer if manure is abundant, although it might be worth while to mix a little acid phosphate in the soil.

Size of Flats

We like flats 2½ or 3 inches deep and 13x18 inches outside dimensions. Ten of these take up the space under one cold frame sash. For lettuce and cabbage plants, a night temperature of 50 or 55 degrees or a day temperature of about 60 degrees would be satisfactory. Tomatoes might be kept 10 degrees warmer. I do not believe it would be worth your while to start radish plants under glass.

Your success in growing plants in the brooder house will depend pretty largely upon the amount of light you can get. A couple of rows of plants along the window should do fairly well, but it is difficult to get good plants if there is much shade.—Paul Work.

Disinfecting Sweet Potato Plantbeds

What recommendations are usually given for preventing the several diseases which are so prevalent in sweet potato plantbeds?

THE New Jersey Experiment Station recommends sterilization of the soil with formaldehyde. This is done by mixing 8 pints of formalin in 100 gallons of water and applying it to the soil at the rate of a gallon to every square foot of the soil. The soil is then covered with a burlap or canvas for 24 hours following which the soil is aired for 10 days before bedding the sweet potatoes.

Stirring the soil occasionally will help to aerate it. Since the soil can easily be reinfected it is advisable to disinfect the boots by stepping into a pail of disinfectant before working in the plant bed.

Muck Soil Fertilizers

Why are different kinds of fertilizers recommended for muck soils than are recommended for upland soils?

THERE are two reasons for this. First, different ratios or formulas are recommended due to the fact that a muck soil is high in nitrogen and low in minerals. In the second place it is believed that a fertilizer should be made up especially for muck soils due to the fact that muck is an unnatural type of soil. For example, it is believed that part of the potash in a muck soil fertilizer should come from kainit or manure salts because of the variety of minerals which it contains. It is also important in a muck soil fertilizer that the nitrogen comes from a source that is readily available. Muck soil is high in nitrogen and late in the summer there is plenty of nitrogen avail-

able for crops. The nitrogen that is added in the fertilizer should be available to the plants before the hot weather sets in.

How to Control Eggplant Rot

THE New Jersey Agricultural Experiment Station states that there is likely to be heavy losses from a disease known as eggplant rot. It has been found that from two to four per cent of the seed from most lots purchased carry this disease. Up to date no seed treatment is known which will destroy the disease on the seed without injury to the seed itself, consequently the best method of control is to use every possible precaution to get healthy seed and to rotate crops so that eggplants will not be grown on the same field two years in succession.

The station reports that the surest way is to save your own seed from healthy plants. If seed is purchased use only that which is brightly colored and from which all seeds showing black spots have been removed.

Treating Seed Potatoes With Organic Mercury

THE New Jersey State College has recently reported on some experiments with an organic mercury compound for controlling scab, rhizoctonia and blackleg of potatoes. In these experiments the seed potatoes were dipped in a solution made by dissolving one pound of organic mercury compound in 20 parts of water.

Following is an account of the procedure followed in treating the seed:

"Either a barrel or a vat may be used as a container for the organic mercury solution. New Jersey growers commonly use a barrel cut down to hold a bushel basket. As a container for the potatoes either a wooden hamper or a wire bushel basket is satisfactory, although the latter is better since it allows ready drainage. Drain boards should be provided on each side of the barrel.

"The basket is filled with potatoes and placed in the solution—using enough of the latter to cover the bushel. Move the basket up and down several times to ensure that all of the potatoes are covered with the solution; then remove and place it on the drain board so the excess mercury solution will drain back into the treating tank. When the basket has been sufficiently drained the potatoes should then be poured out in baskets or on the floor to dry.

"A second container of the organic mercury solution should be available so that when the material in the treating barrel is below the level of the potatoes enough can be added from the reserve supply to restore the initial volume. If the potatoes are muddy it is advisable that they be dipped in water before treating since the presence of excessive amounts of dirt may result in the setting of the chemical."

A New Form of Nitrate

I recently read something about a new form of nitrate of soda. The item stated that this form drills much easier and does not absorb moisture. Most forms of nitrate do. Can you give me any more information about this product?—T. W., New York.

WE understand that this new product has given good satisfaction experimentally. It is no different in composition from the ordinary nitrate but rather than being in small granules, it is made up of particles about the size of buck-shot. We also understand that there has been a breakdown in the machinery of the company manufacturing this form of nitrate and that there will be very little of it on the market this spring.

The Tourist Home and How To Furnish It

(Continued from Page 3)

air—and alas, of flies! Instead of country homes where windows are rarely raised with musty, stuffy rooms, damp and unpleasant, where the windows are often unscreened and can't be raised, or else are screened with half screens, folks like to find homes with wide opened windows screened with full sized screens. Cross ventilation in bedrooms is important.

Good beds are essential. This means good springs and a mattress of a good make. Guests are paying for rest. They cannot be expected to get it on a corn husk mattress or one that sags in the middle or is full of bumps and knobs. Clean bedding must be provided. Pillow cases need especial care to keep them white. If quilts are used, and home pieced ones can be very attractive, the ends should be covered with a covering which may be washed and kept immaculate.

It is almost necessary to serve some meals and one must be prepared to serve them when the tourist wants



Mrs. C. B. Maybury's tourist home near East Homer, New York. Her sign does not show here but she has a good one which is easily read and is attractive.

them, be it late or early. Refrigeration is an absolute necessity. Home-canned meats in the cellar and vegetables in the garden are an asset. Meals can be very simple but the food must be excellent, especially the coffee. News of good coffee travels far and many a place has built a reputation on good coffee. It is a good rule for the family not to eat with the guests. In fact, the family must be quite unobtrusive at all times, providing as much privacy as the guests desire. Many people prefer the impersonal treatment of a hotel. When guests show an inclination to visit, friendliness and hospitality should expand to meet it.

The personality of the hostess will add to or detract from the success of the home. She must know how to meet the public, be hospitable and gracious. She must always be clean, well groomed and attractive to meet her guests at the door. This will at times be difficult but can be managed if she realizes the importance. One manager, who milks at about the time tourists frequently arrive, takes a crisp, white slipover apron to the barn. She wears boots while milking but takes her good shoes along and when she hears a car drive up, it is only a matter of seconds until she is ready to greet her guests, fresh and clean and pleasant to look upon. No wonder a guest wrote in her guest book:

*Of tourist homes this is complete
For rest and eats and friend
Should we again come by this way
We'll stop for the week-end.*

—N. K. M.

Furnishing the Tourist Home

THE tourist home is the ordinary, home with its arms open to the traveler, the transient who desires the warmth, the repose, the exclusion which the rest of the moving world neither expects nor receives at a hotel. Yet because he is a traveler and approaches the night's shelter in a business capacity he expects comfort and quick impersonal service.

Just what can the owner of such a tourist home do to her house to give it the air of welcome and efficiency which it will be expected to have? For now that a varied portion of the public is certain to pass through a considerable part of the house it must be

arranged to fulfill its new capacity with the best possible taste.

First, rooms which can best serve the traveler must be set aside for his use and means to achieve constant and strict cleanliness must be provided. Then the eye must be turned to the furnishing. Here a little careful thought, eliminating of all undesirable things, and a very little expenditure will add the note of charm for which the transient visitor is certain to look.

The point that rooms are a background for the people in them must be kept in mind. Walls that are shabby or papered in garish designs and color should be repapered with an inexpensive neutral paper without pronounced design. Oatmeal or crepe-like paper is good. Curtains whether patterned or unpatterned should easily harmonize with the walls. Old drapes can be freshened by dipping into a dye of some soft greyed color such as ecru

or a pale mixture of orange with a little blue in it to grey the orange or "tone it down." Any color which one would wish to dye the curtains should be "toned down" in this same manner with a little of a contrasting color. New drapes of some material which is rich and restrained in color and not silky or shiny in texture can replace the old ones with little expense. For this purpose theatrical gauze, plain gingham or inexpensive damask dyed are excellent. Furniture can be freshened with slip covers and made comfortable with pillows of burlap, rough weaves or cretonnes. A note of interest can be added to unpatterned materials by weaving various colored yarns into the cloth weave in a plain border.

Now regard your rooms, seeing what can be eliminated. All things of a personal nature, family portraits and photographs that could have no interest to the casual observer had better

be placed in the family rooms. The remaining pictures should either form a part of a furniture group hanging near a table and lamp, or above a chair beside which is a bridge lamp and a magazine stand, above a fireplace, etc. If there are many scatter rugs, retain only those which are essential to cover passage parts of the room, or that seem to "tie up" with a piece of furniture such as a bed, dresser, couch, table, fire place, etc. Overlapping rugs are in bad taste for there are two doing the work one should accomplish.

Eliminate all accumulations of curios, gifts, tidies, or runners that do not seem truly beautiful both by themselves and combined with the rest of the furniture. The room should appear harmoniously like a single unit, not confused or spotty.

Now arrange the furniture thoughtfully, keeping in mind both order and

(Continued on Page 15)

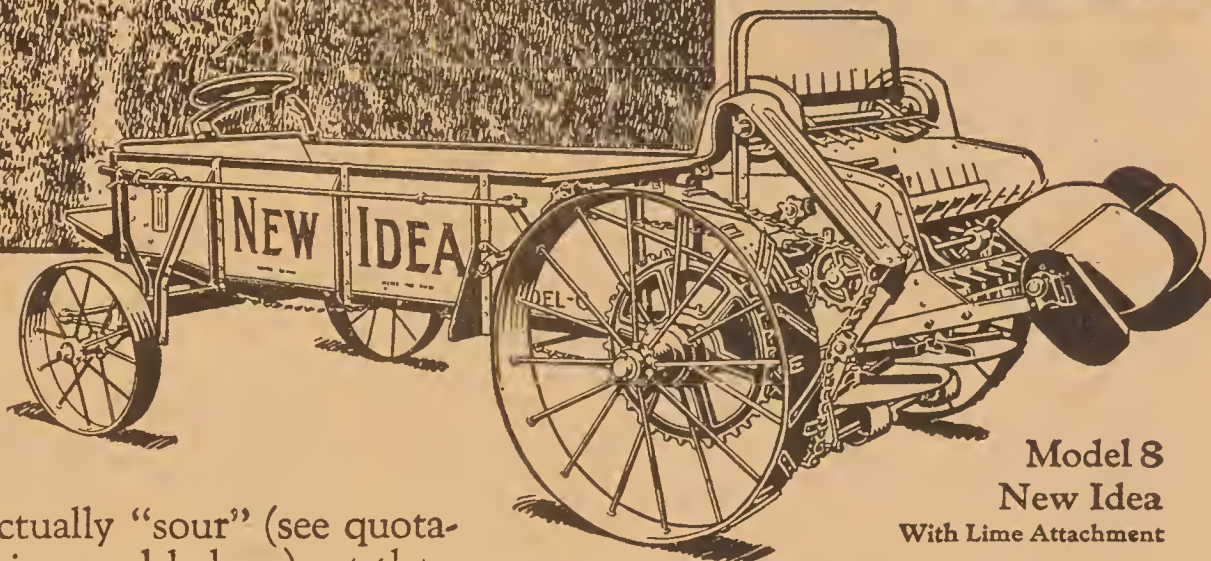
Sweetening—for 2 Million Farms



AUTHORITIES

Estimate that two million farms in the United States need lime right now. Only the few-

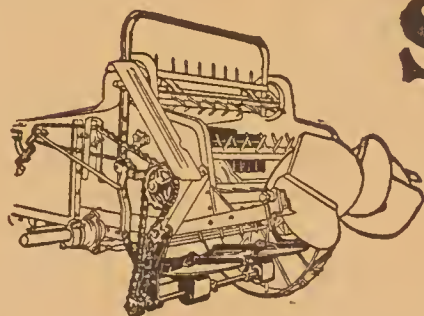
est of these farms are actually "sour" (see quotations from U. S. Bulletin in panel below;) yet they are "calcium (lime) deficient." In the language of the same bulletin, they "will respond in increased yields to applications of lime." Of course lime does not fertilize. Manure is the other requisite. And now the world's leading manure spreader can be converted by a simple attachment, into a perfect acting, easy handling, lime spreader.



Model 8
New Idea

With Lime Attachment

Lime Spreading Attachment for the NEW IDEA Spreader

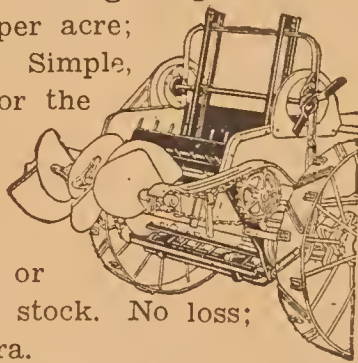


ATTACHED to any Model 8 NEW IDEA Spreader in thirty minutes. Fits it to spread lime, marl—anything finely pulverized

The low spreader sides make easy loading. To unload, set the feed and spread. No hand shoveling or dusty labor; no lime thrown up in the air or getting into bearings. Feed adjustable, 1½ to 5 tons per acre; spreads perfectly 15 to 20 feet wide. Simple, strong, low in cost. Furnished only for the New Idea Spreader.

Special Tail Board Attachment

Handles the difficult manure resulting where shavings, sand, sawdust or similar materials are used for bedding stock. No loss; perfect spreading. Furnished as an extra.



THE NEW IDEA SPREADER CO.

Syracuse, N. Y.	Harrisburg, Pa.	Columbus, Ohio
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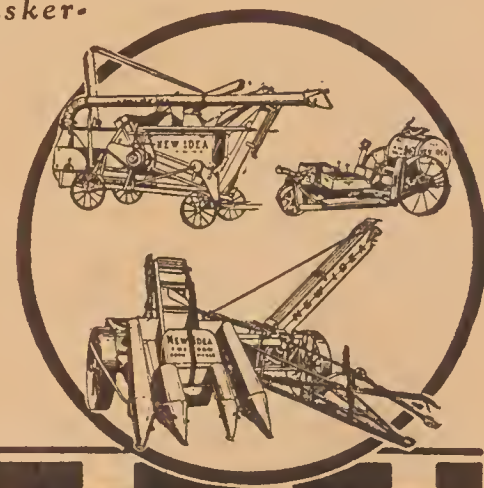


"***soils of the East, South and portions of the Central West are deficient in lime." "the great majority ** that respond to liming are not strong acid." "The conditions ***tend to recur again *** This makes it necessary to repeat the liming." "liming should not be expected to build up such a soil unless organic matter is supplied ** manure or green crops plowed in."

U. S. Dept. of Agric. Farmers' Bulletin No. 921.

WHEN you buy a spreader, you certainly want the qualities of the NEW IDEA Model 8—light draft, short turn, easy loading, free ground clearance, perfect control, comfortable operation and flawless spreading. Tested for five years and never worn out. And now that you can get the new Liming Attachment, you will need the New Idea more than ever.

Manufacturers of Spreaders, Lime Spreading Attachments, Husker-Shredders, Transplanter and Two Row Corn Pickers. Ask for full descriptions on any of these machines.





TO permit your cows to freshen without aid is to invite trouble. It is well known that most disorders that lower production have their origin at calving time. The terrific strain of producing a healthy calf and coming through with vigorous milk-giving capacity calls for definite conditioning aid.

As a dependable aid at this critical time Kow-Kare has a thirty-year record of success. This scientific compound of Iron, the great builder and blood purifier, combined with potent herbs and roots fortifies the digestive and genital organs for unusual strains. Numberless cow owners now "play safe" with every freshening cow by using Kow-Kare for a few weeks before and after calving.

For barn-fed cows, when heavy, dry feeds force down the milk-line in the pails, the invigorating aid of Kow-Kare in toning up digestion and assimilation will bring the extra quarts of milk by eliminating feed waste. Try this regular winter conditioning on your poor milkers and see what surprising results a few cents per month per cow can accomplish in yield and health.

Drug, hardware, feed and general stores sell Kow-Kare—\$1.25 and 65c sizes. If your dealer is not supplied we will mail postpaid.

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Lyndonville, Vermont



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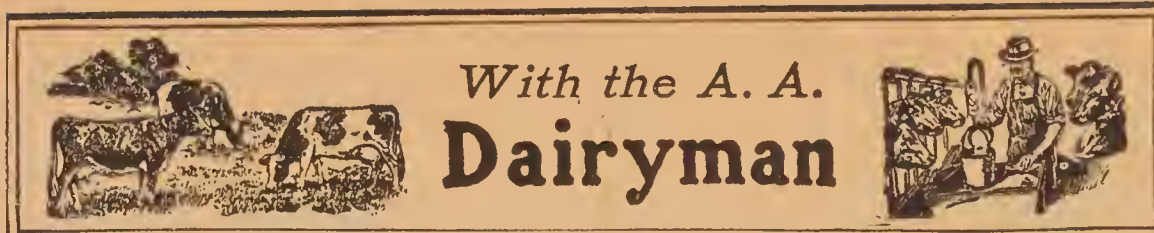
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Oldest Ready-Mixed Paint Factory in America. Est. 1842
252 Plymouth Street, Brooklyn, N. Y.



Paper Bottles for Milk

WHAT may prove to be an epoch making development in milk delivery was introduced in New York City during the second week in January when the experimental use of a new sealed, waxed paper milk container, the "sealcone", was started by the Sheffield Farms Company, Incorporated. The first distribution consisted of 50,000 and was localized in Harlem and the Bronx.

This new sealcone attracts instant attention. To see it is to desire to touch it, to hold it up to the light, to twist and turn it for minute examination. Standing all in a row these individual milk containers by their unsophisticated appearance bring a smile of wonderment. They seem so simple, yet those who have sponsored the development of the sealcone have spent 13 years and upward of a million dollars, it is said, in evolving this amazing new sealed milk container.

It is a cone-shaped container made of spruce fibre, paraffined. Special patented machinery, made, sold and installed by a New York City firm, manufactures the sealcone new, sterilizes, fills and seals it in a quick, continuous process. This special machinery has been installed in the plant of the Sheffield Farms Company at 1045 Webster Avenue, New York City, and it is from this plant that the delivery of milk in sealcones is now being made.

Many desired improvements over old fashioned methods of milk delivery are claimed by the sponsors of the sealcone. Basically it is made of paper and is a one service container entering the home clean and fresh. It may be destroyed as soon as it is used. It is declared, moreover, that the sealcone is durable, leak-proof, air-tight and that the metal seal of the container is absolutely tamper proof giving the consumer fresh, sweet milk in a perfectly sterile container. Tests, it is claimed, have shown that the sealcone keeps milk sweet for several weeks due to the very low temperature at which the milk may be placed in the container.

When the consumer receives milk in the sealcone the top of the container is simply cut off with a pair of scissors. Any unused portion of the milk may be protected by firmly folding over the cut edges of the sealcone. Due to the shape of the sealcone, the milk pours out easily and the visible cream line enables the user to gauge the depth of the cream.

Consumers Report Favorably

Previous to the present trial of the sealcone, it was tried out for a year in Paterson, N. J. Its present use by the Sheffield Farms Company, a corporation that delivers 800,000 quarts of milk daily in New York, is meeting with a decidedly favorable reception from the housewives receiving it according to press reports. Sealcone features which interest the housewife are the freedom from bottle washing that results from discarding the one service container, the ease with which a child can handle it, the convenience with which it may be carried with other bundles, and the refrigerator space-

saving made possible by placing the sealcone in any desired position.

Weighing only one and one-half ounces unfilled, the sealcone after it is filled is so shaped that the sealed containers may be nested, six inverted and six upright, in corrugated boxes for delivery. So packed, two cases each holding 12 quarts of milk, occupy no more space than the usual wooden box holding twelve glass bottles. The resulting saving in labor and the space saving in delivery are evident. Use of the sealcone eliminates entirely the washing of bottles in the dairy, deposits on bottles and the handling of bottles.



The consumer simply snips off the top of the sealcone with a pair of scissors.

Present estimates place the cost of the sealcone at three-quarters of a cent. Special patented machinery for manufacturing the sealcone is divided into three units, the forming machine, the paraffining machine and the filling and sealing machine. Special paper blanks, die cut to proper shape and size to make quarts, pints or half-pints, are fed into the forming machine by the operator. In this machine they are formed into a cone-shaped tube fastened together on the outside by a special sealing strip. A cup-shaped circular disc is tightly spun into the larger end of the cone to form the bottom.

Puts Date of Pasteurization On Seal

From the forming machine the sealcones pass to the paraffining machine. By an automatic process this apparatus impregnates the entire container with super-heated refined paraffin wax. From the paraffin bath the containers are automatically cooled, and protected from contamination, conveyed immediately and directly to the filling machine. This machine, by an automatic process, fills the container with an exact measure of milk, and again automatically, the full container is conveyed to the sealing station where the metal seal is secured in position. At the time the seal is placed on the container the day of pasteurization is automatically stamped on the metal seal itself.—JESSE HILL.

Retesting Accredited Areas

Could you tell me how often cows are supposed to be tested. The cattle in this county were tested two years ago. How long should it be before they are supposed to be tested again and where would we get a veterinarian? In case of reaction does the state pay indemnity and are the people supposed to have it done? The state has tested twice.—C. St. O., New York.

IN this connection you are advised that dairy cattle in this state, after the herds have been placed under official supervision, are tested in accordance with the policies and regulations of the accredited herd agreement, usually every 60-90 days until the herd passes a clean test and thereafter once each year until the percentage of tuberculous animals in the county has been reduced to less than one-half of one per cent. Then the county is declared (Continued on Page 11)



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Bought by
the Wisest Dairymen
in the East

Hundreds of dairy farmers who measure every farm purchase for value, quality, endurance, convenience and appearance—insist on a Unadilla. The fact that more Unadillas are sold than any other make proves that these farmers choose wisely and profitably.

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UNADILLA SILO COMPANY
Box B, Unadilla, N. Y.



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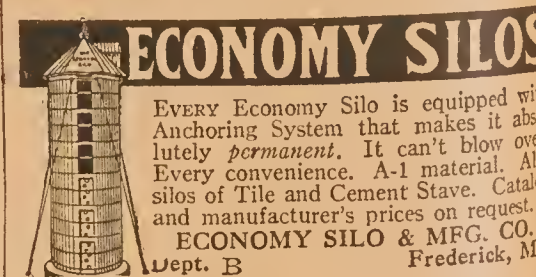


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ABSORBINE will reduce inflamed, strained, swollen tendons, or muscles. Stops the lameness and pain from a splint or soft curb. No blister, no hair gone, and horse can be used. \$2.50 at druggists, or postpaid. Describe your case for special instructions. Interesting horse-book 2-B free.

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A New Exterminator that Won't Kill Livestock, Poultry, Dogs, Cats, or even Baby Chicks

K-R-O can be used about the home, barn or poultry yard with absolute safety as it contains **no deadly poison**. K-R-O is made of Squill, as recommended by U. S. Dept. of Agriculture, under the Connable process which insures maximum strength. Two cans killed 578 rats at Arkansas State Farm. Hundreds of other testimonials.

Sold on a Money-Back Guarantee. Insist upon K-R-O, the original Squill exterminator. All druggists, 75c. Large size (four times as much) \$2.00. Direct if dealer cannot supply you. K-R-O Co., Springfield, O.

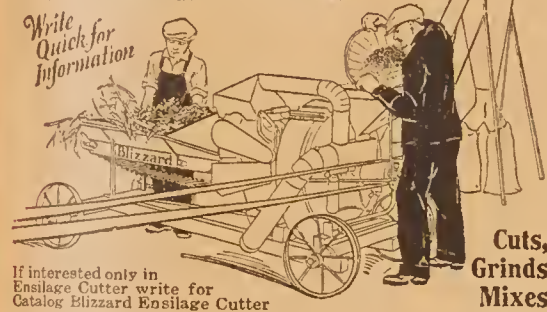
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New Invention Combines Ensilage Cutter-Hammer Mill!

Ensilage Cutter has well-known Blizzard qualities of big capacity, light-running, thoroughness. In half an hour easily changed to Hammer Mill that gives greater capacity with half the power and speed. Entirely new principle. It cuts roughage into 3-16 inch lengths before grinding, and will grind grain at same time, mixing automatically. Requires only 10-20 tractor power, 1500 r. p. m. speed. 7-inch pulley. Greater screen area and longer travel of hammers gives amazing capacity. Price of combined machine less than mill of similar capacity.

Address THE JOS. DICK MFG. CO., Dept. 85
CANTON, OHIO, for circular.

Blizzard Cutter Mill



If interested only in Ensilage Cutter write for Catalog Blizzard Ensilage Cutter

Cuts, Grinds Mixes

SWINE

FARMERS BUY FROM FARMERS

Let us suggest to you as breeders the best kind of a pig to start to raise is a good one. You save time and money. We sell all pigs with a trial of two weeks, and then if dissatisfied, return pigs and we will return your money.

7-8 wks. old, \$4.00 ea.; 8-10 wks. old, \$4.50 ea. Breeds—Chester and Yorkshire cross, and Berkshire and Chester cross. Crating free. These prices F.O.B. our depot. Will ship any number C.O.D. or send check or money order.

MISHAWUN STOCK FARM,
MISHAWUN ROAD, WOBURN, MASS.
P. S. No pigs sold at the farm; only by appointment.

SPRING PIGS FOR SALE

Buy where quality is never sacrificed for quantity. We sell only high grade stock from large type Boars and Sows, thrifty and rugged, having size and breeding. Will ship any amount C.O.D.

Chester & Yorkshire — Berkshire & Chester
7 TO 8 WEEKS OLD\$5.00
8 TO 10 WEEKS OLD\$5.50

Also a few Chester barrows 8 wks. old, \$6.50 each. Satisfaction guaranteed or money refunded. 10 days trial allowed. Crates supplied free. A. M. LUX, 206 Washington St., Woburn, Mass. Tel. Wob. 1415.

PIGS FOR SALE

OLD RELIABLE STOCK

Heavy legged, square backed. Chester and Yorkshire crossed, Poland China and Chester crossed, Barrows, boars or sows 6-8 weeks old \$4.25—8 to 10 weeks old \$4.50 each. Fancier Berkshires, also Chester Whites, 2 months old Sows and unrelated Boars, 6.00 each. 10 days trial or your money back. Shipped C. O. D. Crating free of charge. Yours for quality hogs.

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GOOD HEALTHY FEEDING Pigs for sale. No farm has any better pigs. Chester & Yorkshire crossed 7 weeks old \$4. each. Berkshire & Chester crossed 7 weeks old \$4. 9 weeks old either sex crossed \$4.25 each, also some nice Chester Pigs 7 weeks old \$5. each. Sold subject to approval C. O. D. Keeps the pigs 10 days, if not satisfied return them and your money will be refunded. MICHAEL LUX, Box 149, Woburn, Mass.

BEST GRADE Chester, Berkshire and Poland China Pigs. 3 months old, \$12.00 each; 6-8 weeks old, \$7.00 each. (Express Paid). Bred Sows and Boars. C. E. BOSSERMAN, York Springs, Pa.

FOR SALE: REGISTERED Percheron stallion, Black, coming three, weight 1600 pound, good conformation, good disposition. HOWARD L. PATTEN, Lawrenceville, N. Y.

AMERICAN AGRICULTURIST Classified Ads get results. Try one.

(Continued from Page 10)

to be a modified accredited area and testing of herds is required once every three years.

Our records show that the county of Hamilton is now a modified accredited area and therefore the herds are to be tested once in three years. Inasmuch as the testing thus far in Hamilton County has been performed by state veterinarians, in all likelihood the retest, when due, will be made without expense to the owner or to the county.

In case any animal reacts to the test and is slaughtered upon the order of the Commissioners of this department indemnity will be paid in accordance with the provisions of the agriculture and market law.—Dr. H. J. Henry, Assistant Commissioner, Department of Agriculture and Markets.

What Does It Cost To Rear a Bull?

REARING a bull to serviceable age is comparable to rearing a heifer to first calving. The main difference is that with a bull the time required is about one year and with a heifer two years. Of course, costs will vary with different sections. It is easier to rear either a heifer or a bull of course, where there is skim milk available, but it is not to be had in market milk regions so more care is needed to grow a bull and it will take more whole milk than where skim milk is available. Different feeders will get the same results from different amounts of grain also, but the State College has found that the following amounts of feed and other items of cost in rearing a bull are about average:

Feed:	
Whole Milk.....	500 pounds
Skim milk.....	200 pounds
Grain.....	650 pounds
Silage and succulence.....	600 pounds
Labor.....	40 hours
Miscellaneous:	
Bedding, buildings, interest, losses, etc. (less credits):	
	Add 15% of total costs.

The value of all of these items is approximately \$75 or putting it another way, it costs about \$75. to grow a yearling bull under average conditions.

Costs for the second year are much less due to the absence of milk and a much lower expenditure of labor.

Holstein Association Wins

AFTER ten years of fighting in the courts, the Holstein Friesian Association is now free from all litigation. The U. S. Circuit Court of Appeals recently handed down a decision in favor of the Holstein Friesian Association and against George E. Stevenson. Mr. Stevenson sued the Association to recover damages of \$25,000 that he alleged he sustained by his expulsion by the board of directors of the Association as an undesirable member.

Our readers will also remember the case of Oliver Cabana, Jr. whose records were thrown out by the Holstein Friesian Association because it was claimed that they were wrongfully and illegally made out by injecting extra cream into the cows' milk. Cabana has discontinued his action against the Association.

Calves Have Ringworm

"We have several yearling calves that have ring worms around the eyes and several spots on the body. Can you tell me anything that we can get to cure them."—J. E., New York.

RING worm is caused by a parasite which grows on the skin and which must be killed before the trouble will stop. The treatment is to remove all crusty spots by washing with soap and water and then applying once a day either acetic acid, sulphur ointment, tincture of iodine or nitrate of mercury ointment. The stables should be cleaned and whitewashed in order to prevent the spread of this disease to other animals in the barn.—H. L. C.

A cow must have three quarts of water for every quart of milk she produces.

Free Trial

of either of these New Milkers

De Laval Magnetic

—the World's Best Milker

... or ...

De Laval Utility

—for the Low Price Field

Just send coupon

NOW you can try one of these wonderful new De Laval Milkers in your own barn, on your own cows—so you can see exactly what a De Laval Milker will do for you—without obligating yourself in any way.

THE DE LAVAL SEPARATOR CO., Dept. 1-36
165 Broadway, New York, N. Y.

Without obligating myself in any way I would like to have a **free trial** of a

De Laval Milker { Magnetic ☐ check
Utility ☐ which

I milk.....cows.

Name.....

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Herd Infection—

Write for information. Ask for a **FREE** copy of **THE CATTLE SPECIALIST** and how to get the **PRACTICAL HOME VETERINARIAN**

a livestock Doctor Book without cost. Find out why your cows lose calves—why they retain the afterbirth—why they fail to breed—why they have garget—why your calves have scours and goiters—why you have a shortage of milk. Veterinary Advice Free. Write to

DR. DAVID ROBERTS VETERINARY CO.
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Livestock Breeders

CATTLE

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DISPERSAL SALE

115 REGISTERED HOLSTEIN CATTLE

1 mile east of Attica, N. Y. which is 30 miles east of Buffalo. 10 miles south of Batavia. Good roads.

APRIL 3-4, 1929

Entire herd of F. D. VanBuskirk goes for the high dollar. A genuine breeders' herd since 1908. **HERD FULLY ACCREDITED**—6 years—60 day retest privilege. 19 daughters of 30 lb. cows to be sold.

Many fresh cows, close springers, others bred to freshen in fall. **HIGH CLASS OFFERING** of bred and open heifers. Buy them now. The pasture season is just ahead.

30 lb. herd sire to be sold with many of his daughters. A few other well bred bulls. Sale starts at 10 A. M. each day. Held in comfortable quarters. Dinner served. 50 maternal descendants of the 32.98 lb. cow, Colantha Jewel Mercedes, who with her four 30 lb. daughters were all developed here.

Write for catalog now to

F. D. VanBuskirk, Owner, Attica, N. Y. R. Austin Backus, Sales Manager, Mexico, N. Y.
Col. Glenn R. Mead, East Aurora, N. Y., Auctioneer.

6 COWS, 11-2 year old heifers, 6 bulls 3 to 18 months old. 4 calves 3 months old, 2 registered guernsey calves 3 months old TB Tested.

SPOT FARM, TULLY, N. Y.

ORCHARD GROVE MILKING Shorthorn Herd founded 1887. Young stock at reasonable prices. Come or write. L. R. HATCHKISS, West Springfield, Erie Co., Pa.

PUREBRED OR HIGH Grade Holstein Cattle. Heifers and Springers—all tuberculin tested. Springers on hand at all times. "Tell us what you want and we will have it." Carload or less than carload lots. **STRUBLE & MARTIN,** Milford, Pa., Newton, N. J.

MAPLE LAWN MILKING Shorthorns for sale, red bull calf sired by a son of the many times grand champion Duke of Glendale, his eight nearest dams average better than 10,000 pounds milk. Herd accredited. W. W. CURTIS, Hilton, N. Y.

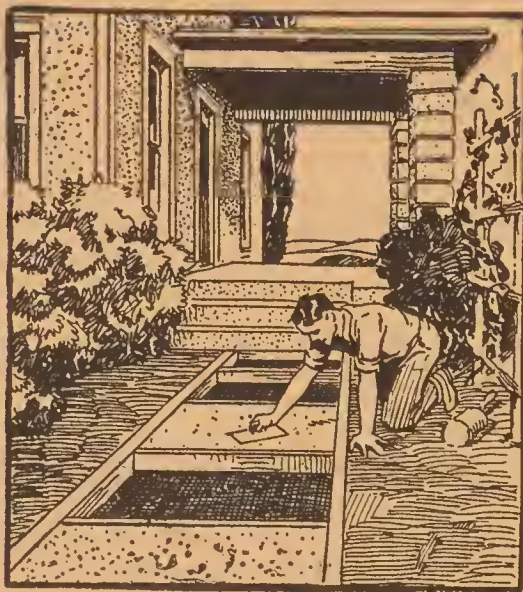
FOR SALE—At all times Guernsey and Holstein cows and heifers in carload lots. **FRED JENSEN,** Waupaca, Wis.

GOATS

EASTERN HERD, FINEST in America, California Purebred Nubians; Toggenburgs; soon fresh, for invalids, babies. Fine Bucks, Kids, Pairs, Trios, herds, wholesale prices. **GOLDSBOROUGH GOATERY,** Mohnson, Pa.

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Build CONCRETE Walks Yourself!

Build labor-saving concrete walks around your house when other work is not pressing.

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Please send me your free booklet "Concrete Improvements Around the Home."

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FISHKILL FARMS

are offering a highly bred bull calf, born March 5, 1929—out of

FISHKILL ALKEN ORMSBY DEKOL

one of the best daughters of

Hengerveld Homestead DeKol 4th.

She made a record of production of 11,769 lbs. milk and 548 lbs. butter in 341 days, at the age of 3 years and 8 days. Her average test for one year in Class C was 3.96%. Her seven day record at the same age was 533 lbs. milk and 25.9 lbs. butter.

It is a son of this great producer we are offering and he is a bargain at

\$75.00 If taken within 30 days F.O.B.

For full details of pedigree, terms of sale, etc., write

FISHKILL FARMS HENRY MORGENTHAU, JR., Owner
461-4th Ave., New York, N. Y.

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WHITE AND BROWN

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Write or wire for quotations, tags, market conditions, etc. Prompt returns—Top prices—Take advantage of 25 years experience. Try us.

JOSEPH C. BERMAN, Inc.,
West Washington Market, New York City

EGG CASES

Wholesale dealer and shipper of second hand egg cases. Car lots a specialty.
LOUIS OLOFSKY, 685 Greene Av., BROOKLYN, N. Y.

Reviewing the Markets

Milk Prices

The following are the March prices for milk in the basic zone of 201-210 miles from New York City.

Dairymen's League prices are based on milk testing 3.5%. Sheffield on the basis of 3%.

Class	Dairymen's League	Sheffield Producers
1 Fluid Milk...	3.37	3.17
2 Fluid Cream		2.30
2A Fluid Cream	2.46	
2B Cond. Milk...		
Soft Cheese...	2.71	
3 Evap. Cond. Milk Powder		2.30
Hard Cheese	2.40	
4 Butter and American cheese. Based on New York City Market quotations on butter and American cheese.		

The Class 1 League price for March 1928 was \$2.90 for 3.5% milk and Sheffield's \$2.80 for 3%.

The above prices in each class are not the final prices the farmer receives. The final price received from the dealer is the result of the weighted average.

Butter Market Very Sensitive

CREAMERY	Mar. 20	Mar. 13	Mar. 21, 1928
SALTED			
Higher than extra...	47 -47½	48¾-49½	49¾-50
Extra (92sc).....	46½	-48½	49 -49½
84-91 score.....	45 -46¼	46½-48¼	44½-48¾
Lower Grades.....	44 -44½	45 -46	43 -44

The butter market is in a very sensitive condition. We are entering the spring storage deal and that period when prices are on the downward trend. Naturally receivers are not desirous of being caught with a lot of high cost butter on their hands and they are adopting a free selling policy. The buyers are extremely cautious not to over-stock with prices on the downward trend. As a result we have a constantly changing market that is very difficult, in fact impossible to anticipate. A slight increase in the receipts or a slight drag in the buying interest will cause an upset in the market within an hour or two. This was characteristic of the market on Monday, March 18, when there was a slight advance, bringing creamery extras up to 48c. The following day prices slipped off to 47½c and by Wednesday full receipts and slow buying cut off another full cent. The changes in the market during the second and third week in March have been so rapid that they have completely upset the calculation of most of the operators, and left them somewhat dazed and complexed. Whether the lower values will broaden the outlets remains to be seen.

No Change in Cheese

STATE FLATS	Mar. 20	Mar. 13	Mar. 21, 1928
Fresh Fancy.....	23½-25	27½-29	22¼-23
Fresh Average.....			
Held Fancy.....	27½-29	23½-25	29 -29½
Held Average.....			

There has been no change in the cheese market. Well cured New York State flats are meeting fair trade at 29c with some business up to 29½c where pet marks are concerned. Fresh cheese has not changed much, most of the stock selling at 23½c with small lots occasionally reaching 25c.

Live Fowls Sharply Higher

FOWLS	Mar. 20	Mar. 13	Mar. 31, 1928
Colored.....	-37	-33	31-33
Leghorn.....	-37	-33	28-30
CHICKENS			
Colored.....	32-36	32-36	
Leghorn.....	32-36	32-36	
BROILERS			
Colored.....	40-50		40-50
Leghorn.....	43-45		-40
CAPONS.....	-45	35-45	45-50
TURKEYS.....	25-40	25-40	30-50
DUCKS, Nearby.....	28-30	-28	28-30
GESE.....	20-22	20-22	18-19

Express fowls have taken quite a jump since last week. A general scarcity exists especially on Leghorn fowls, and the demand for them is quite insistent. Most of the colored fowls are heavy, and the trade is not particularly anxious for that line, but in the face of the shortage of light stock the heavier birds are working out quite freely.

Express broilers are in light supply especially fancy Rocks and values all along the line are fairly well sustained.

Other lines of poultry are selling well. Capons that can be graded as fancy are not over plentiful, in fact strictly fancy birds if on hand would bring more money than the quotations indicate. Hen turkeys are scarce, and

easily bring 40c, while the less desirable grades of Toms are working out slowly at 35c. Long Island spring ducks are moving steadily at slightly higher prices.

Egg Market Lower; Steadier

	Mar. 20	Mar. 13	Mar. 21, 1928
NEARBY WHITE			
Hen'y Sel. Extras...	34-35	35 -36	36-38
Hen'y Av'go Extras...	33-	-34	33-35
Extra Firsts.....	32-32½	32 -33	32-32½
Firsts.....			31-31½
Undergrades.....			29-30
Pullets.....			
Pewees.....			
NEARBY BROWNS			
Hennery.....	33-34	33½-35	34-37
Gathered.....	30-32	-33	30-33

Although the egg market has slipped slightly since last week, it is showing a steadier trend and goods are moving out on a little better basis. The demand for nearbys at the moment is quite active, although a few of the higher cost goods are not turning very freely. The outlook is satisfactory for the next few days. Western advices are higher and Chicago is above a parity with New York. That means eggs are going to be diverted to the central western market.

Feeds and Grains

FUTURES	Mar. 20	Mar. 13	Mar. 21, 1928
(At Chicago)			
Wheat (Mar.).....	1.23½	1.25¾	1.41¼
Corn (Mar.).....	.93½	.96¼	.99¾
Oats (Mar.).....	.46½	.47¾	.58¼
CASH GRAINS			
(At New York)			
Wheat, No. 2 Red..	1.55¾	.160	1.77¾
Corn, No. 2 Yel....	1.13¾	1.16¾	1.22¾
Oats, No. 2.....	.60	.61	.70½
FEEDS			Mar. 17, 1928
(At Buffalo)	Mar. 16	Mar. 9	
Grade Oats.....	37.00	37.00	39.00
Spring Bran.....	31.00	31.00	41.50
Hard Bran.....	35.00	35.00	44.00
Standard Mids.....	30.00	30.00	40.50
Soft W. Mids.....	39.50	39.50	48.00
Flour Mids.....	35.50	35.50	41.50
Red Dog.....	38.00	38.00	42.00
Wh. Hominy.....	38.00	38.00	41.00
Yel. Hominy.....	38.50	38.00	40.00
Corn Meal.....	41.00	41.50	42.00
Gluten Feed.....	48.50	48.50	44.75
Gluten Meal.....	60.00		54.00
36% C. S. Meal.....	45.50	46.00	49.00
41% C. S. Meal.....	49.25	50.25	55.00
43% C. S. Meal.....	52.25	52.25	57.00
34% O. P. Linseed Meal.....	56.50	57.00	54.00

Hay Prices Firmer

The whole hay market has taken on a better tone with much lighter receipts. On Wednesday, March 20 only one car of hay arrived at the 33rd Street yards. Demand is especially active for No. 1 timothy which is extra scarce, and the medium grades are also moving very well. No. 1 timothy on March 20 was quoted at \$27 to \$28 per ton. Timothy grading No. 2 and timothy containing mixtures of grass and clover, grading No. 1 were at \$25 to \$26. No. 3 timothy and No. 2 mixtures were quoted at \$21 to \$23. Other grades were from \$16 to \$19.

Budded from Bearing Trees

Our Apple, Pear, Plum, Cherry and Peach trees are budded from selected trees of superior quality. All Harrison trees are grown in our own nurseries, well-rooted, true-to-name and certified free from disease.



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in more than 30 varieties, Norway Maple and other fine shade trees, Shrubs, Hedge Plants and Hardy Flowers.

FREE Planting Guide. This book, based on more than 40 years' experience, will assist you in improving your orchards and beautifying your home grounds. Write for it today.

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New Models now ready for delivery direct from our factory. Astonishing low prices and terms. Do not buy until you get them. **RIDER AGENTS WANTED** to ride and exhibit sample. Make big money. Many models \$21.50 up. Guaranteed \$1.50 each, wheels, lamps, horns, equipment at half usual prices. Send No Money. Write for our marvelous prices and terms on **KANGAR Bicycles.** **Mead CYCLE CO.** Dept. D205 CHICAGO



FARM SEEDS

Approved Varieties Officially Analyzed and Tested. BEANS, BARLEY, BUCKWHEAT, POTATOES, CORN, OATS. Write for circular and sample. **E. F. HUMPHREY, Inc., N. Y.**

Marking Time at Albany

School Bills Will Be Passed--Road Bills Still in Question--County Notes

NOT much definite has been accomplished in Albany in the past week, ending at this writing on Thursday, March 21, on legislation of interest to farmers. Several disputes between Governor Roosevelt and the legislature have led to delay in the passage of farm relief bills and to lack of definite action.

Approximate agreement has been reached, however, for the passage of the bills for relieving the local tax situation in one-room school districts and in the smaller village districts with less than five teachers. The passage of these school bills will do much to help local taxpayers and to provide better schools.

The gasoline tax bill and the road legislation depending upon the passage of the gasoline tax bill are still in doubt, owing to disagreement between the Governor and the legislature. However, the indications are that an agreement will be reached before the legislative session ends, and that some kind of road legislation will be passed which will be of great benefit to local taxpayers.

Bills for Agricultural Research

Governor Roosevelt has sent a special message to the legislature adopting the recommendations of his Agricultural Advisory Commission urging the passing of three bills introduced by Senator Kirkland providing for an appropriation of \$167,000 to be used by the State College of Agriculture and the Geneva Experiment Station in emergency agricultural research work. These bills have met the approval of both parties and no doubt will be passed.

The legislature was excited recently over the Jenks Bill providing for state enforcement of the Eighteenth Amendment. The issue is still in doubt. City representatives, including Republicans from the cities, are lined up nearly solidly against the passage of this enforcement bill. Rural representatives are for it. It may eventually pass the Assembly, but has little hope in the Senate.

Daylight Saving Wins

A bill to do away with daylight saving was introduced by Assemblyman Cuvillier from New York City, and there seemed to be considerable sentiment even in the cities for its passage. However, those organized bodies in the cities, such as chambers of commerce, sportsmen's organizations, etc., in favor of the law, got busy and deluged Albany with thousands of telegrams and letters asking the legislature not to pass the bill.

Few telegrams or letters were received from rural representatives. This always seems to be the situation. City people are interested enough to let their representatives know how they feel on various issues. Farm people seldom are. It is easy to foretell the results of such policy.

The bill abolishing daylight saving came up for vote in the Assembly on March 20 and was sent back to committee by a vote of 78 to 64. This means the death of the bill for this year. Therefore, the cities of New York may continue to establish daylight saving regulations by local ordinance during the summer months.

Farm News from Washington

THERE is much discussion in Washington over what form the bills should take for federal farm relief. Leaders in Congress have been marking time waiting for definite indications or statements of views on the part of President Hoover on farm relief. The President, however, has just let it be known that he does not intend to express his views in detail beyond what he has already said in his campaign speeches. In his Palo Alto speech accepting the nomination, Mr. Hoover said:

"We stand specifically pledged to create a Federal Farm Board to further aid farmers' cooperatives and assist

generally in solving the multitude of different farm problems, but in particular to build up with initial advances on capital from the government, farmer-owned and farmer-controlled stabilization corporations, which will protect the farmer from depressions and the demoralization of summer and periodic surpluses. It is no proposal of subsidy or fee or tax upon the farmer. It is a proposal to assist the farmer onto his own feet into control of his own destinies."

This would indicate that the President would favor the McNary-Haugen Bill without the equalization fee feature. Mr. Hoover has also stated that there should be tariff legislation more favorable to farmers.

Congressional leaders will now go ahead and draft farm relief bills. For some time, also, they have been working on proposals to adjust the tariff so as to aid agriculture.

To Make War on Crime

The whole nation is watching with great interest the President's work to

organize a Crime Commission to study and suggest ways and means for the better enforcement of all laws and particularly of the Volstead Act. The President has let it be known that it will be the policy of the administration to avoid sudden drives and dramatic gestures in the enforcement work and instead will bring constant and strong enforcement pressure.

In the meantime, enforcement officials and U. S. courts have been given a much more efficient weapon to carry out their work in the form of the Jones Law. This law was recently signed by President Hoover and makes the sale of liquor punishable by a five-year jail sentence and a ten thousand dollar fine. In some of the larger cities, however, where the sentiment against these offenders is more limited, it is feared that it will be difficult to find juries who will convict when they know that such conviction will send violators of the Volstead Act to prison for long terms.

New York County Notes

Cattaraugus County—Professor Ogle, Cornell specialist, is conducting ten poultry schools in as many different places this week in the county for the study of "Control of Diseases and Parasites" and "Incubation and Brooding." Farmers and poultrymen are bringing their questions and problems to him. Loss from disease is one of the big problems of the poultrymen today. Professor Ogle conducted a very successful tour in the county last fall. C. N. Abbey, County Agricultural Agent, is accompanying Mr. Ogle. Farmers have tapped their maple trees but the weather is very unfavorable for sap to run as the weather is either rainy and warm or a cold wind blows which retards the flow of sap. The Niagara Power Company has a speaker with motion pictures paying a visit to the County Granges this month.—Mrs. M. M. S.

Allegany County—The worst weather of the winter was experienced from March 5 to March 10. On March 7 there was a terrible blizzard with a high wind and a biting temperature. In the recent TB retest, only eight reactors were found in the herd of Charles Wilson of Cana-

seraga. A button from his jacket was the only thing found of Charles Mansfield of Bolivar recently, when a load of nitro-glycerine he was carrying in his car, to be used for shooting oil wells, exploded and blew a hole 15 feet deep in the Portville-Allegany state road. He left a wife and children.

The spring Pomona was held at Andover March 7 and 8. Sugar makers are getting ready to tap their sugar bushes. There was a time when Allegany was noted for this product but its fine maples have been sadly depleted. Eggs are selling at thirty-five cents per dozen and potatoes at thirty-five cents per bushel.

Genesee County—There is considerable talk of making a State Park at Indian Falls. The Tonawanda Creek forms a very scenic waterfall at that point, and Divers Lake, one-half a mile away, would be included in the park. There are also some fine groves. One hundred acres would be required and the park would be in the shape of a horse shoe. Potatoes have dropped to thirty-five cents. Farm butter is forty cents. Genesee County farms are to be zoned so that with the aid of a map and numbers printed on

Percheron Mare Dam of Eleven Colts

KARENCE, a 19-year-old mare owned by G. F. Gray of Lima, N. Y., has a record to be proud of, according to her owner. She is the dam of 11 colts; she has worked for 15 years, and she is with foal at the present time.

Two yearling purebred Percheron fillies were imported to the United States from France in 1911 by J. O. Singmaster of Keota, Ia., for E. S. Akin, now of Syracuse, N. Y. The pair was shown that fall at the New York State Fair, and Karence was the first prize yearling. T. N. Smith of Kanona, N. Y., bought the fillies there and sold them in 1914 to their present owner for \$1,100.

Ten of the old mare's colts have been registered by the Percheron Society of America, and there is an unregistered gelding. Mr. Gray's records show that nine of Karence's offspring have been sold for \$3,675. This includes one sold as a weanling for \$125 and a half share in another recently sold for \$300. A young mare valued at \$400 was Mr. Gray's gift to a daughter, and a filly still in Mr. Gray's possession is valued at \$300. The total runs well over \$4,000, and the old mare's day is not yet done.

mail boxes, any farmer can be located easily.—Mrs. R. E. G.

Cayuga County—The middle of March finds us in the midst of a spring break-up. A few warm days have thawed the snow and cleared the ground of frost. Some of the mud roads are rather bad while others are fairly good. Farmers are hauling manure and getting ready for the spring rush of work. The cabbage acreage is likely to be increased but with potatoes at forty cents not many will be planted. As usual, eggs are going down for Easter, but fowls are up several cents—leghorns are about twenty-five cents and heavies thirty cents per pound. It is believed that poultrymen will raise more baby chicks this year than last.—A. D. B.

Cortland County—The Cortland County Holstein Friesian Association held their annual banquet and election of officers recently at the Messenger House. Senator Reynolds of Ohio made the principal address. Under the auspices of the Farm and Home Bureau, a series of meetings will be conducted throughout the county next week. The popular writer and speaker, Jared Van Wagenen, Jr., will be the speaker. A large attendance is expected.—W. N. A.

Sullivan County—The funeral of Judge George Smith which was held at Woodbourne on March 11, was one of the largest ever held in Sullivan County. Farmers are busy tapping trees and as yet there is not much of a run. The days and nights are warm and many already have their baby chicks while others will get theirs a little later on. Feed remains very high while eggs have taken a drop. Butter remains the same. Roads in Sullivan County are almost impassable in many places. Horses are being used instead of trucks.—P. E.

Saratoga County—The rains lately were welcome in some places as many wells and cisterns were dry. Nearly all listened on the radio to President Hoover's inauguration. A second epidemic of grippe is sweeping over this section. Many farmers are cutting fire wood. The deaths this winter of Dr. A. M. Burt of Charlton and Dr. Smith Roods of Wilton, took two much needed doctors from this county. There is much discussion about school matters—whether they should be centralized, consolidated, or whether the present system will be best.—Mrs. L. W. P.

Columbia County—Last Wednesday was a real spring day. Flies, wasps, bees, caterpillars, butterflies, and robins were seen. Storekeepers in Hudson put their awnings up. The ice breaker Osipee from the Maine coast patrol broke ice in Hudson River from Poughkeepsie to Troy. Scarlet fever is raging in Stottville and Ghent. The Kinderhook Girl Scouts attended a rally in Albany. County Agent Buckholz gave a talk on the spray information service for orchardists. William G. Howard of the Conservation Department gave a talk on forestry at the Kiwanis Club in Hudson. The Boy Scouts held their monthly meeting in Hudson. A deer walked down Train Street in Suydam last Wednesday.

Pennsylvania Farm Notes

A BILL was recently introduced in the Pennsylvania Legislature providing that a bond of \$5,000 be taken out by commission merchants or brokers who receive fruits, vegetables, live stock, meat, wool, hides, poultry products, eggs, dairy products, nuts or honey on consignment from producers. The bill gives the State Department of Agriculture the licensing power and provides that the Department may decline to issue a license for specified reasons.

The bill has passed the House of Representatives by a record vote of 147 to nothing and at this date is before the Senate for action. It is reported that commission men in Pennsylvania did not know that this bill was to be introduced and that the news had a very disturbing effect upon them. We understand that action is being taken by members of the trade to oppose the passage of the bill by the Senate.

* * *

HARRY WHITE, of Indiana County, was re-elected president of the Pennsylvania State Association of County Fairs. William Bueckley of Pottsville; Abner S. Dreysher, Reading; S. B. Russell, Lewistown, and John J. Koebert, Waynesburg, were re-elected vice-presidents, and J. F. Seldomridge, Lancaster, was re-elected secretary-treasurer. These members of the executive committee were re-elected: N. L. Strong, Brookville; John R. Rutter, York; Jacob H. Maust, Bloomsburg; D. W. Gammel, Honesdale; F. E. Brown, Lewistown; E. H. Scholl, Allentown; Edward F. Frontz, Hughesville; Charles E. Mills, Athens; D. J. Fike, Meyersdale; W. A. Boyd, Stoneboro; R. L. Munce, Washington; M. J. Patterson, Beaver, and Charles Callahan, Clearfield.

The consensus of reports indicated continued improvements in the conduct of

fairs—an improved moral tone, less gambling, and a higher intellectual standard demanded by the nearly one-quarter of a million patrons of last season's fairs held in Pennsylvania.

Secretary Seldomridge, of Lancaster, representing the Pennsylvania State Farm Association, reports that official figures show that the total attendance at the various fairs in 1928 was 1,957,185. The York County Fair alone attracted 208,783. The Reading Fair was the most profitable, the net proceeds amounting to \$52,000.

A number of farmers' sons who had engaged in the business of raising rabbits upon a commercial basis are also adding guinea pigs, upon a considerable scale, as experimental stations demand a large number in connection with bacteriological work in laboratories.

Wheat and rye fields present a promising appearance, weather conditions being favorable for an early and healthy growth.

Regardless of prevailing low prices, the potato acreage will again be above normal. There is available an abundant supply of sound corn for planting.

Nurserymen report that notwithstanding the Volstead Act, more acres of grape vines will be planted than in any preceding year.—O. D. S.

* * *

Northampton County—After a very cold spell the weather has become mild. It has been a moderate winter with little snow. The farmers are hauling manure and doing other odd jobs. Some large farm sales are being held and the prices for horses and cows are very high. The spring birds are here. Eggs are selling at forty cents, corn at \$1.05 and oats at sixty-five cents a bushel. Farm sales have been few so there will not be many changes.—F. P. H.



REMINGTON Kleanbore

Cartridges are made in all the popular sizes—rim fire and center fire—for rifles, pistols and revolvers. Also in .410 gauge shotgun shells.

They protect the inside of the barrel from rust, corrosion, and pitting.

There is only one Kleanbore—don't submit to substitutions.

REMINGTON ARMS COMPANY, Inc.
Originators of Kleanbore Ammunition
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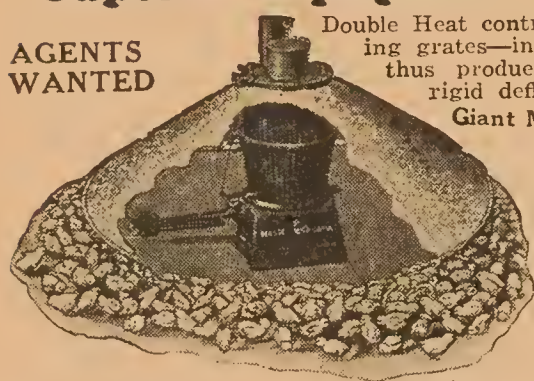
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MAGIC BROODER Every Feature Practical Great Fuel Saver

Superior Equipment for Chick Raising

AGENTS WANTED



Double Heat control, gas chamber, coal feed, non-clogging grates—insure pure air and even temperature, thus producing strong, vigorous chicks. Extra rigid deflector spreads heat evenly.

Giant Magic unequalled for raising broilers.

EVERY BROODER GUARANTEED

Write for free catalogue giving full description, also our Improved Roof Pipe which catches condensation above the roof. Made to take either 3 in. or 4 in. pipe from brooder at same price.

UNITED BROODER COMPANY
310 Pennington Ave., Trenton, N. J.

BABY

CHICKS

BABY CHICKS

	25	50	100	500	1000
Barred Rocks	\$4.00	\$7.50	\$14	\$67.50	\$130
S.C.W. Leghorns	3.50	6.50	12	57.50	110
Heavy Mixed			11	52.50	
Light Mixed			10	47.50	

These chicks are from free range and heavy egg producing flock. 100% live delivery guaranteed to your door. Write for Special Mating prices.

FRANK NACE, Cocolamus, Pa., Box No. 120

CLEAR SPRING QUALITY CHICKS

	per 100	500	1000
S.C. White Leghorns	\$11.00	\$2.50	\$100.00
Barron and Wyckoff Leghorns	12.00	57.50	110.00
Barred Rocks and R.I. Reds	14.00	67.50	130.00

Light Mixed, \$9.00 per 100; Heavy Mixed, \$12.00 per 100, for March and April. 100% live delivery. Postpaid. New circular free giving full details of all breeds.

CLEAR SPRING HATCHERY, McAlisterville, Pa. Box 49

R SINGLE COMB Vt. Certified: Tested, free from B.W.D. Males from 200-500 egg hens. Pullets: Started chicks: 3000 Baby Chicks weekly: Circular. **ASCUTNEY FARMS, A10, HARTLAND, VT.**

100% Live Arrival

	100	500	1000
Ferris Strain White Leghorns	\$12	\$57.50	\$110
Everlay Brown Leghorns	12	57.50	110
Basom's Barred Rocks	14	67.50	130
Owens' R. I. Reds	14	67.50	130
Mixed Chicks	9	42.50	80



JUNIATA POULTRY FARM
Box A Richfield, Pa.

BABY CHICKS

Tancred Strain W. Leg.	\$12 per 100
Wh. Leghorns	11 per 100
Barred Rocks	14 per 100
S. C. Red	14 per 100
Heavy Mixed	12 per 100
Light Mixed	9 per 100

500 lots 1/2c less; 1000 lots 1c less.

100% live delivery guaranteed. Order from this ad, or write for free circular. **C. P. Leister, McAlisterville, Pa.**



DUCKLINGS \$33: EGGS \$14-100 "Duck News" Free. **ROY PARDEE, Islip, L. I., N. Y.**

With the A. A.
POULTRY FARMER



How to Prevent Toe-Picking and Cannibalism Among Chicks

TOE-PICKING, feather-picking, and cannibalism constitute a problem which at the present time is causing quite as much concern and frequently as much loss as disease. These habits if acquired by chicks often continue during the laying year. Whether these losses are due to feeding or management is a question that remains still unanswered, but it seems probable that both have some influence. If we assume in the first place that these vices are at least 50% due to habit, then at least 50% of the control must be practiced before the difficulty occurs.

Toe-picking frequently starts because of a lack of food, or because of an insufficient amount of hopper space. Allow at least one inch of readily accessible hopper space per chick. An excessive amount of light or direct sunshine is more apt to start toe-picking than subdued or indirect light. Crowded conditions while the chicks are confined close to the hover—which prevents the chicks from circulating freely and finding feed and water—may cause trouble. Sufficient brooder house floor space when the chicks get older is an important factor. Allow at least .5 of a square foot of floor space per chicken.

Plenty of Green Feed Helps

An abundant supply of succulent green food after the first week will do much toward satisfying the chicks' craving for bulk. This will not only help to control toe-picking and feather-picking, but it will help to prevent eating litter and act as a disease-control measure. Toe-picking is frequently followed by feather-picking when the chicks are four to five weeks old. The soft pin-feathers, filled with blood and feather material, are very attractive, once the habit of picking has been acquired. Any feather-picking control measures to be effective must be applied at once, as soon as the chicks start trouble.

Pine Tar is effective in protecting chicks that have been attacked. There are also two commercial preparations that are red in color and offensive in odor. All three of these materials are healing. After a few chicks have been attacked it is frequently advisable to paint or treat a large number of chicks, as this has a tendency to discourage further activities.

Paint the Windows Blue

The most positive control for toe-picking, feather-picking, and cannibalism is blue light in the pen produced by the use of windows painted with a transparent blue paint. The red color of the blood does not show up with a blue light and the attraction is lost. Blue Lacquer is recommended for painting windows. This practice cannot be successfully followed out unless the building is thoroughly insulated and ventilated, so that temperature can be controlled regardless of outside conditions—as opening windows to aid ventilation would destroy the blue light effect. Houses so constructed have been used for brooding chickens up to eight, ten and twelve weeks without admitting direct sunshine. Successive lots have been brooded in this way during the season from January to June.—Connecticut Agricultural College.

Selecting Males and Females for Breeders

1. Select those with high inherited production, both on the sire and dam's side, for as many generations as possible.
2. Select male birds that have best progeny performance.
3. Select individuals from families which are early maturers, free from

(Continued on Page 16)

Danger of Infection Among Baby Chicks

Success in raising baby chicks is dependent upon proper care and management. Readers are warned to exercise every sanitary precaution and beware of contaminated drinking water. Baby chicks must have a generous supply of pure water. Drinking vessels harbour germs and ordinary drinking water often becomes contaminated and may spread disease through your entire flock and cause the loss of half or two thirds your hatch before you are aware. Don't wait until you lose half your chicks. Take the "stitch in time that saves nine." Remember that in every hatch there is the danger of some infected chicks—danger of diarrhea in some form and other loose bowel and intestinal troubles. Don't let a few chicks infect your entire flock. Give Walko Tablets in all drinking water for the first two weeks and you won't lose one chick where you lost dozens before. These letters prove it:

Mrs. Bradshaw's Remarkable Success in Raising Baby Chicks

"Dear Sir: I see reports of so many losing their little chicks, so thought I would tell my experience. I used to lose a great many of the little downy fellows from bowel troubles, tried many remedies and was about discouraged. As a last resort I sent to the Walker Remedy Co. Dept. 427, Waterloo, Iowa, for their Walko Tablets for use in the drinking water of baby chicks. I used two 50c packages, raised 300 White Wyandottes and never lost one or had one sick after using the Tablets and my chickens are larger and healthier than ever before. I have found this Company thoroughly reliable and always get the remedy by return mail." —Mrs. C. M. Bradshaw, Beaconfield, Iowa.

Never Lost a Single Chick

Mrs. L. L. Tam, Burnettsville, Ind., writes: "I have lost my share of little chicks from the usual baby chick troubles. Finally I sent for two 50c packages of Walko Tablets, used it in all drinking water, raised over 500 chicks and I never lost a single chick. Walko Tablets not only tend to prevent baby chick troubles, but also tend to give chicks increased strength and vigor. They develop quicker and feather earlier."

Never Lost One After First Dose

Mrs. Ethel Rhoades, Shenandoah, Iowa, writes: "My first incubator chicks, when but a few days old, began to die by the dozens. I tried different remedies and was about discouraged with the chicken business. Finally I sent to the Walker Remedy Co., Waterloo, Iowa, for a box of their Walko Tablets to be used in the drinking water for baby chicks. It's just the only thing to keep the chicks free from disease. We raised 700 thrifty, healthy chicks and never lost a single chick after the first dose."

You Run No Risk

We will send Walko Tablets entirely at our risk—postage prepaid—so you can see for yourself what a wonder-working remedy it is when used in the drinking water for baby chicks. So you can prove—as thousands have proven—that it will reduce your losses and double, treble, even quadruple your profits. Send 50c for a package of Walko Tablets (or \$1.00 for extra large box)—give it in all drinking water and watch results. You'll find you won't lose one chick where you lost dozens before. It's a positive fact. You run no risk. We guarantee to refund your money promptly if you don't find it the greatest little chick saver you ever used. The Pioneer National Bank, the oldest and strongest bank in Waterloo, Iowa, stands back of our guarantee.

WALKER REMEDY CO., Dept. 427, Waterloo, Iowa.

Send me the [] 50c regular size (or [] \$1.00 nominal large size) package of Walko Tablets at your risk. Send it on your positive guarantee to promptly refund my money if not satisfied in every way. I am enclosing 50c (or \$1.00). (P. O. money order, check or currency acceptable.)

Name

Town

State

Mark (X) in square indicating size package wanted. Large package contains about two and one-third times as much as small.



Helping Tires to Last

By ED. HENRY

TO obtain the greatest mileage from an automobile tire it should be as carefully broken in as a new car, so claims the chief chemist of a well-known tire maker. He says it is a mistake to put on a new tire just before starting on a long hard trip and then expect the most service from that tire. It should be given a chance to adapt itself to the work required of it and it will then give many more miles than it would otherwise. He further says it is a mistake to put a new tire on the spare rim and then carry it as an extra. Reduced mileage almost certainly follows. The tire should first be broken in, as this enables it at once to take on the permanent shape it will assume on the road under its load. Aside from defects in construction, the tire that gives no trouble in its first 500 miles is most likely to give a satisfactory 20,000 or more.

Furthermore, the new tire that is first put on during the cool months is most likely to give an extended mileage. During the process of adjusting itself, an excess of heat is engendered, and if the adjusting process takes place during hot weather and at high speeds, it certainly cannot be conducive to the longest tire life.

As an illustration: Five tires put into service on a bus line during November averaged over 28,000 miles, while five exactly similar tires, same make and used under exactly the same service conditions but which were first put into use in June, gave an average mileage of only 12,000.

Average Kilowatt Hours of Electrical Energy Required for Different Types of Work

Operation	Size of Motor H. P.	Work Done	Energy K. W. Hrs.
Washing	1/4	100 lbs. dry clothes	1.5
Average wash,		30 lbs. of clothes	
Ironing	1/4	100 lbs. clothes	11.00
Heating element rating 1650 watts.			
Cream Separating	1/6	1000 lbs. of milk	.48
Pumping Water	1/4	1000 gals.	2.00
Old pumping unit—shallow well. Pressure range 35 to 55 lbs.			
Grain Elevating	5	1 ft. lift per 1000 bu.	.385
Silo Filling	15	One ton cut	.57
8.1 tons per hr. capacity and lift of 36 ft. 1/4 in. cut.			
Feed Grinding	5	100 lbs. of corn	.45
High moisture content. Medium ground.			
		100 lbs. of oats	.286
Finely ground.			
Milking	3/4	100 lbs. of milk	.46
Average of Jan. and Feb., 1926, using 2 units and 9 cows.			

Nails Required for Building Work

Material	Pounds of nails	Size
1000 shingles	3 1/2	3 penny
1000 shingles	5	4 penny
Laths per 1000	8	3 penny
Bridging per M. lineal feet.	62	8 penny
Sheathing per M. board feet.	20	8 penny
Sheathing per M. board feet.	25	10 penny
Studding per M. board feet.	15	20 penny
Joists per M. board feet.	15	20 penny
Flooring per M. board feet.	20	8 to 10 penny finish

Best Treatment for Hardwood Floor

WAX is one of the best finishes for hardwood floors, as it preserves the natural grain of the wood and if properly cared for will improve with age. Worn places on a waxed floor are easily repaired because they may be retouched with the wax and still match the rest of the floor. The following

suggestions from the New York College of Agriculture will be helpful:

A new floor should be put in shape and waxed by an expert. After a good surface has been obtained, it is not necessary to re wax it often. If it is dusted with a dry mop, and polished every month with a weighed brush, a woolen cloth, or a dry mop, it will stay in good condition.

Parts of the floor which are most used should be given a thin coat of wax when they first show signs of wear. The wax should dry for an hour; then it should be polished. No retouching is necessary around the worn area.

Soiled spots may be removed with a cloth dipped in turpentine or gasoline. Either will remove the surface wax which holds the dirt and will leave the floor bright and clean. Water should not be used because it removes the wax finish. Leaky radiators sometimes

cause white spots on waxed floors. If these spots do not yield to the turpentine or liquid wax treatment, rub them with a cloth dipped in weak ammonia water, and apply fresh wax. If these directions are followed, the entire floor will usually require waxing about once a year.—I. W. D.

The Tourist Home and How To Furnish It

(Continued from Page 9)

comfort. To obtain order let all large pieces of furnishing run parallel with the sides of the room. That is, see that davenports, pianos, beds, sideboard, rugs, etc. are not "catty-cornered" but in line with one of the walls. Then group the furniture for comfortable use seeing that lamps, chairs, tables with magazines, are close enough to

form a reading unit. If a desk forms a part of the furnishing let both the day and night light be serviceable. If the living room is very large the furniture can be grouped to form several units.

This little forethought and attention to good taste and comfort on the part of the tourist home owner will provide an added attraction to the traveler who seeks at once an impersonal home and service.—D. B. S.

If you haven't a tool house or are not completely satisfied with yours send to the college for Bulletin E 108 which gives a list of farm shop equipment and shows handy ways of arranging tools. Plans for making benches, vices and other helps are also shown. Address the publication office, state college of agriculture, Ithaca, New York.



"For farm machinery
this all-round gasoline is best"
say farmers here

NO MATTER whether it is a truck, a tractor or a portable engine, it will start quicker with Socony Special Gasoline.

All over New York and New England, farmers are turning more and more to this all-round gasoline. For all kinds of work, in all kinds of weather, they agree that Socony Special is best.

In their tractors it means quicker starting and greater power. Portable engines start easily with one turn of the flywheel. And Socony Special Gasoline in cars and trucks means greater mileage, freedom from knocking and long life for the motor.

Farmers find, too, that their equipment runs more efficiently on Socony Parabase Motor Oil or Socony 990-A Motor Oil for Ford cars. These oils are ideal companion products to Socony Gasoline and Socony Special Gasoline.

SOCONY

REG. U. S. PAT. OFF.

Gasoline • Special Gasoline • Parabase Motor Oils • 990-A Motor Oil for Fords

STANDARD OIL COMPANY OF NEW YORK

BABY



CHICKS

20TH CENTURY "MARVEL" CHICKS

Special Mating Imported Barron S. C. White Leghorns

Our flocks for this very Special Mating consist of 350 YEARLING hens carefully selected by an Expert Poultryman. These hens weigh not less than 4½ pounds, and up to 6 pounds. They produce better than 250 eggs per year, per hen, imported from TOM BARRON, of England.

Standard Bred "MARVEL" Winter Layers

THOUSANDS OF PLEASED CUSTOMERS can tell you about the splendid chicks and wonderful profits made by our Marvelous High Class, Heavy Laying, Standard Bred, American Cert-O-Cult Matings for 29 years; Pure-Bred, carefully culled for size, type, color, vigor and egg laying ability. Look at the low prices—100% Live Delivery Guaranteed—you can safely order from this advertisement. References: Commercial Bank, Dun or Bradstreet.

	50	100	500	1000
S. C. Wh., Br., Buff, Blk. Leghorns, Anconas.....	\$7.00	\$13.00	\$60.00	\$115.00
Barred and Wh. Rox, R. C. and S. C. Reds, Blk. Minorcas.....	8.00	15.00	70.00	135.00
W. Wyandottes, Buff Orpingtons, Buff Minorcas.....	8.50	16.00	75.00	145.00
Impt. Barron W. Leghorns, W. Minorcas, Parks' Rox.....	9.50	18.00	85.00	160.00

Heavy Mixed, \$12.50 per 100; Light Mixed, \$9.00 per 100. Wh. Pekin Ducklings, 25c each.
C. O. D. Shipments: We will ship 20th Century Chicks C. O. D. (pay postman on delivery) if you prefer.
Get our FREE illustrated catalog. Tells all about our money-making chicks. C.O.D. plan, imported matings, etc.
20th CENTURY HATCHERY Box R NEW WASHINGTON, OHIO

EIGENRAUCH FARMS

RED BANK,

NEW JERSEY

18TH YEAR

breeding White Leghorns for size, vigor and heavy production of large White EGGS. 8,000 LAYERS are housed on our farm.

Our Chick Guarantee

100% satisfactory arrival on the exact date we promise shipment. Every chick sold by us is hatched from eggs laid by breeders on our own farm.

Write for Free Folder and Prices on Pullets and Chicks
EIGENRAUCH FARMS Dept. G, Red Bank, N. J.

HUBER'S RELIABLE CHICKS

MAKE EXTRA POULTRY PROFITS With HUBER'S Reliable Chicks

When we say RELIABLE—we mean RELIABLE in every way. Breeding stock of highest quality of 19 years of careful development. Special attention paid to health of flocks and records kept.

CATALOG FREE—CHICKS SENT C. O. D. IF YOU WISH

Write for details—get our illustrated catalog which tells all the story. Our prices reasonable. A book on Raising Chicks worth many dollars given free with each order of \$10.00 or more. Big discount for early orders.

HUBER'S RELIABLE HATCHERY, No. High St., Fostoria, Ohio

WOLF SELECTED CHICKS

BABY CHICKS

C. O. D. Send only \$1

Don't miss this chance to get a start with Wolf's extra quality pure-bred high producing stock. Every breeder produced on free range and health of chicks is safeguarded. Get Our Catalog and Price List

Tells about prizes won by our birds. Read about Mary Hencel who made over \$1000 profit in one year with birds of our breeding. All leading breeds—prices very attractive. Write today. Chicks shipped C.O.D. Toe picking stopped instantly with Wolf's "No-Pick." Order box today. \$1.00 postpaid. Satisfaction guaranteed or money refunded.

WOLF HATCHING & BREEDING COMPANY, BOX 1, GIBSONBURG, OHIO

Buy C.M.L. Chicks

C.M.L. CHICKS

Cost no more than ordinary chicks from the average hatchery and the quality is far better. We have specialized for years in BARRON LEGHORNS. Imported direct from Barron, Pedigrees 235 to 314. BARRON S.C.W. LEGHORNS, BARRED ROCKS, WHITE ROCKS, REDS, WHITE WYANDOTTES.

Our birds have ample range which insures large, hardy chicks. They are carefully selected and mated. They mature early. Our fine quality chicks can be had at a price that will surprise you. Get our low prices. They will interest you. C. M. Longenecker, Box 40, Elizabethtown, Pa. Write today for FREE catalogue.

National "Superbred" Chicks

Insure your future poultry profits by ordering NATIONAL "SUPERBRED" CHICKS NOW

	50	100	500	1000
S. C. White, Brown and Buff Leghorns.....	\$6.75	\$13.00	\$62.00	\$120.00
Tancred & Hollywood White Leghorns.....	7.25	14.00	67.00	130.00
Barred & White Rocks, R. I. Reds.....	7.75	15.00	72.00	140.00
Wh. Wyandottes, Buff Orpingtons.....	9.00	17.00	82.00	160.00

Light Mixed—\$9.00 per 100. Heavy Mixed—\$10.00 per 100.

Also Black Minorcas, White Minorcas, Anconas, Blue Andalusians and Jersey Black Giants. Send for our free catalog and prices on our Special Mated Chicks. We guarantee 100% live delivery. Member International Baby Chick Association.
NATIONAL CHICK FARMS, BOX 408, MIFFLINTOWN, PENNA.

BABY CHICKS

From Heavy Laying Free Range Flocks

	25	50	100	500	1000
S.C.W. & Br. Leghorns.....	\$3.50	\$6.00	\$12	\$57.50	\$110
S.C.B. and Wh. Rocks.....	4.00	7.50	14	67.50	130
Buff Orpingtons & Reds.....	4.00	7.50	14	67.50	130
White Wyandottes.....	4.00	7.50	14	67.50	130
Assorted Chicks.....	3.00	5.00	9	42.50	80

100% prepaid safe delivery guaranteed.

Order from this ad. or write for circular
Box 161
J. N. Nace Poultry Farm, RICHFIELD, Pa.

Wyckoff Tancred White Leghorns CHIX

Book your order now for March and April Chicks.
\$12.00 per 100 \$57.50, 500 \$110, 1000
100% prepaid safe delivery guaranteed.

J. N. NACE POULTRY FARM, Box No. 50, Richfield, Pa.

SINGLE COMB

White Leghorns Exclusively

3000 breeders on free farm range, Pure Barron English Strain, with trapnest records up to 314 eggs in a year. The large vigorous Leghorns that lay large white eggs. Now booking orders for hatching eggs and baby chicks Mar., Apr., & May delivery. Special feeding directions with all orders. Circular free Cecil Sherow and Olive Briggs-Sherow successors to EDGAR BRIGGS, SUNNY BROOK FARM Box 50 Pleasant Valley, N. Y.

BABY CHICKS

	25	50	100		25	50	100
Barred Rocks.....	4.00	7.50	14	S.C.W. Leg.	3.50	6.50	12
S.C.R.I. Reds.....	4.00	7.50	14	Heavy Mixed.....	3.50	6.50	12

500 Lots ½c less. 1000 Lots 1c less.
Free Range Flocks. Live Delivery.

B. N. LAUVER, McAlisterville, Pa.

(Continued from Page 14)

broodiness and show a high rate of production.

4. Birds should be free from standard defects and disqualifications.
5. Select either a well matured vigorous cock bird.
6. A four generation egg production pedigree behind the cockerel is the best recommendation as to the egg production he will be able to transmit to his female off-spring.
7. The male is at least one half the flock therefore, no pains should be spared in selecting one which represents the desired character for which one is breeding.—La. State College.

New England Laying Ration

Coarse Yellow Corn Meal, 200 pounds

Wheat Bran100 "

Middlings, white flour100 "

Ground Oatmeal or gr.

38 to 40-lb. oats100 "

Meat Scrap (not less than 50% protein) 25 "

Fish Meal (not less than 50% protein) 25 "

Alfalfa Leaf Meal (not over 20% fiber) 25 "

Edible Steamed Bone Meal 25 "

Dried Skimmed Milk or Buttermilk 25 "

Fine Salt 5 "

Scratch Grain

Cracked Corn or Whole

Corn500 pounds

Wheat250 "

Barley150 "

Oats (38 to 40-pound oats)100 "

—Conn. Ext. Bulletin 124

Pullets Stagger When They Walk

I have a flock of Rhode Island pullets, about 80, that are five months old. About two weeks ago one of the pullets seemed to stagger when she walked. I took her away from the rest but she kept getting worse and finally got so she couldn't walk and had to be killed. She ate quite a lot. Now we have another with the same symptoms. The pullets are on range and I feed them cracked corn twice a day and all the mash they will eat made up of 100 corn meal, 100 bran, 100 middlings and 30 meat scraps. Do you think the trouble might be caused by their feed or is it some disease? If you could give me any information I would appreciate it very much.—W. J. G.

Do not think you need be alarmed about any disease in the Red pullets. I think if you change the mash a little the trouble will let up. Use the following mixture for mash: 100 pounds each of wheat bran, middlings, cornmeal, ground oats, and beef scrap. It is a lack of this last item that is probably causing your trouble today. In addition to thoroughly mixing up these ingredients, you might also mix into them three pounds of salt. For a grain ration use 5 pounds of cracked corn, two pounds each of wheat and barley, and 1 pound of heavy oats.—L. H. HISCOCK.

WENE CHICKS

Greatly Reduced Prices on State-Supervised Leghorns

Now you can buy blood-tested State-Supervised S. C. White Leghorn Chicks for only a little more than you would pay for chicks from untested, unsupervised stock. Every female Leghorn is a Hen Breeder weighing at least 4 lbs.

Leghorns for April 15th Delivery

	50	100	500	1000
Wene Select Matings.....	\$8.50	\$16	\$77.50	\$150
Wene-Ells Matings.....	9.50	19	92.50	180

S. C. Wh. Leghorn Pullets, blood-tested State-Supervised, 8-10 weeks, \$1.05 each, f.o.b. Vineland.

For Broilers and Roasters order our cross-bred chicks from blood-tested Wyandotte-Rock matings. Immediate deliveries.

We are also booking orders for Rocks, Reds and Wyandottes, all blood-tested.

All chick shipments sent postage prepaid—100% Live delivery Guaranteed.

Free Folder and Mating List mailed on request.

WENE CHICK FARMS, DEPT. D, VINELAND, N. J.



CHICKS with vim and vigor

Hatched by men with 19 years experience, from culled flocks, 100 per cent live delivery guaranteed by Prepaid Parcel Post at the following prices:

S. C. White Leghorns.....	11c	each—\$100.00 per 1000
S. C. Brown Leghorns.....	11c	" " " " " "
Barred Rocks.....	12c	" " " " " "
S. C. R. I. Reds.....	14c	" " " " " "
S. C. Black Minorcas.....	14c	" " " " " "
Mixed Broilers.....	9c	" " " " " "

Order now for spring delivery. Capacity 60,000 eggs. \$1.00 will book your order. Catalogue free.

The Pennsylvania Hatchery, Liverpool, Pa.

Our Slogan "Service After Delivery"

White Leghorn Baby Chicks a Specialty

	Per 50	100	500	1000
S. C. W. Leghorns.....	\$6.50	\$12.00	\$57.00	\$110.00
Barred Rocks.....	7.50	14.00	67.50	130.00
R. I. Reds.....	7.50	14.00	67.50	130.00
Heavy Mixed.....	6.50	12.00	57.50	110.00
Light Mixed.....	5.00	9.00	42.00	80.00

Our White Leghorn Cockerels: Sire—from hen that laid 312 eggs per year. Hens—254-290 eggs. Actual 365 day trap nest record. All chicks Postpaid to your door. 100% live delivery guaranteed. Order direct or write for free circular.

PENN HATCHERY, Dalmatia, Penna.

Formerly Sunshine Hatchery

HIGH GRADE CHICKS

Immediate and April delivery

	100	500	1000
White & Brown Leghorns.....	\$13	\$62.50	\$120
Bd. Rocks, R. I. Reds, Anconas.....	15	72.50	140
Wh. Rocks, Wh. Wyan., Bl. Minorcas.....	16	77.50	150
Assorted: Light 10c, Heavy 12c; Pekin Ducklings 32c each, \$30 per 100. All chicks for May delivery 1c less. Also special mating blood tested chicks and two and six weeks old chicks. 100% Live delivery guaranteed. Order direct from adv. or write for circular. 10% books order, balance cash or C. O. D.			

TAYLOR'S HATCHERY, BOX 12, LIBERTY, N. Y.

BABY CHICKS

hatched by the best system of incubators from

high class bred-to-lay stock. White, Brown, Buff Leghorns, Anconas \$14.00 per 100; Barred, White Rocks, Minorcas, Reds \$16.00 per 100; White Wyandottes, Buff Orpingtons \$17.00 per 100; Giants \$20.00 per 100; Heavy Broilers \$12.00 per 100; Light Broilers \$10.00 per 100; Pekin Ducklings \$30.00 per 100. Add 25c on orders for less than 100. Safe delivery guaranteed by parcel post.

Nunda Poultry Farm, Desk H, Nunda, N. Y.

Member of the International Baby Chick Ass'n. and the N. Y. State Co-Operative Chick Producers Ass'n.

BABY CHICKS ORDER DIRECT from this ad. and save time.

Free range bred 25 50 100 500 1000

Wh. & Brown Leghorns.....\$3.25 \$6.25 \$12.00 \$58.75 \$115

Ancona & Black Leghorns.....3.25 6.25 12.00 58.75 115

White & Barred Rocks.....3.75 7.25 14.00 68.75 135

Rhode Island Reds.....3.75 7.25 14.00 68.75 135

Heavy Mixed Broilers.....3.25 6.25 12.00 58.75 115

Light Mixed Broilers.....2.25 4.25 8.00 38.75 75

Full count and quality guaranteed. Catalogue free. For Greater Profit ULSH POULTRY FARM & HATCHERY Hatchery Chicks. Port Trevorton, Penna.

BARRED ROCK CHICKS

A large modern Breeding Farm and Hatchery devoted exclusively to the production of BARRED PLYMOUTH ROCKS.

MARVEL POULTRY FARM, GEORGETOWN, DEL.

BABY CHICKS

	25	50	100	500
White Leghorns.....	\$2.75	\$5.25	\$10.00	\$47.50
Barred Rocks.....	3.25	6.25	12.00	57.50
Rhode Island Reds.....	3.25	6.25	12.00	57.50
Heavy Mixed.....	2.75	5.25	10.00	47.50
Light Mixed.....	2.50	4.75	9.00	42.50
Peking Ducklings.....	7.50	14.50	28.00	
Mixed Ducklings.....	6.50	13.00	25.00	

John Shadel Hatchery McAlisterville, Pa. Route 2.

TAKE NOTICE 75,000 CHICKS for APRIL DELIVERY

	25	50	100	500	1000
S. C. Wh. Leghorns.....	\$3.50	\$6.50	\$12	\$57.50	\$110
Rocks or Reds.....	4.00	7.50	14	67.50	130
Silver Laced Wyandottes.....	4.50	8.50	16	75.00	
Light-Mixed.....	3.00	5.00	9	42.50	80
Heavy Mixed.....	3.50	6.50	12	57.50	110

From carefully selected free range flocks. 100% arrival Postpaid. Write for illustrated catalogue.

The Richfield Hatchery, Box 80, Richfield, Pa.

CHICKS Will ship C. O. D.

	25	50	100
S. C. Reds.....	\$4.00	\$7.50	14.00
Barred Rocks.....	4.00	7.50	14.00
White Leghorns.....	3.50	6.50	12.00
Heavy Mixed.....	3.50	6.50	12.00
Light Mixed.....	2.75	5.00	9.00

500 lots ½c less, 1000 lots 1c less.

Free range. 100% Delivery. Circular.

W. A. LAUVER, McAlisterville, Pa.

GOLD MEDAL CHICKS

Choice Chicks at Popular Prices. 50 100 500 1000

Wh., Br., Buff Leghorns, Anconas.....\$7.50 \$14 \$67.50 \$130

Barred Wh. Buff Rocks, Reds.....9.00 16 77.50 150

Wyandottes, Orpingtons, Minorcas.....8.00 17 82.50 160

Mixed Chicks, \$12, 100. All shipments Postpaid. Finest Stock, Greatest Profit Makers. 100% Safe Delivery.

Gold Medal Chickeries, Box 444, Wallkill, N. Y.

BABY

CHICKS

BIG CHICKS from High Record Matings



300-325 eggs S.C. White Leghorns. Also Special Tancred Matings and 15 other varieties. Buff, Brown, Black Leghorns; Anconas; White, Buff, Black Minorcas; Barred, White, Buff Rocks; White Wyandottes; S.C. and R.C. Reds; Buff Orpingtons; Jersey Black Giants. Write today for free catalog before you buy. Prices Low and good genuine personal service to each customer. Satisfaction Guaranteed. 28 years shipping chicks to satisfied customers. FREE! 1000 CHICKS in prizes for best photos of Pioneer Chicks or Flocks.

1900-1929
First to ship Chicks
in U. S.

UHL PIONEER HATCHERY & EGG FARMS
New Washington, Ohio Dept. A

5 Lb. Leghorns

The old reliable Heavyweight stock. Produced High Up on Pennsylvania's healthy mountain top. Get your chicks from certified record strains above 300 eggs. R.O.P. Hollywood, Tancred, Barron Matings. Hatch weekly pure white eggs up to 24 ounces per dozen. Beautiful Color Plate Leghorn Catalogue Free.

FARM SERVICE
ROUTE A10 TYRONE, PENNA.

CHERRY HILL CHICKS

S.C.W. Leghorns—Wyckoff Strain.....	12.00
S.C. Everlay Brown Leghorns.....	12.00
Barred Rocks—Wm. Nace's select.....	14.00
S.C. Rhode Island Reds.....	15.00
Mixed or Broiler Chicks.....	9.00

1/2c less in 500 lots. 1c less in 1,000 lots.
25 chicks add 2c. 50 chicks add 1c. Full count.
100% live arrival guaranteed. Parcel Post prepaid.
Bank reference. Order direct from this ad or write for free circular.
CHERRY HILL POULTRY FARM,
WM. NACE, Prop. McALISTERVILLE, PA.

BABY CHICKS

	25	50	100	500	1000
S.C.W. Leghorns.....	\$3.25	\$6.50	\$12	\$57.50	\$110
Bd.Rocks & S.C. Reds	3.75	7.25	14	67.50	130
Heavy Mixed.....	3.25	6.50	12	57.50	110
Light Mixed.....	2.50	4.75	9	42.50	80

A Special Discount on orders placed in advance
Will ship C.O.D.

PINECREST POULTRY FARM & HATCHERY

Herbert Miller, Prop. Box 12 Richfield, Pa.

QUALITY BABY CHICKS

Five extra given free with every box of one hundred ordered. April hatched chicks. Leghorns, White, Brown, Buff, Black—\$14.00 per 100; Barred Rocks, Reds, Minorcas, Anconas, \$16.00 per 100; White Rocks, Wyandottes, Buff Orpingtons, \$18.00 per 100. March, \$2 more; May, \$2 less; June \$4 less. Custom hatchling. Eggs for hatchling. Odds and Ends, Left Overs, Mixed broiler chicks, Light, 10c; Light and Heavy, 12c; All Heavy, 14c; Better order now. Will send C.O.D. Thousands hatching daily all year around. Active, husky, chicks hatched from healthy free range breeders that will live, grow and lay. Prompt shipments. Postage prepaid. Live delivery. Send for folder. **SCHOENBORN'S HATCHERY**, 335 Main St., Hackensack, N. J. Phone 1603 or 1604.

STOP! LOOK! LISTEN!

	25	50	100	500	1000
Cash or C.O.D.	\$4.50	\$8.50	\$16.00	\$77.50	\$150
Wh. Wyandottes	4.00	7.50	14.00	67.50	130
Rocks or Reds.....	3.50	6.50	12.00	57.50	110
Wh. Leghorns.....	3.50	6.50	12.00	57.50	110
Heavy Mixed.....	2.75	5.00	9.00	42.00	80

From carefully selected free-range flocks. 100% arrival. Postpaid. Valuable illustrated 96-page booklet FREE. Telling all about poultry.

The Commercial Hatchery,
Box 75-A (The dependable plant) Richfield, Penna.

Green Forest Husky Chicks

	25	50	100
English and Tancred Strain Ship C. O. D.	\$3.25	\$6.25	\$12
S. C. White Leghorns.....	3.75	7.25	14
S. C. Barred Plymouth Rocks.....	2.75	5.25	10

Leghorns are out of hens with trapnest records of 291-300 eggs. We pay parcel post and guarantee 100% good, strong chicks on arrival. Free circular.

GREEN FOREST POULTRY FARM
J. W. Amig & Son, Props. Star Route Richfield, Pa.

BABY CHICKS

FROM A HEAVY LAYING STRAIN. Three years blood tested for white diarrhoea and under State supervision. Barred Rocks, White Wyandottes, Reds, White Leghorns. Moderately priced. Write for Catalogue and Prices.

BYRON PEPPER & SONS
BOX 11, GEORGETOWN, DEL.

HILLPOT Quality Chicks

Leghorns-Rocks-Reds-Wyandottes



SEND FOR THIS USEFUL CHICK BOOK

You will find it a valuable guide in selecting your chicks for the coming season and a constant help in rearing them. The book which is illustrated in color describes my breeds fully;

tells of my careful methods of mating and rearing; discusses the most profitable sizes for flocks; contains house-plans and construction details and concise feeding and rearing charts. Write for your copy today.

W. F. HILLPOT, Dept. 129, FRENCHTOWN, NEW JERSEY

Hall's Chicks

Leghorns-Reds-Rocks-Wyandottes

"WELL BRED FROM WELL BREEDERS"

You can't fool the neighbors, and most of our output is sold to our neighbors. If you want really "better chicks" with some real breeding behind them, to make MORE MONEY for you, take advantage of our years of breeding. New England Accredited Stock. All breeders. 100% White Diarrhea free. Official Contest records. Circular.

Hall Bros. Poplar Hill Farm, Box 59 Wallingford, Conn.



Lone Oak Poultry Farm

A breeding farm where nothing but our own production and rearing is sold.

Chicks of Known Ability

Breeders used this season were sired by males whose dams' production records ranged from 200-278 eggs. This same blood is being intensified still more in the present flock matings. Make sure of the production ability of your future flock by securing chicks from these choice matings.

Choice breeding cockerels, priced right.

LONE OAK POULTRY FARM, Box 661, BABYLON, N. Y.



Fairport Quality Chicks

are bred to make money for you. Strong, healthy, vigorous from the world's best and heaviest laying strains such as—Tancred, Ferris, Owen Farms, Daniels, Thompson, Martin, Shepard, Fishel and others. Free range flocks, scientifically culled and supervised. Smith Hatched. 100% live delivery guaranteed. 16 breeds 9c and up. Postpaid. Members International Baby Chick Association. Send now for free poultry book and prices. Buy Hatchery Chicks for Greater Profits.

FAIRPORT HATCHERIES Box 44 Fairport, N. Y.



New York State Certification Pays

The Key to Success and Greater Profits with Production Bred Poultry Today is Through the Purchase of High Grade Stock, Eggs or Chicks from Members of the

New York State Co-operative Official Poultry Breeders, Inc.
Formerly New York Co-operative Poultry Certification Association, Inc.

The Big 1929 Catalogue is off the press, and will be mailed Free to All Requests. Write.

M. M. Griffiths, Sec'y. Box Y New Hartford, N. Y.



Schwegler's "THOR-O-BRED" BABY CHICKS

THEY LIVE because they are bred from healthy, free range breeders that have thrived and gained in vigor for generations. They LAY because they are from selected and tested high egg power stock. White, Brown and Buff Leghorns, Barred and White Rocks, R. I. Reds, Anconas, Black Minorcas, Buff Orpingtons, White Wyandottes, 22c and up. 100% live delivery guaranteed. Postpaid. Member International Chick Assn. Write today for FREE Chick Book.

SCHWEGLER'S HATCHERY, 204 Northampton, BUFFALO, N. Y.

BUY EASTERN QUALITY-PLUS BABY CHICKS

	BIG HATCHES MARCH 19-26;	APRIL 2-9-16-23-30.	WE SHIP C.O.D.
Large Barron English S. C. White Leghorns.....	\$7.00	\$13.00	\$63.00 \$125.00
Silver Laced Wyandottes, Barred Rocks, S. C. Reds.....	8.00	15.00	72.00 140.00
Mammoth Light Brahmas.....	9.00	17.00	

Sent parcel post prepaid. 100% live delivery guaranteed. 10% Books Order. Catalog free.

SHERIDAN POULTRY FARMS, Box 21, Sheridan, Pa.

KERLIN BARGAINS in Wh Leghorn Chicks

"Kerlin-Quality" Money-Making Leghorns. Beautiful, Great Winter Layers, White Diarrhoea Free. Egg Contest Winners. Over 50,000 Delighted Customers. BIG DISCOUNT on Chicks ordered Now. Delivery When Wanted. Free Starting Feed! Big Catalog FREE! Kerlin's Grand View Poultry Farm, Box 35, Centre Hall, Pa.

QUALITY CHICKS

S. C. White Leghorns per 100—\$11.
S. C. Barred Rocks \$13. Light mix \$9 per 100. Heavy \$11. Special prices on larger lots. 100% live delivery, postpaid. New circular free. **EDGAR C. LEISTER,** McAlisterville, Pa. Box B

Hampton's Black Leghorn Day Old Chicks. The Kind that lay. Circular free. **A. E. HAMPTON,** Box A, Pittstown, N. J.



FREE BABY CHICKS

You Get the Chicks—We the Advertising. Fair? Show

Better get your pencil and send for this 4-color, beautifully illustrated catalog now—also advertising slips for your free Baby Chicks. Only a limited number, so you should write now—this very minute.

This catalog, the prettiest and most elaborate we have ever seen, gives you some new, cashable ideas on raising pure-bred poultry—actually shows you how to s-t-r-e-t-c-h poultry profits—complete history of 17 different breeds—famous strains. . . Shall we mail your copy tomorrow?—and send your FREE CHICKS in a week or two?

GLASER HATCHERIES - McCOMB - LIEPICK - OHIO.

FINGER LAKE REGION BABY CHICKS

with an official record. Ask for our Baby Chick Book describing our Pedigreed Cornell Chicks from stock that has laid from 200 to 312 eggs in their pullet year and mated to breeders that have averaged over 200 eggs in their pullet year. Also describes our 144,000 egg hatchery with 22 years' experience in hatching Baby Chicks, Leghorns, Reds, Rocks, Wyandottes, Minorcas, and Giants. The home of better Chicks at lower cost. **THE DERBY TAYLOR CO.,** NEWARK, NEW YORK

200,000 CHICKS 1929

	50	100	500	1000
Goodling's Super Quality. Healthy, Strong and Vigorous				
Single Comb, White Leghorns.....	\$6.50	\$12.00	\$57.50	\$110
Barred Plymouth Rocks.....	7.00	13.00	62.50	120
S. C. Rhode Island Reds.....	8.00	15.00	75.00	
Broiler Chicks, Heavy Breed.....	5.50	11.00	52.50	100
Broiler Chicks, Light Breed.....	5.00	10.00	47.50	90

Order direct. Prepaid 100% live delivery guaranteed. Circular Free.

THE VALLEY HATCHERY Box A, R. No. 1, RICHFIELD, PA.

PENNA. "State Supervised" CHICKS

Flocks inspected by officials from the Penna. Dept. of Agriculture. Our 19th year. Get our low prices on Reds, Rocks, Leghorns and Minorcas. Member I.B.C.A. Catalogue free.

THE KEYSTONE HATCHERY, (The old reliable plant) RICHFIELD, PA.

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New Trends in Spring Styles

Even If You Can Not Get to the Shops, You Can Get Here the High Points of the Fashions

WITH the warm days of spring, our attention is again turned to new clothes. Whether you are planning to purchase a dress or coat it is important to give careful thought to styles so that you will avoid mistakes and buy wisely. Carefully selected clothes, with particular thought given to line, color, fabric, suitability, and becomingness are a much better investment than those selected hurriedly with no thought of the present style trends or of the garments on hand. They help us to reach the goal of being well dressed. Many of you may not be able to visit the shops so I am reviewing here the new trends which are indicative of the season's styles.

For early wear, tweed and light-weight woolens are popular. These

low on a bright red ground. The accompanying dress, fashioned of the same print, uses the yellow, black and white striped border to trim the scarf collar which ends in a tie, lower edge of blouse, and cuffs. The close-fitting hat of black bakou straw, black shoes sun-burn hose and gloves complete the costume.

This suit is practical for the woman with a limited wardrobe because the coat can be combined with a black dress, an all-white, a yellow or a print, in which yellow predominates, make complete ensembles for many occasions.

New coats follow the lines of the moulded silhouette. Some show added skirt fullness in slight flares, but these styles are for the slenders. There is a

smart trim used on semi-dress frocks. Buttons, bound buttonholes, and bands of self material with ravelled edges add interest and smartness.

Dress fabrics include crepe de chine, flat crepe, printed silks, foulards with border patterns and crepe satin, new rayons in stunning prints, plain and printed cottons. For afternoon dresses, chiffon and georgette in prints and in plain colors, rayon, voiles, chiffons, organdie, and batiste are featured. Sport frocks are made of silk jersey, necktie prints and plaid silks. Checked and plaid cottons are very good. Lace is particularly good both for afternoon and party dresses and it is used as a trimming to add the more feminine touch for dresses for daytime wear.

Early showings concentrate on black and white dresses and ensembles. Vivid contrasts are now featured such as chartreuse with independence blue, bright red with gray, orange and yellow with brown and with navy. The parchment and pale beige tones are particularly good. Blue in a shade lighter than navy is one of the season's smartest colors. Black is shown with egg shell or off-white and occasionally with sun-tan shades. Tangerine and sun-burn shades are combined with brown, navy, and beige. Royal blue is contrasted with egg shell.

Accessories Match Ensemble

In choosing accessories for your costume, hats in felt, bakou or linen-like straw in matching color are particularly good. For early wear, new hats with the off-the-brow brims are worn. As warm weather approaches, wider brims will be popular. Hosiery and gloves in sun-burn shades and shoes of colored kid to match the ensemble are correct.

Characteristic of the season's styles are the models illustrated here. Charming in its simplicity is the afternoon frock shown at extreme left. Fashioned of chartreuse colored crepe, it features the scarf collar with ends trimmed with bias ruffles knotted carelessly in center front. Back of dress is cut straight and front of blouse is attached to shirred skirt at a low waist line. Three narrow bias ruffles of self material add interest to back and front. Sleeves are long, close-fitting, trimmed at wrist with a narrow bias ruffle of self material. Blouse is shirred slightly at the hip line.

The silk ensemble illustrated at left of center, is a becoming print in brown and white polka dot on a beige brown.

Skirt is knife-pleated all around. Blouse is of beige crepe with round neck line, faced on the right side with front piece that ties in a bow in center. Narrow belt is of self material. The coat is finger-tip length trimmed with plain band of beige-colored crepe on edge of pocket, sleeves, and front. One of the most interesting features of this costume is the scarf made of a triangle of dark brown crepe joined to beige and sun-burn silk bands. The ends of the scarf are ravelled one inch. It ties in a bow at center front.

The bright red crepe dress, illustrated at center, is particularly becoming to slender figures. The cape-like collar ends in a long scarf on the right side. The skirt is pleated. Dress is made two-piece with six-inch hem on lower edge of the blouse made double. Sleeves are close fitting trimmed with buttons and bound buttonholes. Black patent leather belt and matching gardenia add individuality. With this model is worn a close fitting hat of red bakou straw bound with red grosgrain ribbon.

Matron's dress, at extreme right, is a practical one because a blouse can be added and the coat blouse shown here can be worn with the skirt for a jacket. It is fashioned of beige-colored crepe with skirt fullness arranged in narrow box pleats. Vest is of white crepe and jacket blouse is trimmed with band trimmings in yellow, black, and white. Bound buttonholes and matching buttons fasten the front and lower edge of sleeves. Hat is of dark brown felt with beige straw front inset.—LEONORE DUNNIGAN.

Useful Pamphlets

The following booklets can be secured by addressing Household Department, American Agriculturist, 461-4th Avenue, New York City.

How to Make Crepe Paper Costumes—10c.

How to Make Crepe Paper Flowers—10c.

How to Decorate Halls, Booths and Automobiles—10c.

Weaving with Paper Rope—10c.

Sealing Wax Craft—10c.

Tables and Favours—10c.

Old-fashioned recipes (for 2 cents postage).

Do not hang clothes away until they are well aired. Have trees for each pair of slippers—costs a little more—but saves on new ones.—M. F. M., Ark.



Left to right: Misses Dress of Chartreuse Crepe with Self Trim; Suit of Tan Print with Brown, Beige and Off-white Scarf; Two-piece Dress of Red Crepe with Cape Collar Ending in a Scarf; Black Kasha and Red Printed Crepe Combined in Attractive Ensemble; Matron's Street Dress of Beige Crepe with Jacket-style Blouse.

fabrics are featured in separate coats and in three-piece ensembles. The ensemble consists of skirt with contrasting silk blouse and jacket. The jacket may be short, finger-tip length, three-quarters or seven-eighths. Skirts are made with pleats at the side or placed low in the front with fitted yoke. Blouses are finished so that they may be worn outside or tuck-in style.

The majority of the suit skirts are belted, although a few are sewed to a foundation waist. Some blouses show yoke effects that end in a front bow tie. Many are collarless with fitted facings. Sleeves are close fitting, buttoned or tied at the wrist.

For warmer days, sleeveless blouses are extremely good. Interesting color combinations are shown. An attractive blue suit in a shade lighter than navy showed a stunning blouse of yellow crepe with a three-quarter length jacket lined in yellow. Another suit of beige kasha featured a silk blouse in copper tone. Front lacing of self material was the only trim on the blouse.

Sun-burn shades and off-whites are smart for blouses to be worn with blue, beige, and black suits.

The more tailored tweed suits show accompanying vestees of pique, batiste, dimity, organdie, and other washable fabrics. The new tweeds are soft in texture, lovely in color, and practical for service suits for town and country wear. When combined with silk blouse in harmonizing shade, they appear dressy enough for many occasions.

Kasha wool crepe and light-weight woolens in basket weaves are shown in lovely ensembles for dress wear. The charming ensemble featured here shows a full-length coat of black kasha, lined with printed crepe in an all-over design in black, white and yellow.

tendency to accent yoke treatments. Some show sleeve and yokes cut in one.

Cape collars, scarf collars of self fabric and separate scarfs of silk are worn on unfurred coats. Others introduce a rever on one side and a scarf throw on the other or a notched tuxedo collar or Johnny collar.

Dress coats of basket weaves, twill, kasha and cashmere are trimmed with flat furs. Sports styles are made of camel's hair, checked and ombre woolens, and tweeds.

Slender Misses may select cape coats and cape and scarf-collared ones, but the stouts will do well to stick to straight line styles with tailored or tuxedo collars.

Beige, gray and blues are good colors for separate coats. Black with white fur trim is smart for dress.

New frocks show feminine trends in drapes, tiers, ripply flounces and bias ruffles, scarf and cape collars. They appear longer for afternoon wear and somewhat longer for street wear. Waistlines are a trifle higher and sleeves are closely fitted. For warmer days sleeveless dresses are good and for those who find sleeveless styles unbecoming there are the sleeveless dresses with accompanying short jackets of matching silk.

Cape collars and scarfs in sun-burn shades add a dressy look to frocks. Necklines with bow treatments are good. The bow ties may be cut in one with the yoke or inserted at center front through bound buttonholes.

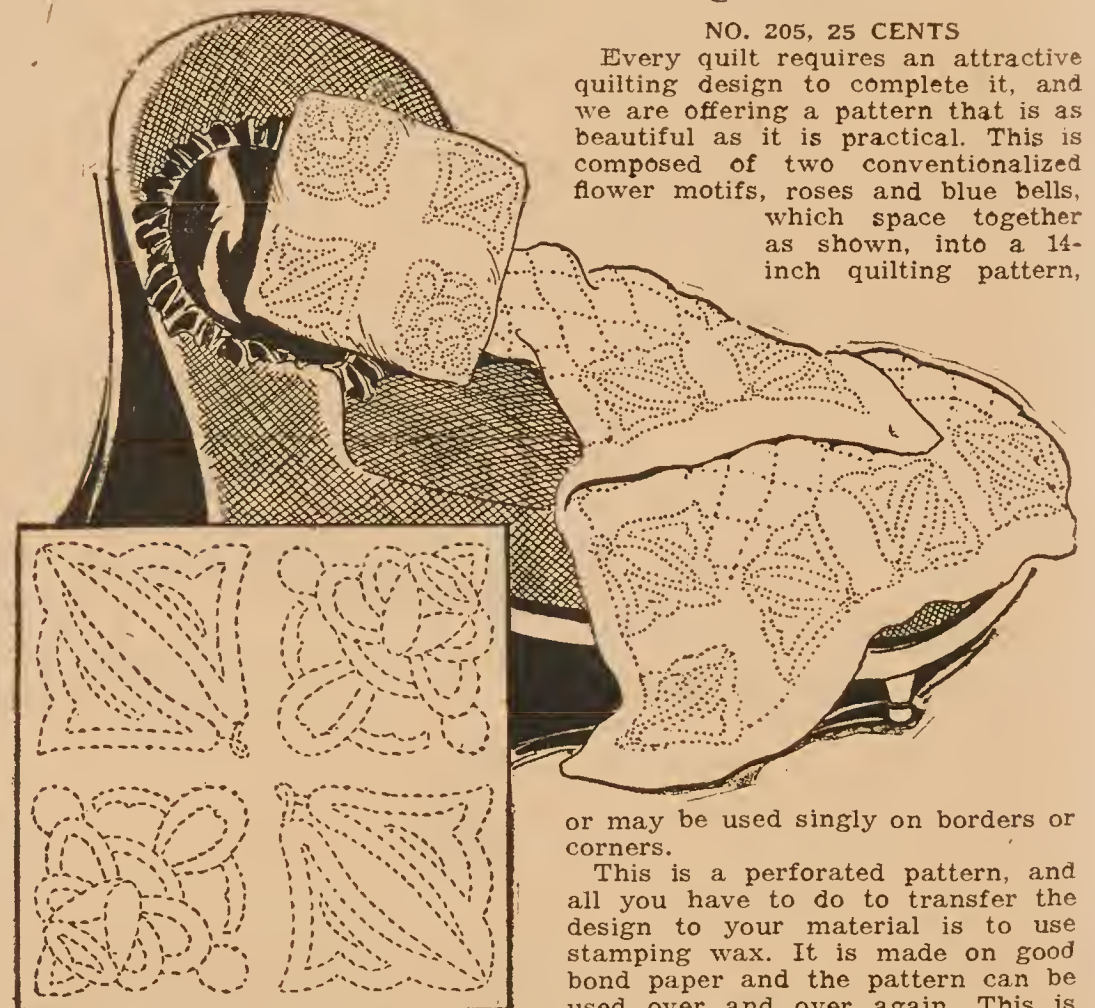
Skirt fullness is added low. A four to six-inch band or a fitted yoke carries the skirt pleats.

Narrow bias ruffle trims with edges turned and machine stitched and then turned back and slip stitched is a

Good News for the Quilter

NO. 205, 25 CENTS

Every quilt requires an attractive quilting design to complete it, and we are offering a pattern that is as beautiful as it is practical. This is composed of two conventionalized flower motifs, roses and blue bells, which space together as shown, into a 14-inch quilting pattern,



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This is a perforated pattern, and all you have to do to transfer the design to your material is to use stamping wax. It is made on good bond paper and the pattern can be used over and over again. This is number 205 and costs only 25 cents postpaid. Stamping wax to use with this is 25 cents for a box. This is number 206. Orders accompanied by stamps or coin (coin at sender's risk) should be sent to Embroidery Department, AMERICAN AGRICULTURIST, 461 Fourth Ave., New York City.

Aunt Janet's Counsel Corner

Is There Any Such Thing As Equal Rights for Husband and Wife

HERE is a chance for some man to distinguish himself by answering the questions asked by "Rebellious." Certainly the men must have some reason on their side, since so many do just what she accuses them of doing. Now, if ever, is the opportunity for them to justify their actions. Aunt Janet will give space in her column to the best answer to the letter printed below.—AUNT JANET.

* * *

Isn't it funny how the hardest problem is sometimes solved? I was undecided whether to have a good cry or else go at the basket of clothes which were dampened ready to iron when I spied a new magazine. Opening it at random I read an article which made me feel I was not the only misunderstood woman on this beautiful earth that seems so ugly at times.

Of course you will be wondering why I was feeling so blue. In reality it was a very simple argument between my husband and myself that brought me so near tears—tears that make a man disgusted and were never known to help a woman. But I think it is the unfairness of some men that makes women rebellious, yes, disagreeable at times. They pretend to agree to equal

rights between men and women, then when the time comes for an equal decision he takes it for granted that he knows much better which is right. Why do men insist they are more capable of handling money than women? Everybody knows that if a wife asks her husband to get a yard and a half of cloth to make the baby a dress that

mates but usually there are not and then those wives are called slackers by those with whom fate dealt more kindly.

Please do not think this all belongs to my husband for it does not, only a small portion fits him, but it is all too true in cases that I know. And I have not painted it nearly as bad as in truth it is.

I realize I'm putting up only one side of this. There are many faults in wives. For instance, some women are not satisfied with one husband and her family but want a flock of admirers around; they call this "newly found freedom." That is enough to discourage any man with the idea of equal rights but a broad-minded man or woman knows that is only a cloak to cover her actions. Bad women are not the only ones that need cloaks, for what about those admirers themselves? They usually are the first to scatter the news, yet they watch their own wives' actions pretty close and their daughters too. But these kinds are not new; they existed long before a woman ever voted and I guess the older people will agree to that.

I may not be able to put my view on paper but I'm strong for "Real partnership or fifty-fifty," as my husband used to say.

What do you think?

REBELLIOUS.

Always in Good Taste



2736



PATTERN No. 2736 made up in navy blue faille silk crepe would be a dress suitable for almost every occasion. It has the added advantage of lines which tend to make the large figure look smaller. The style is equally good for sheer woolen or for the heavier silks. The pattern cuts in sizes 36, 38, 40, 42, 44 and 46 inches bust measure, and made with $3\frac{1}{4}$ yards of 40-inch material with $1\frac{1}{2}$ yards of trimming for the collar. PRICE 13c.

he will either get material fit for a bride or else not worth making up. Yet nine times out of ten he thinks she should buy a whole layette with ten or fifteen dollars.

Again a man will have to have (or think he has to have) a gang of men to help at busy times and never once thinks that it will cost twice as much to feed four men as it would to feed two, but complains about bills when he is the one who is having the help which often times he could do himself. Yet his wife has all the extra work to do and gets no credit for it.

It is very easy for a man before he is married to paint rosy pictures. "Oh yes, we'll be different," "We will be real partners." "Go fifty-fifty all the way through." But when the baby is young and can't go to dances, baseball games, basket ball games, bridge parties or any of those places and mother has to stay home as there is no one else to take care of the darling, then he says she is selfish because she insists that he stay at home with her. Then by the time that baby is big enough to take in some pleasures, why hubby wonders why there can't be a brother or sister to play with. In some cases there will be several play-

Dainty Frock for Little Miss



2754



DESIGN No. 2754 is delightful for the little girl when made up in pretty dimities, organdies, tub silks, chambrays or silk crepes. The yoke and hem of plain material with the main part of figured makes a pretty contrast. The pattern cuts in sizes 2, 4 and 6 years and requires $1\frac{1}{2}$ yards of 40-inch material with $\frac{1}{2}$ yard of 32-inch contrasting and $3\frac{1}{4}$ yards of trimming for the 4-year size. PRICE 13c.

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To "see before you buy" kitchen utensils is almost necessary if you want real satisfaction and to get your money's worth. Visit our stores—it's the thrifty way.

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The Little Shepherd of Kingdom Come *By John Fox, Jr.*

Hemmed in as Morgan was, he would have gotten away, but for the fact that a heavy fog made him miss the crossing of the river, and for the further reason that the first rise in the river in that month for twenty years made it impossible for his command to swim. He might have fought out, but his ammunition was gone. Many did escape, and Morgan himself could have gotten away. Chad, himself saw the rebel chief swimming the river on a powerful horse, followed by a negro-servant on another—saw him turn deliberately in the middle of the stream, when it was plain that his command could not escape, and make for the Ohio shore to share the fortunes of his beloved officers who were left behind. Chad heard him shout to the negro:

"Go back, you will be drowned." The negro turned his face and Chad laughed—it was Snowball, grinning and shaking his head:

"No, Mars John, no suh!" he yelled. "It's all right fer you! You can git a furlough, but dis nigger ain't gwine to be cotched in no free State. 'Sides, Mars Dan, he gwine to get away, too." And Dan did get away, and Chad, to his shame, saw Morgan and Colonel Hunt loaded on a boat to be sent down to prison in a State penitentiary! It was a grateful surprise to Chad, two months later, to learn from a Federal officer that Morgan with six others had dug out of prison and escaped.

"I was going through that very town," said the officer, "and a fellow, shaved and sheared like a convict, got aboard and sat down in the same seat with me. As we passed the penitentiary, he turned with a yawn—and said, in a matter-of-fact way:

"That's where Morgan is kept, isn't it?" and then he drew out a flask. I thought he had wonderfully good manners in spite of his looks, and, so help me, if he didn't wave his hand, bow like a Bayard, and hand it over to me:

"Let's drink to the hope that Morgan may always be as safe as he is now." I drank to his toast with a hearty Amen, and the fellow never cracked a smile. It was Morgan himself."

Early in '64 the order had gone round for negroes to be enrolled as soldiers, and again no rebel felt more outraged than Chadwick Buford. Wolford, his commander, was dishonorably dismissed from the service for bitter protests and harsh open criticism of the Government, and Chad himself, felt like tearing off with his own hands the straps which he had won with so much bravery and worn with so much pride. But the instinct that led him into the Union service kept his lips sealed when his respect for that service, in his own State, was well-nigh gone—kept him in that State where he thought his duty lay. There was need of him and thousands more like him. For, while active war was now over in Kentucky, its brood of evils was still thickening. Every county in the State was ravaged by a guerilla band—and the ranks of these marauders began to be swelled by Confederates, particularly in the mountains and in the hills that skirt them. Banks, trains, public vaults, stores, were robbed right and left, and murder and revenge were of daily occurrence. Daws Dillon was an open terror both in the mountains and in the Bluegrass. Hitherto the bands had been Union and Confederate, but now, more and more, men who had been rebels joined them. And Chad Buford could understand. For, many a rebel soldier—"hopeless now for his cause," as Richard Hunt was wont to say, "fighting from pride, bereft of sympathy, aid, and encouragement that he once received, and compelled to wring existence from his own countrymen; a cavalryman on some out-post department, perhaps,

without rations, fluttering with rags; shod, if shod at all, with shoes that sucked in rain and cold; sleeping at night under the blanket that kept his saddle by day from his sore-backed horse; paid, if paid at all, with waste paper; hardened into recklessness by war—many a rebel soldier thus became a guerilla—consoling himself, perhaps, with the thought that his desertion was not to the enemy."

Bad as the methods of such men were, they were hardly worse than the means taken in retaliation. At first, Confederate sympathizers were arrested and held as hostages for all persons captured and detained by guerillas. Later, when a citizen was killed by one of these bands, four prisoners, supposed

seer; how he had ridden out to pay his personal respects to the complainant, and that brave gentleman, seeing him from afar, had mounted his horse and fled, terror-stricken. They never knew that just after this he had got a furlough and gone to see Grant himself, who had sent him on to tell his story to Mr. Lincoln.

"Go back to Kentucky, then," said Grant, with his quiet smile, "and if General Ward has nothing particular for you to do, I want him to send you to me," and Chad had gone from him, dizzy with pride and hope.

"I'm going to do something," said Mr. Lincoln, "and I'm going to do it right away."

And now, in the spring of '64, Chad

The Story Thus Far

CHAD leaves "Lonesome" with his dog "Jack." His foster parents are both dead from the plague and plans have been laid to bind Chad out to a hard fisted neighbor. After the funeral, Chad collects a rifle, some powder, and shot and a haversack and with "Jack" by his side, starts out for unknown parts. He meets the sons of Joel Turner from over the mountain who take him home. Chad's cleverness at school gains the admiration of Caleb Hazel, the schoolmaster. They become close friends. Hazel tells Chad of the "Bluegrass Country" beyond the hills. Logging operations take Chad to a distant city where he gets lost and starts home on foot. He is picked up by Major Calvin Buford. It appears that Chad is also a Buford and is believed to be a kinsman of his new found friend, who takes him to his home in Lexington in the heart of the "Bluegrass." Chad accepts the Major's offer of a home and an education. Chad enters into the social life and becomes very popular at school. He falls in love with Margaret Dean, daughter of General Dean, neighbor of the Bufords. Meanwhile feeling grows bitter between North and South and war clouds gather. Chad joins the Union forces under Grant. His command takes him back to Lexington.

to be chosen from this class of freebooters, were taken from prison and shot to death on the spot where the deed was done. Now it was rare that one of these brigands was ever taken alive, and thus regular soldier after soldier who was a prisoner of war, and entitled to consideration as such, was taken from prison and murdered by the Commandant without even a court-martial. It was such a death that Dan Dean and Rebel Jerry had narrowly escaped. Union men were imprisoned even for protesting against these outrages, so that between guerilla and provost-marshal no citizen, whether Federal or Confederate, in sympathy, felt safe in property, life, or liberty. The better Unionists were alienated, but worse was yet to come. Hitherto, only the finest chivalry had been shown women and children throughout the war. Women whose brothers' and husbands and sons were in the rebel army, or dead on the battle-field, were banished now with their children to Canada under a negro guard, or sent to prison. State authorities became openly arrayed against provost-marshals and their followers. There was almost an open clash. The Governor, a Unionist, threatened even to recall the Kentucky troops from the field to come back and protect their homes. Even the Home Guards got disgusted with their masters, and for a while it seemed as if the State, between guerilla and provost-marshal would go to pieces. For months the Confederates had repudiated all connection with these freebooters and had joined with Federals in hunting them down, but when the State government tried to raise troops to crush them, the Commandant not only ordered his troops to resist the State, but ordered the muster-out of all State troops then in service.

The Deans little knew then how much trouble Captain Chad Buford, whose daring service against guerillas had given him great power with the Union authorities, had saved them—how he had kept them from arrest and imprisonment on the charge of none other than Jerome Conners, the over-

carried in his breast despatches from the President himself to General Ward at Lexington.

As he rode over the next hill, from which he would get his first glimpse of his old home and the Deans', his heart beat fast and his eyes swept both sides of the road. Both houses—even the Deans'—were shuttered and closed—both tenantless. He saw not even a negro cabin that showed a sign of life.

On he went at a gallop toward Lexington. Not a single rebel flag had he seen since he left the Ohio, nor was he at all surprised; the end could not be far off, and there was no chance that the Federals would ever again lose the State.

On the edge of the town he overtook a Federal officer. It was Harry Dean, pale and thin from long imprisonment and sickness. Harry had been with Sherman, had been captured again, and, in prison, had almost died with fever. He had come home to get well only to find his sister and mother sent as exiles to Canada. Major Buford was still in prison, Miss Lucy was dead, and Jerome Conners seemed master of the house and farm. General Dean had been killed, had been sent home, and was buried in the garden. It was only two days after the burial, Harry said, that Margaret and her mother had to leave their home. Even the bandages that Mrs. Dean had brought out to Chad's wounded sergeant, that night he had captured and lost Dan, had been brought up as proof that she and Margaret were aiding and abetting Confederates. Dan had gone to join Morgan and Colonel Hunt over in southwestern Virginia, where Morgan had at last got a new command only a few months before. Harry made no word of comment, but Chad's heart got bitter as gall as he listened. And this had happened to the Deans while he was gone to serve them. But the bloody Commandant of the State would be removed from power—that much good had been done—as Chad learned when he presented himself, with a black face, to his general.

"I could not help it," said the Gen-

eral, quickly. "He seems to have hated the Deans." And again read the despatches slowly. "You have done good work. There will be less trouble now." Then he paused. "I have had a letter from General Grant. He wants you on his staff." Again he paused, and it took the three past years of discipline to help Chad keep his self-control. "That is, if I have nothing particular for you to do. He seems to know what you have done and to suspect that there may be something more here for you to do. He's right. I want you to destroy Daws Dillon and his band. There will be no peace until he is out of the way. You know the mountains better than anybody. You are the man for the work. You will take one company from Wolford's regiment—he has been reinstated, you know—and go at once. When you have finished that—you can go to General Grant." The General smiled. "You are rather young to be so near a major—perhaps."

A major! The quick joy of the thought left him when he went down the stairs to the portico and saw Harry Dean's thin, sad face, and thought of the new grave in the Deans' garden and those two lonely women in exile. There was only one small grain of consolation. It was his old enemy, Daws Dillon, who had slain Joel Turner; Daws who had almost ruined Major Buford and had sent him to prison—Daws had played no small part in the sorrows of the Deans, and on the heels of Daws Dillon he soon would be.

"I suppose I am to go with you," said Harry.

"Why yes," said Chad, startled; "how did you know?"

"I didn't know. How far is Dillon's hiding-place from where Morgan is?"

"Across the mountains." Chad understood suddenly. "You won't have to go," he said, quickly.

"I'll go where I am ordered," said Harry Dean.

XXVI

BROTHER AGAINST BROTHER AT LAST

IT was the first warm day of spring and the sunshine was very soothing to Melissa as she sat on the old porch early in the afternoon. Perhaps it was a memory of childhood, perhaps she was thinking of the happy days she and Chad had spent on the river bank long ago, and perhaps it was the sudden thought that, with the little they had to eat in the house and that little the same three times a day, week in and week out, Mother Turner, who had been ailing, would like to have some fish; perhaps it was the primitive hunting instinct that, on such a day, sets a country boy's fingers itching for a squirrel rifle or a cane fishing-pole, but she sprang from her seat, leaving old Jack to doze on the porch and, in half an hour, was crouched down behind a boulder below the river bend, dropping a wriggling worm into a dark, still pool. As she sat there, contented and luckless, the sun grew so warm that she got drowsy and dozed—how long she did not know—but she awoke with a start and with a frightened sense that someone was near her, though she could hear no sound. But she lay still—her heart beating high—and so sure that her instinct was true that she was not even surprised when she heard a voice in the thicket above—a low voice, but one she knew perfectly well:

"I tell you he's a-comin' up the river now. He's a-goin' to stay with ole Ham Blake ter-night over the mountain an' he'll be a-comin' through Hurricane Gap 'bout daylight ter-morrer or next day, shore. He's got a lot o' men, but we can layway 'em in the Gap an' git away all right." It was Tad Dillon.

(Continued from Page 22)

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PUREBRED NEWFOUNDLAND puppies. MAPLE GROVE FARMS, Pope Mills, N. Y.

BLACK AND TAN German Police pups, Males \$10. Eligible. WARD WILLARD, Heuvelton, N. Y.

PAINE'S COLLIE KENNELS, South Royalton, Vt.

FOX TERRIER PUPS, smooth hair, small breed, 3 months old, \$10. each. CHARLES FISHER, Williamston, N. Y.

PEDIGREED POLICE PUPPIES 2 months old Wolf gray \$15. Females \$10., silver and cream \$25. JOSEPH STABB, Oriskany Falls, N. Y.

LIVE STOCK

(See Page 22)

POULTRY

Baby Chicks, Breeding Stock, Eggs

PEAFOWL, Pheasants, Bantams, Pigeons, Guineas. Free circular. JOHN HASS, Bettendorf, Iowa.

KEISER'S SINGLE COMB Brown Leghorns and Golden Buff Orpingtons. Excellent matings. Catalogue. F. KEISER, Grampian, Pa.

FOR SALE—Single Comb White Leghorn chicks. L. H. HISCOCK, Skaneateles, N. Y. Circular on request.

SINGLE COMB REDS—Barred Rocks. Eggs, Chicks. Extraordinary matings. Fine type. Bred for winter production. Catalogue. Low prices. GRAMPAN HILLS POULTRY FARMS, Grampian, Pa.

AMERICAN MOTTLED ANCONAS—Record Layers. Lay large white eggs. Extra large type. Exceptional markings. Fine matings. Low prices. Catalogue. AMERICAN ANCONA FARMS, Grampian, Pa.

PRODUCTION BRED CHICKS that live. Large type S.C.W. Leghorns. \$20-100; \$180-1000; Invest now and take profits in 1929. ADAM SEABURY, Sayville, L. I.

SUNNYFIELD EXTRA LARGE Single Comb Black Minorcas. Exclusively. Chicks. Eggs. Stock. Extraordinary layers. Lay exceptionally large white eggs. Two matings. Low prices. Catalogue. SUNNYFIELD MINORCA FARMS, Grampian, Pa.

REGAL DORCAS WHITE WYANDOTTES—Eggs, chicks, stock. 256 egg record. Ledger. North American contest. Winter layers. Excellent type. Fine matings. Low prices. Catalogue. KEISER'S WHITE ACRES, Grampian, Pa.

GIANT LIGHT BRAHMAS—chicks—eggs—extraordinary large breeders—fine color—record layers—standard bred—low price—Catalogue. GIANT BRAHMA FARMS, Grampian, Pa.

BUCHER SUPER-QUALITY CHICKS from inspected free range money-making stock. Reds, White Wyandottes, White Barred Rocks, Giants, Black Minorcas, Anconas, White and Brown Leghorns. Booklet free. Low Prices. Pure Breeds. BUCHER BROS., HATCHERY, Dept. C, Bucyrus, Ohio.

PUREBRED DAY OLD CHICKS—Sturdy, rugged. White Leghorns, Rocks, from blood tested 250-290 egg high producing ancestry. Pennsylvania State Supervision your guarantee. Ask for "More Profits." JUST A MERE FARM AND HATCHERY, Box A, Milan, Pa.

CHICKS C.O.D.—100 Rocks or Reds, \$14; Leghorns, \$12; heavy mixed, \$12; light, \$9. Delivery guaranteed. Feeding system, raising 95% to maturity, free. C. M. LAUVER, Box 26, McAlisterville, Pa.

CHICKS OF KNOWN quality bring greater returns. 16 breeds. Circular free. How to raise Better Chicks. PERRY POULTRY FARM, Perry, N. Y.

POULTRY

Baby Chicks, Breeding Stock, Eggs

STATE TESTED and Accredited S.C.R.I. and white Leghorns. Chicks healthy. High producing Birds. W. W. HAM, Branford, Conn. Phone 141.

SINGLE COMB WHITE Leghorn chicks from two and three year hens only. 18c. Hatching eggs, 9c. RED BRIDGE POULTRY FARM, Centre Moriches, N. Y.

WOODSIDE POULTRY YARDS, chicks, Tom Barron S.C. White Leghorns Imported 250-298 egg strain Breeder of leghorns for 28 years. Catalogue. DAVID HAMMOND, Cortland, N. Y.

CHICKS—PULLETS From Barron's White Leghorns. Imported annually from Barron, England; Big females, long bodies, large eggs. Catalogue free. BISHOP'S POULTRY FARM, New Washington, Ohio.

GIANT LIGHT BRAHMAS. The ideal farm flock. Eggs 10c. \$9. hundred. E. P. ALLEN, Delhi, N. Y.

BABY CHICKS 25,000 weekly. White, Brown, Buff Leghorns and Anconas \$12. and Reds, Rocks, Wyandottes, Orpingtons \$11. Per 100. Also Pigeons, Hares, Mice, Parrots. J. A. BERGEY, Telford, Pa.

HEAVIEST LAYING BARRED Rock pen all eastern contests two consecutive years. Records to 2347. Circular. Chicks \$25 per hundred. Cockerels \$5. H. VAN WINKLE, Box A, Camden, N. Y.

10 WHITE ROCK COCKERELS from heavy laying stock, beauties. H. C. BEARDSLEY, Montour Falls, N. Y.

CHICKS, LARGE TYPE, Leghorns, Rocks, Reds, Wyandottes, Turkeys, Geese, Ducks, Guineas, Stock, Eggs. Catalog. PIONEER FARMS, Telford, Penn.

CASH ON DELIVERY, Wyckoff Tanager strain. White Leghorn chicks. Our own production bred flock. 100 chicks \$10.50, 500, \$50. Write BROOKSIDE POULTRY FARM, McAlisterville, Pa.

BABY CHICKS HATCHING Eggs 8 and 10 weeks old Pullets single comb White Leghorns only. Write for price. ALTOONA FARM, R. Neal Marshall, Honesdale, Pa. R. 4.

BABY CHICKS: From heavy laying strains of Rocks and Reds \$12. White and Brown Leghorns \$10. Mixed \$9. prepaid. Member 1. B. C. A. SUNNYSIDE HATCHERY, Liverpool, Pa.

EGGS—WHITE CRESTED Black Polish Barred Rocks, Seabrights, PAINE, South Royalton, Vt.

COLUMBIAN WYANDOTTES. Large handsome heavy layers. Splendid chicks, right prices. INVALE FARM, R4, Walkkill, N. Y.

BARRED ROCK HATCHING eggs from heavy layers. Parks strain. CORY C. DEAN, Burdett, N. Y.

COLUMBIAN WYANDOTTES. Stock, Eggs. All purpose fowl. Twenty years breeding. ADRIAN E. MARSH, Lindley, N. Y.

SELECTED JERSEY BLACK Giant eggs \$1.50—15; chicks \$19—100. MRS. HOMER BAKER, Richfield Springs, N. Y.

LEGHORNS, ANCONAS 10c. Rocks, Reds, Minorcas 12c. Wyandottes 13c, heavies 11c. Light mixed 9c. CONTINENTAL HATCHERY, York, Pa.

ROSE COMB BROWN Leghorns. Frostproof egg producers. Very profitable. Baby Chicks. J. M. CHASE, Box 40, Walkkill, N. Y.

CHICKS. PURE BARRON English White Leghorns. We import Large Trapped Birds. 11c and up. Big, husky chicks hatched from our Egg-bred Leghorns insure success. Get free Catalog, prices, before buying. WILLACKER LEGHORN FARM, Box G, New Washington, Ohio.

BLUE ANDALUSIANS—Can still spare a few hatching eggs from my two pens at \$2.00 per 15; \$6.00 per 50. Great type and laying. Highly productive. L. J. VAN SCHYER, Closter, N. J.

POULTRY

Baby Chicks, Breeding Stock, Eggs

S. C. RED CHICKS, from accredited, trapnested flocks. Males from 200-265 egg hens. \$25 per hundred. MRS. W. C. WEED, Enosburg Falls, Vermont.

TOM BARRON STRAIN S. C. White Leghorns exclusively. Extra nice healthy chicks March and April \$20 per 100. May \$15. June \$12. Safe delivery by prepaid parcel post and satisfaction guaranteed. FEEK'S WHITE LEGHORN FARM, Clyde, N. Y. R. 4.

POULTRY

Turkeys—Ducks—Geese

MORNINGS CHAMPION WINNINGS Bourbon Red's. Book your hatching eggs early. FLORA MORNING, Owego, N. Y.

TURKEYS—LARGE, PUREBRED, Mammoth Bronze Dark colored. Very beautifully marked. Best strain. Yearlings and young stock. MRS. ARTHUR INGER-SOLL, Lowville, N. Y.

TURKEYS—Large, purebred, Mammoth Bronze, vigorous, healthy birds. highest quality, splendid markings, satisfaction guaranteed. CLIFTON LEE, Lowville, N. Y.

WHITE WYANDOTTE: MAMMOTH PEKIN Duck eggs, Pearl Guineas eggs. LAURA DECKER, Stamfordville, N. Y.

TURKEYS, FOUR BREEDS. Ducks, Geese, Guineas, Pet Stock, Eggs and Chicks. EDWIN SOUDER, Sellersville, Pa.

MAMMOTH WHITE PEKIN Duck eggs for hatching. ten cents apiece, delivered, satisfaction guaranteed. JOS. KENNEL, Atglen, Pa.

TURKEYS—PUREBRED MAMMOTH Bronze, Bourbon Red, Narragansett and White Holland Hens. Toms, unrelated pairs and trios, also eggs. WALTER BROS., Powhatan Point, Ohio.

MAMMOTH BRONZE TURKEY eggs from healthy free farm range stock. 100 eggs \$45. 50, \$23.50. 12, \$6. Prepaid. Fertility and safe delivery guaranteed. Valuable instructions with order. HIGHLAND FARM, Sellersville, Pa.

MAMMOTH TOULOUSE GEISE Eggs. From large old breeders, 50-\$23.50. 12-\$6.00. Prepaid. Pekin Duck eggs. 100-\$11.00. 50-\$6.00. 12-\$2.00 prepaid. Ducklings \$30.00. Satisfaction guaranteed. HIGHLAND FARM, Sellersville, Pa.

PUREBRED MAMMOTH BRONZE turkey eggs. "Baker's Bronze Beauties" strain. TROWBRIDGE TURKEY FARM, Sabinsville, Pa.

PUREBRED MAMMOTH BRONZE turkeys, large vigorous healthy birds, dark color, beautiful markings. Best strain. Satisfaction guaranteed. MRS. CHAS. ABBEY, Lowville, N. Y. R. 5.

FARM EQUIPMENT

ROOFING PAPER, 3-ply, \$1.35 per roll, 100 sq-ft. Prepaid. Asphalt shingles, roofcoating, paint. Send for price list. WINIKER BROS., Millis, Mass.

SEEDS—NURSERY STOCK

HIGH GRADE SEED Potatoes—Russets. Green Mountain, Gold Coin, Cobbler, Banner, Walter Raleighs and Carman No. 3. Prices right. Catalog free. THE KEYSTONE POTATO FARMS, Richfield, Pa.

100 MASTODON EVERBEARING \$1.85. 300, \$5. 11-illustrated Plant, Seed Catalogue free. CHAMPION ORIGINATOR, New Buffalo, Michigan.

SEEDS—NURSERY STOCK

C. O. D. FROST PROOF Cabbage plants, Leading varieties now ready. 500, 65c; 1000, \$1.00; 5000, \$4.50. FARMERS PLANT CO., Tifton, Ga.

SEND NO MONEY. C.O.D. Frost proof Cabbage and Onion plants. All Varieties now ready. 500, 65c; 1000, \$1.00; 5000, \$4.50. STANDARD PLANT CO., Tifton, Ga.

CABBAGE PLANTS, NOW Ready. My frost proof Cabbage plants will head three weeks earlier than home grown plants. Varieties: Jersey and Charleston Wakefield, Succession, Flat Dutch, Golden Acre and Copenhagen Market. Prices by parcel post prepaid: 500, \$1.25; 1000, \$2.25. Express: 1000, \$1.00; 5000, \$4.50; 10,000, \$7.50. Bermuda Onion plants same prices as Cabbage plants. Roots wrapped in moss and shipped promptly. Satisfaction Guaranteed. P. D. FULWOOD, Tifton, Ga.

STRAWBERRY, BLACK, PURPLE and Red Raspberry plants, let us mail you our circular, giving description and prices. Our plants are strictly fresh dug from new fields. F. G. MANGUS, Maple View, N. Y.

CERTIFIED SEED POTATOES. Smooth rural type. High yielding strain, grown by APPLETON BROS., Canandaigua, N. Y.

FREE SAMPLE CLARAGE SEED CORN—Clarage produced world's highest yields. Write Dunlap & Son, Williamsport, Ohio.

PAY THE POSTMAN. Send No Money. Frostproof Cabbage and Onion plants. Leading varieties. 500, 65c; 1000, \$1.00. ALBANY PLANT CO., Albany, Ga.

DAHLIAS—25, \$2.00; 75, \$5.00; not labeled, 20, \$2.00; 60, \$5.00; labeled, Perennial phlox, mixed, mammoth scarlet canna's, 15, \$1.00; 50, \$2.00. MRS. HOWARD HOLSINGER, Denton, Md.

EARLY VEGETABLE PLANTS. Frostproof Cabbage: Wakefields, Copenhagen, Golden Acre, Flat Dutch.. Bermuda Onions, Beets, Lettuce. Postpaid: 100, 40c; 500, \$1.25; 1000, \$2.25. Collect: 1000, \$1.00; 5000, \$4.50. Tomato Plants: Earliana, Bonny Best, Baltimore. Postpaid: 100, 50c; 500, \$1.50; 1000, \$2.50. Collect: 1000, \$1.75; 5000, \$7.50. Write for prices on Potato, Pepper, and Egg Plants. Carefully Packed. Varieties Labeled. Delivery Guaranteed. PIEDMONT PLANT CO., Albany, Ga.

FREE GLADIOLUS BOOK—36 pages, 45 illustrations. Describes 171 exquisite varieties, many new. Tells how to grow. It's free! The famous beautiful Rainbow Collection of thirty bulbs, all different, \$1. postpaid. HOWARD GILLET, Gladiolus Specialist, Box J, New Lebanon, N. Y.

SPECIAL LOW PRICES on pedigreed Green Mountains, Russets and Cobblers. Catalogue. ROY HASTINGS, Malone, N. Y.

RAISE BEARDLESS BARLEY. New two rowed, stiff strawed, heavy yielding. Also Burbank Oats and Gold Nugget Corn. Descriptions and samples free. LONG-ACRE FARM, Route 2, Geneva, N. Y.

EARLY JUNE RED Raspberry sets for sale. The earliest, largest, heaviest bearing berry grown. Send for literature telling what the New York State Experiment Station says of the June. LESTER BENNETT, Victor, N. Y.

TIFTON'S RELIABLE PLANTS. Frostproof Cabbage, Bermuda Onion Plants, Wakefields, Dutch Ballhead, Copenhagen, Golden Acre, Postpaid, 500, \$1.50; 1,000, \$2.50. Express paid, 500, \$1.25; 1,000, \$2.15; 5,000, \$9.40. Early Tomato, Pepper, Cauliflower, Egg Plant later, write TIFTON PLANT CO., Tifton, Ga., Box 57.

COOK'S CERTIFIED POTATOES. Cobblers and Russets. Better than ever. Attractive prices. We pay freight. IRVING E. COOK, Munsville, N. Y.

Additional Classified Advertising

On Page 22

HANDY ANDY Says "Here's How"

To Get the Best Out of Your Cook Stove

By Ray Inman

to get the best out of your cookstove. TREAT IT RIGHT!

GEE, WILLIE YOU SURE GOT THE BEST OUTA YOUR COOKSTOVE THAT TIME!

YEAH—AN' I'LL PROBLY GET THE BEST OUTA TWO BIG SWITCHES DAD'S GOT IN THE WOODSHED

Open bottom and chimney drafts when lighting FIRE.

1

EMMA WHAR'S THEM SHOES I PUT IN THIS OVEN B'FORE SUPPER? THEY AINT NUTHIN' BUT A COUPLA BEEFSTEAKS IN HERE NOW.

SHOES! GOOD HEAVENS, I DIDN'T KNOW THEY WERE THERE—YOU ATE THEM FOR SUPPER!

2 Always open oven draft for baking 3 Don't let ashes accumulate under grate, it burns it out...

GOOD LAND—DO I SMELL MY CORNED BEEF AND CABBAGE BURNING?

THAT AINT CORN BEEF AN' CABBAGE MAW. IT'S GRAPES FEET—HEWENT TA SLEED WITH 'EM IN THE OVEN—

4 wipe out oven often with greased cloth to prevent rusting ~ ~ ~

5 a good way to collect your husband's insurance: a LEAVE THE GREASED RAG ON THE FLOOR. b SPLIT 50-50 WITH US FOR GIVIN' YOU THE IDEA.

The Little Shepherd of Kingdom Come

(Continued from Page 20)

speaking—Daws Dillon, his brother, answered:

"I don't want to kill anybody but that damned Chad—Captain Chad Buford, he calls hisself."

"Well, we can git him all right. I heerd that they was a-lookin' fer us an' was goin' to ketch us if they could."

"I wish I knowed that was so," said Daws with an oath. "Nary a one of 'em would git away alive if I just knowed it was so. But we'll git Captain Chad Buford, shore as hell! You go tell the boys to guard the Gap ter-night. They mought come through afore day." And then the noise of their footsteps faded out of hearing and Melissa rose and sped back to the house.

From behind a clump of bushes above where she had sat rose the gigantic figure of Rebel Jerry Dillon. He looked after the flying girl with a grim smile and then dropped his great

bulk down on the bed of moss where he had been listening to the plan of his enemies and kinsmen. Jerry had made many expeditions over from Virginia lately and each time he had gone back with a new notch on the murderous knife that he carried in his belt. He had but two personal enemies alive now—Daws Dillon, who had tried to have him shot, and his own brother, Yankee Jake. This was the second time he had been over for Daws, and after his first trip he had persuaded Dan to ask permission from General Morgan to take a company into Kentucky and destroy Daws and his band, and Morgan had given him leave, for Federals and Confederates were chasing down these guerillas now—sometimes even joining forces to further their common purpose. Jerry had been slipping through the woods after Daws, meaning to crawl close enough to kill him and, perhaps, Tad Dillon, too, if necessary, but after hearing their plan he had let them go, for a bigger chance might be

at hand. If Chad Buford was in the mountains looking for Daws, Yankee Jake was with him. If he killed Daws now, Chad and his men would hear of his death and would go back, most likely—and that was the thought that checked his finger on the trigger of his pistol. Another thought now lifted him to his feet with surprising quickness and sent him on a run down the river where his horse was hitched in the bushes. He would go over the mountain for Dan. He could lead Dan and his men to Hurricane Gap by daylight. Chad Buford could fight it out with Daws and his gang, and he and Dan would fight it out with the men who won—no matter whether Yankees or guerillas. And a grim smile stayed on Rebel Jerry's face as he climbed.

On the porch of the Turner cabin sat Melissa with her hands clinched and old Jack's head in her lap. There was no use worrying Mother Turner—she feared even to tell her—but what should she do? She might boldly cross the mountain now, for she was known to be a rebel, but the Dillons knowing, too, how close Chad had once been to

American Agriculturist, March 30, 1929

the Turners might suspect and stop her. No, if she went at all, she must go after nightfall—but how would she get away from Mother Turner, and how could she make her way, undetected, through Hurricane Gap? The cliffs were so steep in one place that she could hardly pass more than forty feet from the road on either side and she could not pass that close to the pickets and not be heard. Her brain ached with planning and she was so absorbed as night came on that several times old Mother Turner querulously asked what was ailing her and why she did not pay more heed to her work, and the girl answered her patiently and went on with her planning. Before dark, she knew what she would do, and after the old mother was asleep, she rose softly and slipped out the door without awakening even old Jack, and went to the barn, where she got the sheep-bell that old Beelzebub used to wear and with the clapper caught in one hand, to keep the bell from tinkling, she went swiftly down the road toward Hurricane Gap.

(To be Continued Next Week)

Additional Classified Advertising

SEEDS—NURSERY STOCK

PAY ON ARRIVAL—Frostproof Cabbage Plants immediate shipment. 75c-1000. EMPIRE PLANT CO., Albany, Ga.

FROSTPROOF CABBAGE PLANTS. Order today. Pay postman. 500-60c, 1000-\$1. POSTAL PLANT CO., Albany, Ga.

MILLIONS FROST PROOF Cabbage Plants, postpaid: 250, 50c; 500, 75c; 1000, \$1.50. Express. 10,000, \$7.50. Satisfaction guaranteed. WALTER PARKS, Darien, Ga.

CHOICE YELLOW EYE Seed Beans. Tested by Geneva Experimental Station. Germination 99% purity 99.9 plus. Good yielders \$10 per hundred. ROY WILLIAMS, Middlesex, N. Y.

HARDY ALFALFA SEED 93% pure \$10.00 per bushel; Sweet Clover 95% pure \$3.00 per bushel. Return seed if not satisfied. GEO. BOWMAN, Concordia, Kansas.

BERMUDA ONION PLANTS—Grow bigger and better Onions. Frostproof. Postpaid 200, 55c; 500, \$1; 1000, \$1.75. Cabbage Plants 3 Doz. 40c; 100, \$1. PORT MELLINGER, North Lima, Ohio.

STRAWBERRY, RASPBERRY, BLACKBERRY, Dewberry, Loganberry, Wineberry, Grape, Juneberry plants; Asparagus, Rhubarb, Horseradish roots; Hardy Perennial and Annual Flower plants; Roses, Vines, Shrubs, Hedge plants. Catalogue free. HARRY E. SQUIRES, Hampton Bays, N. Y.

VEGETABLE SEEDLINGS—Ready now for you to transplant into cold frames or greenhouse. \$3. per 1000. Postpaid. Peppers—Ruby King, Worldbeater, Bull Nose, Sunnyside, Sweet Cheese, and Chinese Giant. Tomatoes—Langdon's Earliana, Penn State Earliana, Marglobe, Chalk's Early Jewel, Bonny Best, John Baer, Stone and Matchless. Send for list of other plants. PAUL F. ROCHELLE, Morristown, N. J.

CERTIFIED ITHACAN OATS and Alpha Barley seed. Our fields of these Cornell varieties College inspected. Also select Canada Field Peas. JONES & WILSON, Hall, N. Y.

OLD FASHIONED HARDY Flower Plants. Hollyhocks, Delphiniums, Bleeding Hearts, Anemones, Blue Bells, Canterbury Bells, Columbines, Monkshoods, Hardy Carnations, Hardy Chrysanthemums, Hardy Lilies, Hardy Phloxes, Lupines, Hardy Pinks, Oriental Poppies, and 240 other Perennials that will bloom this summer; Pansies, Asters, Salvias, Petunias, Zinnias, Snapdragons and other annuals; Roses, Vines, Shrubs, Hedge Plants; Berry plants, Asparagus roots. Catalogue free. HARRY E. SQUIRES, Hampton Bays, N. Y.

COLORADO BLUE SPRUCE 50 seeds with planting instructions 10c. BOX 92, Greenlane, Pa.

CERTIFIED SEED POTATOES. Smooth white Russians. Write for prices. H. L. HODNETT & SONS, Fillmore, N. Y.

PREMIER OR HOWARD 17 Strawberry Plants \$1.00 per 100, \$5.00 per 1000. BASIL A. PERRY, Georgetown, Delaware.

FROSTPROOF CABBAGE and Onion Plants \$1 thousand. Prompt shipments. Good delivery guaranteed. OLD DOMINION PLANT COMPANY, Franklin, Va.

GLADIOLUS \$1.00 Blooming Bulbs \$1.00, 12 choice Dahlias \$1.00. Catalogue. 20 Evergreen Trees \$2.00. GLADAILIA FARMS, Chicopee Falls, Mass.

FOR SALE: Number one Vermont Green Mountain Certified Seed potatoes from foundation stock \$1.00 per bushel. JOHN A. ALEXANDER, South Royalton, Vt.

FOR SALE: COLLEGE INSPECTED Certified Seed Potatoes. Rural heavyweight type. Priced reasonable, write for prices and inspection report. HARRY M. FUESS, Waterville, N. Y.

PURE STRAIN BRAND Certified and Near-Certified Seed Potatoes. Best proven varieties. Northern Grown. Ask for price list. A. G. ALDRIDGE SONS, Established 1889, Fishers, N. Y.

GLADIOL CHOICE COLLECTION of new and standard kinds. Write for catalogue. Exceptionally choice mixture, large flowering kinds at \$2.50 per hundred. ECHO HEIGHTS FARM, Jordan, N. Y. R. 2.

MASTODON EVERBEARING STRAWBERRY Plants \$2.50 per 100, \$15.00 per 1000. Plants set out this Spring will bear quantities of large delicious berries this summer and fall. BASIL A. PERRY, Georgetown, Delaware.

CERTIFIED—COLLEGE INSPECTED Seed Potatoes. Green Mountain and Irish Cobblers. Write for our prices. WALTER L. CARPENTER INC., Chittenango Station, N. Y.

SEEDS—NURSERY STOCK

100 ONION PLANTS FREE with order for 1000 plants. Cabbage plants \$1.00 thousand, onion plants 75c, tomato plants \$1.50, mail or express collect. Guarantee safe delivery. Write for descriptive booklet. CARLISLE PLANT FARMS, Valdosta, Ga.

SEND \$1.00 FOR 15 named Dahlias, detached from labels, mixed in handling. Collection contains many prize winning varieties of exhibition and giant types, worth 50c, 75c, or \$1.00 each. Catalog free. MRS. B. D. BAILEY, Litchfield, Conn.

CERTIFIED SEED POTATOES. Smooth and Russet. Buy direct from one of New York's Premier growers, ear lots or less. A. A. WEEKS, Locke, N. Y.

Set Our "FROSTPROOF" Cabbage and Onion plants, and mature crop three weeks earlier 300, \$1.00; 500, \$1.75; 1000, \$2.75; 10,000, \$20. All delivered prepaid. Prompt shipment, good plants delivered or money refunded. J. P. COUNCIL COMPANY, Franklin, Virginia.

SEED CORN—CERTIFIED West Branch Sweepstakes for sale, grown by Penna State College instructors. 95 to 100% germination. \$3. per bu. A. L. WINTER & SON, Mountoursville, Pa.

CERTIFIED LATHAM AND HERBERT RASPBERRIES. Howard 17 and Mastodon Strawberries, Washington Asparagus. Other leading varieties Raspberries, Strawberries, Blackberries, Fruit trees, Shrubs, Evergreens, etc. Prices low. Everything guaranteed. Send for price list. BERT BAKER, Iloosick Falls, N. Y.

"FROSTPROOF" Cabbage and Onion Plants—Special wholesale prices: 500, \$1.25; 1000, \$2.00; 5000, \$9.00; 10,000, \$17.50 all charges prepaid. Fine Plants, good delivery guaranteed or money refunded. WHOLESALE PLANT COMPANY, Thomasville, Ga.

MILLIONS, CABBAGE, ONIONS, and Tomato Plants \$1, 1000. Pepper and Potato Plants \$1.75 1000. Gladiolus Bulbs \$1. Hundred, CLARK PLANT CO., Thomasville, Ga.

WANTED TO BUY

WANTED—HAY, GRAIN, Potatoes, Apples, Cabbage, Carloads. Pay highest market prices. THE HAMILTON CO., New Castle, Pa.

WANTED TO BUY old bags. We pay excellent prices. Write for prices. We pay freight. OWASCO BAG CO., Rochester, N. Y.

USED COW STABLE equipment for 15 head, kind, price. C. ROUNDS, Greenwood, N. Y.

\$2 to \$500 EACH paid for hundreds of Old or Odd Coins. Keep all old money, it may be very valuable. Get posted. Send 10 cents for illustrated Coin Value Book, 4x6, 25 years in business. We buy and sell. CLARKE COIN EXCHANGE, Box 25, Le Roy, N. Y.

WOOL—HIDES—FURS

MUSKRAT FURS WANTED. Black—Large \$3.50. Medium \$2.50. Brown—Large \$2.50. Medium \$1.50. All furs wanted. EVERETTE SHERMAN, Whitman, Mass.

WOOL AND SHEEP Pelts Wanted. I—specialize in Wool and Pelts. Hundreds of satisfied shippers. Write for prices. ALVAH A. CONOVER, Lebanon, N. Y.

AGENTS WANTED

AGENTS: SELL TROUSERS, Overalls, Dry Goods, Etc. Some advertised brands. Write FREEMAN E. HUNTER CO., Riverton, N. J.

MAKE \$50 to \$75 weekly this Spring taking orders for our quality Nursery Stock. Fruits from our trees have won first prize at the Syracuse State Fair for years. Free replacements. No investment. No experience necessary. Free outfit. Pay weekly. KNIGHT & BOSTWICK, Newark, New York State.

HELP WANTED

RELIABLE MEN WANTED to sell guaranteed trees, shrubs and roses. Steady work. Pay weekly. Start now for Spring business. Wholesale and retail. WEBB NURSERY CO., Rochester, N. Y.

MAKE \$10 EVERY day introducing New Automatic Window Washer. Amazing invention. Send for FREE sample offer. NATIONAL INDUSTRIES, 67 E. Lake, Dept. 203, Chicago.

SITUATIONS WANTED

DO YOU NEED FARM HELP. We have Jewish young men, able-bodied, some with, but mostly without experience, who want farm work. If you need a good, steady man, write for an order blank. Ours is not a commercial agency. We make no charge. THE JEWISH AGRICULTURAL SOCIETY, Inc., Box A, 301 E. 14th Street, New York City.

YOUNG EXPERIENCED MAN wants work on farm. age 17, good milker. MICHAEL LOSOWSKI, Brookfield, N. Y. care Robert Curnow.

FARMS FOR SALE

FOR SALE TO Close Estate. Two adjoining dairy farms of 100 and 200 acres respectively; 15 miles south of Syracuse, N. Y. Two sets buildings in best of repair and painted, including milkhouse, icehouse, chicken house and garage. Never failing spring piped to barn and milkhouse. Enquire at farm, Pompey, N. Y. of Roy R. Partridge or Harry I. Partridge, Executor, 19 Woodlawn Ave., Buffalo, N. Y.

DEL-MAR-VA—6,090 SQUARE MILES FINEST AGRICULTURAL OPPORTUNITIES. Within three to ten hours by motor truck over splendid concrete highways to New York, Philadelphia, Baltimore and Washington markets. Pennsylvania Railroad System permeates entire Peninsula. Mild, equable climate. Very little snow and freezing. Farms, town and waterfront homes, low-priced. Good schools, low taxes. Handsome descriptive booklet, FREE. Address 164 Del-Mar-Va Building, Salisbury, Md.

FOR SALE: Milk plant, twelve room house, five acres, abundant spring water, state road, electricity, railroad. Priced to sell. ADDRESS BOX 47, Hannibal, N. Y.

YEAR'S RENT of 100 acre fertile conveniently located Western New York farm free to reliable man who has some stock, tools. Will sell at a sacrifice. Box 3, Cuba, New York.

FARM FOR SALE: 132 acres, high state of cultivation, ¼ mile stone road, good buildings, water in house and barn; 100 ton silo; tie up 18 head cattle; near Dairyman's League and Sheffield Plants, milk taken from door. Stock consists 24 high grade Holsteins, horses, all modern farming machinery, will sell with or without equipment. E. J. GOODMAN, West Chazy, N. Y.

TOBACCO

LEAF TOBACCO—Good sweet chewing, 3 lbs., 90c; 5, \$1.25; 10, \$2.00. Smoking, 3 lbs., 60c; 5, 90c; 10, \$1.50. UNITED FARMERS, Mayfield, Kentucky.

LEAF TOBACCO—Good sweet chewing, 3 lbs., 90c; 5, \$1.25; 10, \$2.00. Smoking, 3 lbs., 60c; 5, 90c; 10, \$1.50. UNITED FARMERS, Mayfield Kentucky.

GUARANTEED CHEWING or Smoking five lbs. \$1.50; Ten \$2.50; Fifty Cigars \$1.85; pay when received. KENTUCKY TOBACCO CO., West Paducah, Kentucky.

WOMEN'S WANTS

PATCHWORK PERCALES, GINGHAMS 7 pounds \$1. 4 pounds Blankets remnants \$1. Rug Strips 4 pounds \$1. Pay postman plus postage. NATIONAL TEXTILE CO., 661 Main St., Cambridge, Mass.

WONDERFUL VALUE SILK Jersey 36 inches wide 3 yards \$1. Pansey, Nude only. Corduroy 54 inches wide. Remnants 3 pounds \$1. Nile Green only. White Flannel Remnants 3 pounds \$1. Percales 36 inches wide 8 yards \$1, slightly imperfect. Pay postman plus postage. Silks or Velvets large package 25c postpaid. NATIONAL TEXTILE CO., 661 Main St., Cambridge, Mass.

TWELVE ARTISTIC BIRTHDAY Cards, no two alike, fancy lined envelopes, postpaid \$1.00. SOUTHWORTH'S, Milford, Conn.

LADIES' FINE LISLE STOCKINGS, 3 pair \$1.00. Black, gunmetal, grey, beige, nude, French nude; sizes 8½-10. Good openings for agents. A. H. TALBOT SALES COMPANY, Norwood, Mass.

PRINTING—STATIONERY

200 FINE WHITE ENVELOPES neatly printed with your return corner card, postpaid, \$1.00. Samples free. PRINTER HOWIE, Beebeplain, Vt.

GUMMED MAPLE LABELS—Guaranteed stick to tin. Beautifully printed in colors. You need them. Samples free. PRINTER HOWIE, Beebeplain, Vt.

250 BUSINESS ENVELOPES AND 250 Letter Heads only \$3.00, 500 of each \$5.00. Cuts used free. Write your wants. INDEPENDENT PRESS, Mexico, N. Y.

250 BUSINESS ENVELOPES printed postpaid \$1. 50 Calling cards 10c. Samples free. WALTER G. COLLINS, Cohocton, N. Y.

MAPLE LABELS. POSTPAID—Four sizes: \$1.20, \$1.50, \$1.85, \$2.00 per 500. Best label, no waste. Samples, list free. HONESTY FARM PRESS, Putney, Vt.

MISCELLANEOUS

WANTED USED BAGS any quantity and grade. Highest prices and freight paid. HOFFMAN BROS. BAG CO., 39 Gorham St., Rochester, N. Y.

LEARN AUCTIONEERING at home. Every student successful. SCHOOL, Box 707, Davenport, Iowa.

BARRELS OF SLIGHTLY damaged crockery—Hotel chinaware — Cookingware — Glassware — Pottery. E. SWASEY COMPANY, Portland, Maine.

SUPERIOR GRAFTING WAX for Successful grafting. 1 lb. 50c; 3 lbs. \$1.25 postpaid. D. VICTOR MFG. CO., So. Weymouth, Mass.

PATCHWORK: Rayon, Percale, Prints, 3 lbs. \$1. 100 assorted pieces 6x8, \$1. Special trial package, 50 cents, postpaid. NEW ENGLAND PATCHWORK CO., Hartford, Conn.

HONEY: 60 lbs. finest buckwheat \$5.40. Clover \$6.60 not prepaid. Satisfaction guaranteed. F. W. LESSER, Fayetteville, N. Y.

HARDWOOD ASHES 10 per cent Potash, \$18 per ton. Write for carload prices. C. W. STEVENS, Yorkshire, N. Y.

AVIATION—If you are interested in aviation instruction and earning while learning, write WEEKS AIRCRAFT CORPORATION, Dept. BII, for free information without obligation, Milwaukee, Wis.

USED CIVIL WAR ENVELOPES with flags, designs, etc., \$1 to \$15 paid. Other stamps on envelopes before 1871 bought. Three-facelamps and old glassware bought. W. RICHMOND, Cold Spring, N. Y.

OUR 1929 CATALOG just from press. 84 pages showing largest line of Poultry Supplies in the world (Over 350 items). Write today for your copy FREE. BROWER MFG. CO., Dept. 11 1, Quincy, Ill.

FOR SALE: Hand power, invalid or freight elevator, 600-lb. capacity. SIDNEY CROUNSE, Altamont, N. Y.

FINE CLOVER HONEY: 5 lbs. \$1.15, 11 lbs. \$2.00, 2 lbs. 70c. All in special parcel post containers, postpaid. B. B. FLORY, Pequoa, Lancaster Co., Pa.

MUSIC LOVERS—New Popular also World's Best Music, 10c per copy. Catalogues and Two copies free for names of ten piano players. WEASNER MUSIC CO., Buffalo, N. Y.

AX HANDLES, hand shaved, white hickory, 60c; red hickory, 40c; postpaid; giv length, single or double bit; hammer handles, finest shellbark hickory. 15c. CHAS. RICKARD, Interlaken, N. Y.

BALSAM PILLOWS filled with fresh Adirondack Balsam \$1.25 postpaid. Makes an ideal gift. Fill your own pillow; enough balsam in bulk for two pillows. \$1.00 postpaid. WONDER GIFT SHOP, Box 24, Newcomb, N. Y.

BEES PAY FAR Better, cost considered, than any other farm stock—if you keep them Right. Do you want to keep your bees better? If so, let us help you. Send for our free booklet, "Bees for Pleasure and Profit." Thoroughly discusses beekeeping. Tells how to start right. If you want to transfer your bees into better hives ask also for leaflet on transferring. Address A. I. ROOT CO., 232 Liberty St., Medina, Ohio.

PURE HONEY. Satisfaction guaranteed. 5 lbs. clover, \$1; 10, \$1.90; buckwheat \$1.65. Prepaid. C. N. BAL-LARD, Valois, N. Y.

FARMERS. End crow pests and replanting. Treat corn seed with guaranteed formula costing few cents per bushel. Same mailed on receipt of \$1. R. WHEELER, Marathon, N. Y., R. D. 1.



The Service Bureau

A Department Devoted to the Interests, Welfare
and Protection of A. A. Readers



Life Insurance By Mail

OWING to the unusual number of letters asking for information concerning several life insurance companies, we are giving our readers the following information. The State of New York has rather stringent insurance laws, and any company which maintains agents in New York State must be licensed by the State Insurance Department.

However, it is perfectly legal for an insurance company outside of the State of New York, to advertise in papers circulating in New York and to solicit residents of New York State through the mails. In this case, of course, the New York State resident assumes whatever risk there may be that the company may be unable to carry out its promises.

We feel it is a reasonable supposition that any company failing to take out a license to do business in New York

as I could not afford it. The agent told me that the set of books would not cost me a cent; that he would send me a set of books free but that he wanted me to sign my name to show that I gave him permission to use my name as a reference when he would come through this way again to sell the sets of books. I asked him then if I signed my name, would I not have to pay anything, and he said, "No."

About two weeks later I received a bill of \$71.11 from the company for the books. I had not yet received the books, so I wrote immediately and told them not to send any books to me, that I would not pay for them as I had not ordered any. That I merely signed my name, giving their agent permission to use my name as a reference, and that their agent told me I would not have to pay a cent.

The company sent the books on, after I had told them not to, but I sent them back and the books are at the company's office now, but they keep sending bills. In their last letter, which was received March 1, they stated that I would have to make arrangements to pay immediately or they would file suit against me.

The name of the company is the Standard Educational Society, of 134 N. La-Salle Street, Chicago, Ill.

THE above letter is only one of many we might print, complaining about the methods used by agents of the Standard Educational Society. We are printing it to show the readers what they may expect from agents of this society. The following is a part of a letter received from the Standard Educational Society, when a similar complaint was forwarded to them:

"We are enclosing a copy of the agreement, and you will observe that the contract outlines the transaction in detail, stating we are to deliver to the subscriber ten bound volumes of the Standard Reference Work and to enter subscriber's name for ten years of Loose Leaf Extension Service and ten years of Research Bureau Service. Further more,

the following words, 'This contract is not subject to cancellation, and will not be affected by any agreement not endorsed hereon,' appeared in extra heavy print just above the signature line."

Under the circumstances as given by our subscriber we doubt whether

Promptness Appreciated

PLEASE accept my thanks for the check for \$20.00 which I received from the North American Accident Insurance Co. You are rendering a great service through your paper to those who are fortunate in having policies in that company in case of accidents.

Yours respectfully,
Roy J. Beemer,
Sussex, N. J., R. D. 3

legal action will ever be taken to collect the claim. However, she will be subjected to endless annoyance through letters demanding payment. READ BEFORE YOU SIGN.

Do You Understand Your Insurance Policy

"We were insured for \$5000 and the loss by fire was about \$6000 on which the insurance adjuster has made a cut of \$1000, and we would like your advice as to what to do."

IT should be clearly understood when you insure buildings for a certain sum, perhaps 50% of the value of the property, that if the buildings are damaged by fire to the extent of 25% of the value of the buildings, the insurance company will only pay 25% of the amount you are insured for and not the full face of the insurance. If you insure for the full value of a building in two different companies and have a total loss by fire, each company will pay 50% of the value of the loss.

Farm fires in the United States cost \$150,000,000 and 3,500 lives a year.

Posting New York Farms Against Trespassers

THE New York State Conservation Law specifies that no-trespass signs shall be at least twelve inches square. One sign must be posted on each corner of the farm and along the boundary line not to exceed forty rods apart. Illegible or defaced signs must be replaced once a year during the months of March, July, August or September.

If a farm is posted, it is necessary to post the entire farm; that is, one section cannot be posted and the other not posted. However, if a man owns several farms, any one of them may be posted separately as desired. An owner may hunt or fish on his own property without a license without reference to whether the land is posted or not. The signs should be placed high enough on trees or fences to keep them from mutilation. American Agriculturist will furnish no-trespass signs printed on linen at a cost of 95 cents per dozen.

Rights Against Trespassers

The fact that land is not posted does not give anyone the right to hunt or fish on it. Even where land is not posted, the owner may order trespassers to leave the premises and if they refuse he may use "reasonable force" to evict them. Notwithstanding this fact, it is advisable to post a farm because the penalty for hunting or fishing on posted land is rather severe while there is no penalty for hunting or fishing on unposted land so long as no damage is done.

The Conservation Law also states that any hunter or fisherman who, while hunting or fishing without the permission of the owner, shall enter upon his land and cut, destroy or damage any bars, gates or fences or shall leave open any bars or gates thereon, shall be guilty of a misdemeanor.

A man can be sued for damage done even though the land is not posted.

Many questions have come to us, asking what to do where signs are dis-

regarded. In some cases trespassers have actually threatened farm owners when they were ordered off the place. Under these conditions we recommend that the number of the trespasser's hunting or fishing license be secured and that the State Troopers be notified of the facts immediately.

Penalties for Trespassing

There is no penalty attached to trespassing on unposted property so long as no damage is done. If damage is done, suit must be instituted to recover. As already stated, trespassers can be ordered off even though the land is not posted.

Where the land is posted, the New York Conservation Law states that "a person who violates any provision in Part II (which contains the no-trespass law) shall be guilty of a misdemeanor and in addition thereto is liable to a penalty of from \$10 to \$50 together with the cost of the suit in addition to the actual damages all of which can be recovered in the same action and it shall be the duty of the State Police and game protectors and all peace officers to enforce the provisions of Part II and prosecute all violators thereof. The penalty for a second conviction for a misdemeanor is a fine of not less than \$25 or more than \$150 or imprisonment for not more than 100 days or both. For a third conviction, the punishment is imprisonment in the County Jail for ten days to six months and a fine of not less than \$10 or more than \$100.

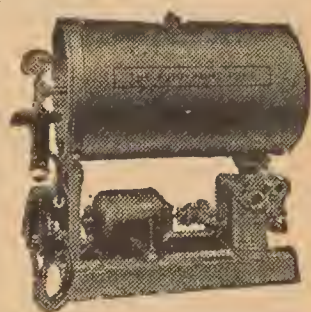
Who Should Enforce Trespass Law

We have also received questions indicating that local officers pay little attention to complaints against trespassing. A recent letter from the Conservation Department states that it shall be the duty of the State Police, game protectors and all peace officers to enforce the provisions of Part II and prosecute all violators.

Ninety Parts Eliminated in New Kind of Pump

Surprising Invention Developed by
Noted Engineers Provides
Fresh Running Water at
Amazing Low Cost!

NOW, at last, every rural and suburban dweller who has no water supply system may have fresh running water at less than city cost, as a result of a wonderful new pump developed by engineers of the Auto-Prime Pump Company, Cleveland, Ohio. Between 90 and 95% of the moving, wearing parts hitherto considered essential in pump design have been eliminated in this latest invention, cutting down operating costs and doing away with expensive repairs and replacements, and saving hundreds of users thousands of dollars.



Entirely Different

The new pump is built on an entirely new principle discovered after several years' research and experimentation. Its amazing simplicity of construction has made possible new standards of economy as it has no belts, pulleys, pistons, valves or leather suction washers. Nothing to wear out, nothing to get out of order, nothing to replace or repair! The first low cost is the last.

Surprising Performance

While it has only one moving part, the pump is so efficient that it has a rated capacity of 650 gallons per hour under a maximum pressure of 75 pounds per square inch. The volume increases as the pressure is decreased and a large number of faucets can be opened at the same time without any appreciable drop in volume. It may be connected to any shallow well, lake, spring, stream or cistern. And because of its greater suction lift (draws from a depth of 28 feet!) may be used in places where deep well equipment is normally required.

Many Exclusive Features

The Auto-Prime Pump has 25% greater capacity in addition to its greater suction lift. What is more, it is entirely automatic and self-priming, pumping steadily without pulsation or "water-hammer." A special automatic switch insures continuous operation, requiring no starting, stopping or priming. In addition, every precaution has been taken to make it absolutely safe and fool-proof. Will not deteriorate through use or lack of use. Even after long periods of idleness, it can be depended upon to furnish instant fresh running water without sticking or blowing of fuses. A knife switch and safety switch guard against any emergency.

Quickly and Easily Installed

Here is an advantage that cannot be overlooked, for anyone can in a short time install this modern water system which is furnished all ready to set up. No special wiring, lugs, bolts, etc., are necessary, and once the pump is installed it will last a lifetime, so sturdily is it constructed. All in all, it affords the shrewd buyer the greatest pump value on the market today—a modern unit guaranteed to furnish maximum satisfaction at the lowest possible cost.

Free Book Gives Full Details

Readers of this publication interested in learning the complete facts about this remarkable engineering development may secure a copy of an interesting new booklet offered by the manufacturers. This valuable treatise presents a wealth of valuable information about economical water supply and is furnished free, without obligation. For your convenience a space for your name and address is provided. Decide now to banish the drudgery of hand and water pail in this modern, practical and economical way.

Name.....
Address.....
City.....
State.....

Simply fill in and mail to The Auto-Prime Pump Company, Dept. CA-50, 850 E. 72nd St., Cleveland, Ohio.

We Are Glad To Help

"I received a check of \$45.82 today which is payment in full of my claim against the ———. I want to heartily thank you for what you have done for me."

"It was due to your efforts alone that the machine company ever sent a representative to see me. I feel that I am greatly indebted to the Service Bureau for helping to clear this thing up."

"Thank you very much for your letter regarding my claim. I received a check in full settlement of the claim. Thank you again for your assistance, for I had been unable to get any reply from them regarding the matter."

State does so because it is unable to meet the requirements. As a result, we suggest that our readers who are solicited by mail, write first to the State Insurance Department at Albany, New York, or to us asking whether the company in question has a license to do business in the state.

Complains about Unsatisfactory Merchandise

Can you give us information regarding the National Advertisers Syndicate of Chicago? Recently I sent an order for some merchandise, and gave the agent \$15.00 deposit. The goods received were not as ordered, so I did not accept them, and is there any way I can get back the \$15.00 I paid as deposit?

ON investigation we learn that the National Advertisers Syndicate consists of Mr. John M. Sweeney. He also has operated under the following names:

The United States Factories.
Wholesalers Protective Assn.
The U. S. Commercial Agency.

Mr. Sweeney sells merchants an advertising scheme, users of which, according to information given us, can be prosecuted both under the state and federal laws for operating a lottery. We are informed that many complaints have been received against Mr. Sweeney from dealers who have either not received the merchandise, or who have paid the C.O.D. charges, and have maintained that the goods are inferior, and not as represented to them.

Claims Misrepresentation By Book Agent

Last October a book agent came to my school during school hours and began to tell me about a wonderful set of books. I told him point blank that I did not want a set, and would not buy a set of books,

Increase your grain profits reduce dockage losses



by treating *all* seed
grains with CERESAN

**Controls diseases...easy to use
harmless to seed and drill**

Avoid heavy dockage losses or lowered feeding value on your crop because of smutted, diseased grains. Grow a clean crop that will grade high and bring you increased profits. Now—a single dust disinfectant, CERESAN, controls 9 important diseases of grains. Exhaustive tests by the U. S. Dept. of Agriculture and State Experiment Stations have proved CERESAN safe and effective. Treats seed for only 6 to 9 cents a bushel. No costly equipment is needed. Harmless to seeds and drills. Get your package of CERESAN from your dealer now. Ask him also for FREE pamphlets on Du Bay Seed Disinfectants for other crops—Semesan Jr., for seed corn; Semesan Bel, the instantaneous potato dip; and Semesan, for vegetable and flower seeds and bulbs.

Ceresan Controls these Diseases:

Wheat—Bunt or stinking smut and seed-borne flag smut.

* *

Oats—Both loose and covered smut.

* *

Barley—Stripe disease, covered smut and loose smut in certain 6-row winter varieties.

* *

Sorghum—Kernel smuts.

* *

Rye—Seed-borne stem smut.

Most dealers handle CERESAN. Those listed below carry a large stock and can quickly supply your needs.

IN NEW YORK

COUNTY	DEALER	TOWN
Albany	George H. Price	Albany
Allegany	Rowe & Kennedy	Canaserago
	Kohn's Drug Store	Wellsville
	W. E. Robbins Hardware	Wellsville
	Wellsville Milling Co.	Wellsville
	Hazlett & Chase	Whitesville
Cattaraugus	Economy Drug Store	Salamanca
Cayuga	D. S. Ramsey	Auburn
Chemung	Banfield-Jennings Co-op.	Elmira
	Geo. W. Peck Co.	Elmira
Chenango	Harold L. Keeler	Norwich
Clinton	J. D. Bowen	Saranac
Cortland	McGraw & Elliott	Cortland
Erie	W. H. Geih & Son	East Aurora
	R. F. Knoeche & Son	Hamburg
	W. G. Arthur	Orchard Park
Franklin	Cooks Pharmacy	Chateaugay
	D. Dickinson & Co.	Malone
Herkimer	The Sauer Drug Corporation	Herkimer
Jefferson	Walter N. Bisnett	Watertown
Lewis	F. C. Snyder's Pharmacy	Lowville
Livingston	Geo. W. Peck Co.	Dansville
	Genesee Hardware Co.	Genesee
Monroe	Joseph Harris Co., Inc.	Coldwater
	Burr & Starkweather Co.	Rochester
	Hart & Vick	Rochester
	James Vick's Sons	Rochester
Nassau	Hempstead Seed Co.	Hempstead
New York	Max Schling Seedsmen, Inc.	New York
Oneida	Utica Seed Co.	Utica
Onondaga	Frederick H. Ebeling	Syracuse
	Onondaga Farmers Supply Co., Inc.	Syracuse
Ontario	Peck Hardware Co.	Canandaigua
	Dorchester & Rose	Geneva
Otsego	Kenneth W. Root	Cooperstown
St. Lawrence	The Barr Pharmacy	Canton
Schenectady	Empire Seed Co.	Schenectady
Schoharie	Hoagland's Pharmacy	Cobleskill

IN NEW YORK

COUNTY	DEALER	TOWN
Schuyler	W. M. Pellett	Watkins Glen
Seneca	J. F. Farrell	Seneca Falls
Steuben	Hawkins & Hill	Addison
Steuben	B. C. McKay	Atlanta
	Geo. W. Peck Co.	Bath
	Kinkaid Produce Co.	Cohocton
	Peck-lookup Co.	Cohocton
	Geo. W. Peck Co.	Corning
	Geo. W. Peck Co.	Prattsburg
	C. J. Tierney	Wallace
Suffolk	Long Island Produce & Fertilizer Co., Inc.	Riverhead
Tioga	The Beach Drug Co.	Owego
Washington	Harry W. Baker Ph. G.	Hudson Falls
Wayne	W. G. Carpenter & Co.	Lyons
Wyoming	E. K. Lucas	Gainesville
Yates	Geo. W. Peck Co.	Penn Yan

IN NEW JERSEY

COUNTY	DEALER	TOWN
Burlington	Fenimore Brothers	Mt. Holly
	J. S. Collins & Son	Moorestown
Camden	Gardiner Cheeseman	Grenloch
Cumherland	Minches Seed Store	Bridgeton
	I. Serata & Sons	Bridgeton
	S. V. Davis	Shiloh
	Vineland Farmers Exchange, Inc.	Vineland
Gloucester	Reed & Estelow	Mullica Hill
	Ed. Hann	Swedesboro
Mercer	Farmers Co-operative Assn. of Mercer County	Trenton
	M. C. Rihmsam & Son's Co.	Trenton
	Jos. H. Courtney & Co., Inc.	Windsor
Monmouth	W. T. Pierce	Allentown
	Rooney & Ely Co.	Englishtown
	Monmouth County Farmers Exchange	Freehold
	C. H. Roberson	Freehold

IN NEW JERSEY

COUNTY	DEALER	TOWN
Monmouth	H. B. Kemp	Long Branch
	Reed & Perrine	Tennent
Salem	Andrews and Avis	Elmer
	Garrison's Rexall Pharmacy	Elmer
	G. M. Andrews & Son	Woodstown
Salem	The South Jersey Farmers Exchange	Woodstown

IN DELAWARE

COUNTY	DEALER	TOWN
Kent	James B. Bice Co.	Dover
	W. M. Hinkle	Dover
	J. A. Frear & Sons	Dover
	Clarence Voshell & Son	Felton
	W. W. Wilson	Frederica
	Harrington Hardware Co.	Harrington
New Castle	Ellwood A. Pierson	Wilmington
	The Phillips-Thompson Co.	Wilmington
Sussex	George E. Swain	Georgetown
	Chipman & Penuel	Laurel
	Collins and Ryan	Millsboro
	Burton Brothers	Seaford

IN MARYLAND

COUNTY	DEALER	TOWN
Anne Arundel	Arundel Supply Co.	Annapolis
Baltimore	The Meyer Seed Co.	Baltimore
	Wiseman-Downs Co.	Baltimore
Carroll	King's Pharmacy	Westminster
Cecil	G. A. Allender	Elkton
	C. W. Ashby	Rising Sun
Frederick	P. L. Hargett & Co. Inc.	Frederick
Harford	McComas Bros.	Bel Air
Howard	Patapsco Pharmacy	Elicott City
Kent	Massey & Wilmer	Chestertown
Queen Annes	Queen Annes County FB.	Centerville
Washington	Ernest Miller	Hagerstown
Wicomico	White & Leonard	Salisbury
Worcester	D. H. Bradford & Son	Snowhill

Jobbers for the Du Bay Seed Disinfectants in New York, New Jersey, Maryland and Delaware

IN NEW YORK

Gibson-Snow Co. Inc.	Albany
E. C. McKallor Drug Co.	Binghamton
Ellicott Drug Co.	Buffalo
Gibson-Snow Co. Inc.	Buffalo
Harvey Seed Co.	Buffalo
Plimpton-Cowan Co. Inc.	Buffalo
Joseph Harris Co.	Cold Water
The Geo. W. Peck Co.	Elmira
Hempstead Seed Co., Inc.	Hempstead

IN NEW YORK

Long Island Drug Co.	Jamaica
McMonagle & Rogers	Middletown
Alcxander Drug Co.	New York
Peter Henderson Co.	New York
Schieffelin & Co.	New York
Stump & Walter Co.	New York
York Drug Co.	New York
Doty & Humphrey Drug Co.	Poughkeepsie
Gibson-Snow Co. Inc.	Rochester
Hart & Vick, Inc.	Rochester
Vick & Dildine Co.	Rochester
Gibson-Snow Co. Inc.	Syracuse
Charles Hubbard Son & Co.	Syracuse
John L. Thompson Sons & Co. Inc.	Troy
A. H. Williams Co. Inc.	Utica
W. W. Conde Hardware Co.	Watertown
Litchard, Schultheis & Johnson, Inc.	Wellsville

IN DELAWARE

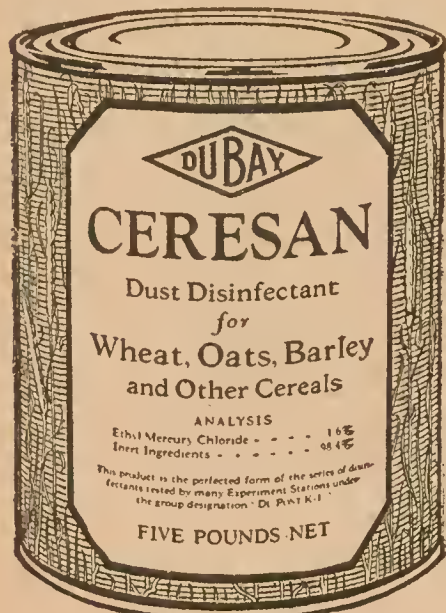
O. A. Newton & Son	Bridgeville
N. B. Danforth, Inc.	Wilmington

IN NEW JERSEY

Chamberlain & Barclay	Cranbury
Doughten Seed Co.	Newark
New Jersey Wholesale Drug Co.	Newark
Roebor & Kuebler Co.	Newark
Bennett, Denison, Clayton & Co.	Prospect Plains
American Chemical Specialties Co.	Springfield
Swedesboro Supply Co.	Swedesboro
Weatherby & Stewart	Swedesboro

IN MARYLAND

James Bailly & Son	Baltimore
J. Bolgiano Seed Co.	Baltimore
Gilbert Bros. & Co. Inc.	Baltimore
Henry B. Gilpin Co.	Baltimore
Griffith & Turner Co.	Baltimore
Loewy Drug Co.	Baltimore
The Meyer Seed Co.	Baltimore
Muth Brothers & Co.	Baltimore



Seed Disinfectants

CERESAN

REG. U. S. PATENT OFFICE

Dust Disinfectant for Seed Grains.

BAYER-SEMESAN COMPANY, Inc., 105 Hudson Street, New York, N. Y.

Successors to Seed Disinfectants Divisions of The Bayer Co., Inc., and E. I. du Pont de Nemours & Co., Inc.

Look for the green can with the red Du Bay Diamond when you buy CERESAN.

AMERICAN AGRICULTURIST

\$1.00 Per Year

April 6, 1929

Published Weekly

A New England Vacation

A Fireside Reflection On "The Old Man of the Mountains"

BEFORE I forget it I would like to mention the interesting fact that there are a number of localities in Vermont where gold has been found. The presence of the yellow metal has been known for well toward a century and now and again there has been considerable local excitement over some promising find. The presence of gold is no fairy tale because from time to time (as the official records show) small quantities of Vermont gold have appeared at the United States Mint. A man once told me that he lived on a creek where



Jared Van Wagenen, Jr. if you knew how and had good luck you could in the course of a day or two pan enough gold to make a souvenir finger-ring and that he knew several persons who had done the trick—adding that he never heard of anybody getting rich at the job.

In the town of Vershire in Orange County over on the eastern side of the state I once visited a really extensive but now abandoned copper mine. The gaping tunnels running back into the mountain, the rusting tramways, the crumbling smelters and the enormous accumulation of slag and waste all speak of a time when industry hummed up here in this lonely countryside. I think it was the most impressive exhibit of a dead enterprise that I ever saw. They told me that there had once been a considerable village here but it had vanished and left only a single house behind. Perhaps it will do us good to remember that farming

By JARED VAN WAGENEN, JR.

is not the only business venture that sometimes fails to pay and is abandoned.

The Old Man of the Mountains

One of the very few definite objectives that we had when we left home was to see the White Mountain country. I had already in other years, from the Vermont side, seen the mountains loomed up far off and rugged and mysterious. I had read (and sometimes retold) Hawthorne's story (or perhaps better parable) of the Great Stone Face and naturally I wanted to see this region near at hand. A little east of St. Johnsbury we crossed the Connecticut, here a rather insignificant stream, and so came to Lyttleton which calls itself "The Business Center of the White Mountain Country." This whole region lives by ministering to (I will not say by preying upon) the casual tourist and the summer visitor. I suppose that there is nowhere a region that has been more thoroughly advertised and skillfully commercialized than this beautiful country.

At Lyttleton on the main street was a tourist information headquarters with a man in charge and an array of maps and advertising literature that was truly imposing. Being informed that we wanted to see something of the mountains, the affable and skillful gentleman in charge very promptly pulled out a map and in a moment sketched a detour which would add about 50 miles to the Portland trail and which he said would embrace most of the regular "features." One realized that the

routing of tourist was a matter that was perfectly standardized.

Some writer has said that the "White Mountains are the best known and best loved of any mountain group in America." As a loyal New Yorker, however, I believe that I would challenge his statement and ask him to make one exception in favor of our own lovely Catskills. When Washington Irving lent the magic of his pen to the Legend of Rip Van Winkle he conferred immortality upon the mountains as well.

In my early boyhood I memorized a long poem which was a poetical version of Irving's story of Rip's slumber and of Hudson's crew. I have never seen the poem since and only a single complete stanza has stayed with me across the years. However I still insist that it was pretty good poetry.

*"And even now when the days are long
Tho' four score years have speeded by
You may hear a sound like a thunder storm
Sweep over those mountains high;
You may hear the echoes rattle and roll
With every ball that the Dutchmen bowl,
Far up in the heart of the Hudson hills
The lordly, beautiful Kaaterskills."*

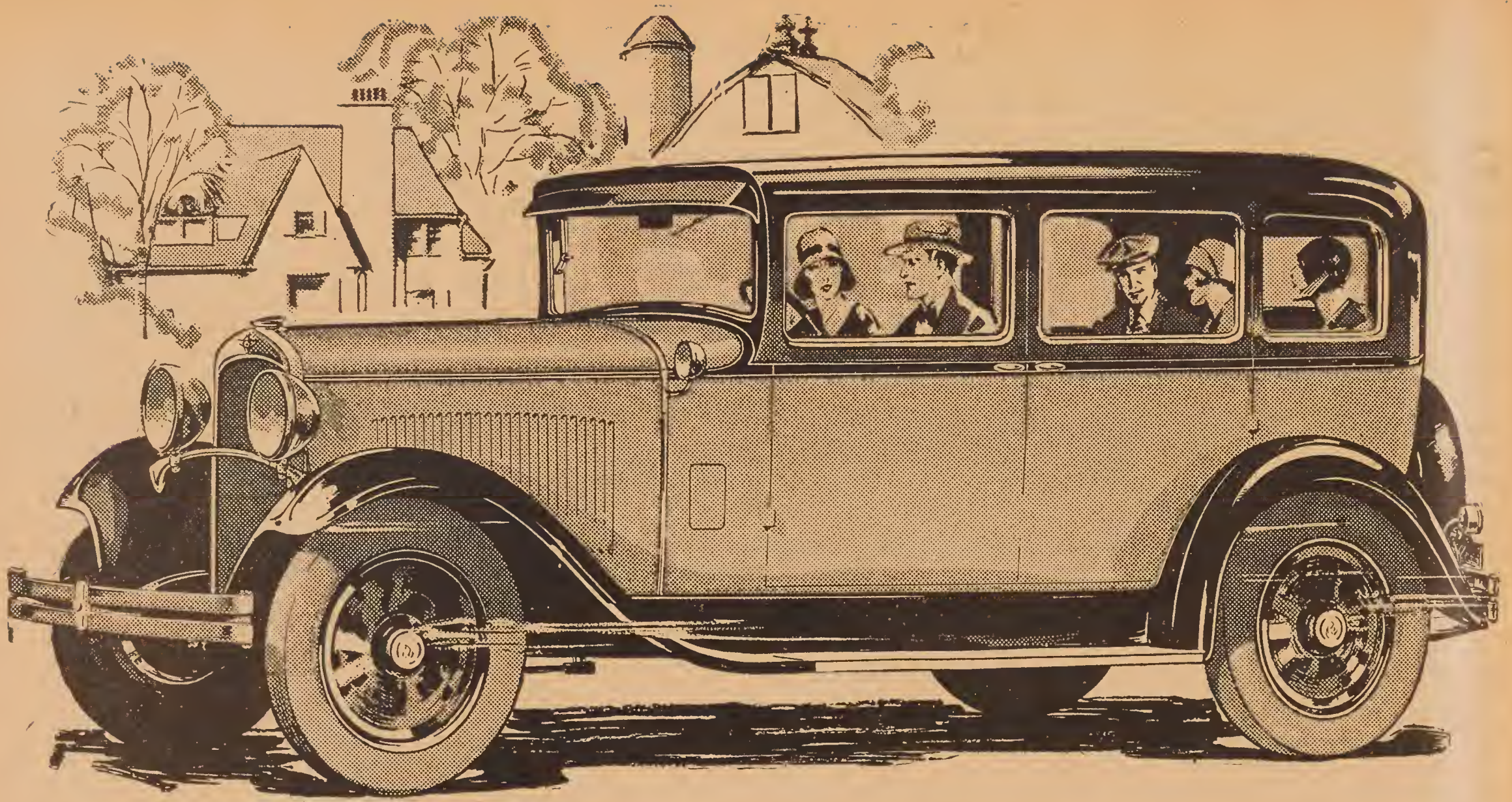
As a boy I felt a passionate sense of joy and relief to know that Henry Hudson and the faithful members of his crew did not (as the history books assert) perish when the mutineers cast them adrift in an open boat amid the eternal desolation of the ice-bound north but that by some happy fate they were translated to an undiscovered clove of the Catskills and that there they were permitted to hold joyous revel and to play at nine pins

(Continued on Page 18)



A view of the White Mountains with Franconia Notch at the left. This photograph was taken by Mr. Van Wagenen on his vacation trip last fall.

What Will Potatoes Bring Next Fall ?



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JUST as the farmer of yesterday relied on Dodge Brothers cars for their dependability and stamina—the farm owner of today, with his modern wants and needs, now turns to the new Dodge Brothers Six. He knows from its name that it is a sound, sturdy and capable motor car. He finds, from an inspection of its many betterments and advancements, that it offers new dependability even for a Dodge Brothers car. He learns, from a trial ride, that it welcomes rough roads, thrives on hard work—sets the pace in performance for anything at or near its price. The new Dodge Brothers Six—with its new Mono-piece Body—its modern, good-looking lines—its spacious interiors, is as typical of the ability of Dodge Brothers as it is of the genius of

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What Will Potatoes Bring Next Fall?

Low Prices Are Not Always Followed by a Reduction in Acreage

SOME years ago, a popular Broadway refrain ran somewhat as follows: "They do the same thing over—over again—over again" and so on. It is a 50-50 chance that the writer of that song never saw a potato field, and it is even more likely that he wouldn't have recognized a potato in its native habitat. Nevertheless, the words of his song come remarkably close to a description of the potato industry during the past ten years.

Early last spring, AMERICAN AGRICULTURIST featured an article by the writer in which a potato crop of 430 to 440 million bushels was predicted for 1928 IF the 10 to 15 per cent increase in acreage, forecast by the United States Department of Agriculture took place. As it turned out this prediction was altogether too modest. From an acreage of 3,825,000 acres planted in 1928, (349,000 more than was planted in 1927) there were produced 463 million bushels of potatoes during 1928.

Early Predictions Borne Out

The prediction was also made last spring that IF a 440 million bushel crop of potatoes was produced in 1928, prices to growers in the United States would probably range from 35 to 60 cents per bushel. Reports from shipping points in practically all areas indicate that this prediction was only too true. The following table shows the average prices reported by the United States Department of Agriculture as the farm value of potatoes on

By M. P. RASMUSSEN
New York State College of Agriculture

December 1, 1928, in various important sections of the United States:

Comparative Prices Received by Growers in the United States
Per Bushel of Potatoes, December 1, 1927 and 1928

Producing Area	1927	1928	Prices per bushel to growers Dec. 1 1928 compared with 1927	
			Cents	Per Cent
Eastern States.....	\$1.14	\$.64	50	44%
East Central States.....	.87	.40	47	54%
West Central States.....	.60	.375	22½	38%
Far Western States.....	.66	.51	15	23%
United States.....	\$.965	\$.54	42½	44%

Probably the most striking proof of the low potato prices obtaining in important areas is the

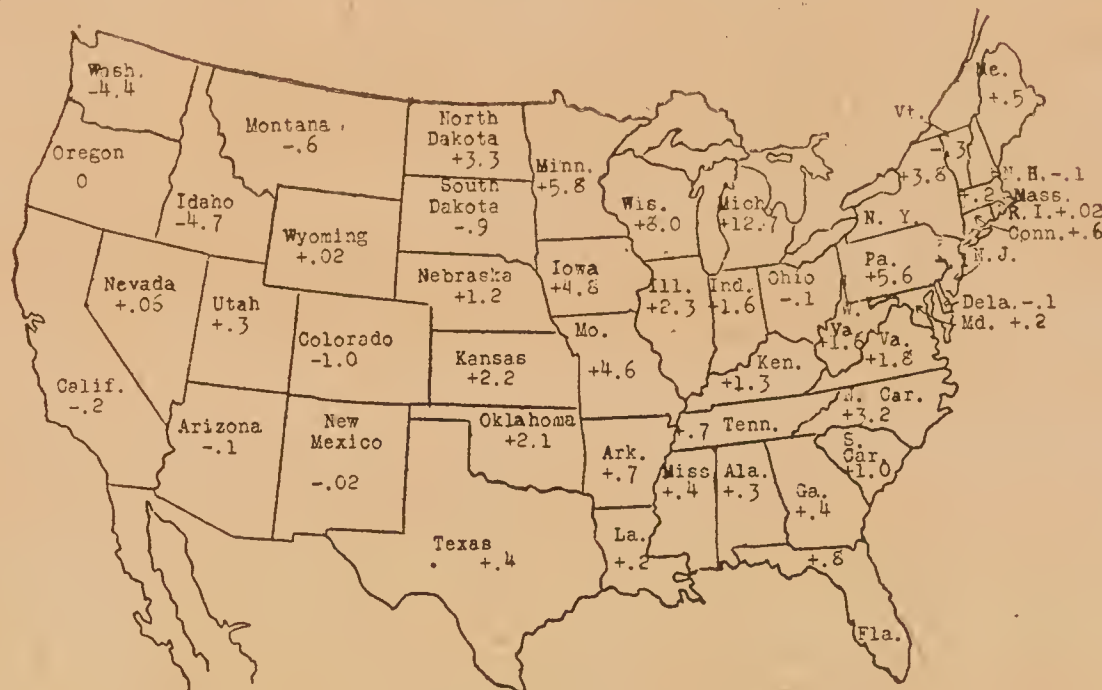
heavy demand from all sections of the country for information concerning the value of potatoes as feed for livestock. At the present writing—the middle of March, 1929—growers are reported as receiving the following prices per bushel at country shipping points: Maine, 45 cents; Western New York, 35 cents; Michigan, Wisconsin and Minnesota, 35 cents; Colorado, 45 cents; Idaho 40 cents, and Washington 50 cents.

The purpose of this discussion, however, is not to present an "I-told-you-so" argument but to focus the attention of potato growers on certain facts with the hope that repetition of the disastrous 1928 season may be avoided.

It should be clearly recognized that important and far reaching changes have been taking place in the potato industry during the past ten years. In the first place, there has been a decided tendency in important potato growing states, particularly those east of the Mississippi, to concentrate the growing of potatoes on the better soils and on those soils where machinery can be used efficiently. This has resulted in greater yields per acre at lower costs per bushel.

Secondly, average crop yields of potatoes per acre have been steadily increasing during recent years, largely due to the fact that there has been a plentiful supply of increasingly better quality seed potatoes. Better cultivation, better disease control, and greater care in harvesting have also contributed towards increasing yield per

(Continued on Page 8)



Outline map of the United States showing the increase or decrease in crop of potatoes grown in each state in 1928 compared with 1927. (Figures are in millions and tenths of millions of bushels).

Making An Old Tree Young

Grafting to Change Undesirable Varieties and Repair Girdling Damage

By GILBERT W. PECK
New York State College of Agriculture

TOP-WORKING may well be employed to provide for cross-pollination in orchards planted to solid blocks of McIntosh, Northern Spy, Cortland, Delicious, Rhode Island Greening and others, or in changing a variety which proves to be untrue to name or which is undesirable. Bridge-grafting is the only satisfactory way of saving girdled trees.

For the purpose of providing cross-pollination in blocks of a single variety, the number of trees to be grafted will depend somewhat on the section in which the orchard is located. Where weather conditions at blossoming time are likely to be unfavorable for the flight of bees and natural insects, top-working every third row through the orchard to a good pollen variety should correct the condition. In sections more favorably located working over every fourth or even every fifth row should solve the pollination problem.

A good pollinizer should be a variety of commercial importance, blossom annually and at approximately the same time as the variety to be pollinated. Rome and Spy blossom late and inter-pollinate each other satisfactorily. McIntosh, Cortland, Delicious, Wealthy, Rhode Island Greening and in fact most of our other commercial varieties blossom sufficiently close to inter-pollinate each other.

The operation of top-working or bridge-grafting is one that any grower may perform and with good results if a few simple points are carefully followed. Well

matured, strong, one year old cion wood should be used. Many of the failures are due to the use of cions so weak and puny that they will barely grow on the tree from which they are taken. Vigorous terminal growths from known bearing trees make the best cions, but suckers or water-sprouts are better than weak terminal growths; and for bridge-grafting, they are usually best because of their large size. Cion wood should be cut while it is still dormant and stored in moist sand or saw-dust and kept in an ice house, cool cellar or buried in a well drained sandy spot where it will keep dormant until used.

It is essential that the growing tissues of cion and stock, the cambium or the layer of cells, between the bark and wood come in contact when the cions are set. Otherwise growth is impossible. Within a short time after the cions are in place

all cut surfaces should be thoroughly waxed to exclude moisture and prevent drying out.

For those who have had little experience, the inlay method will be found most desirable to use both in top-working and bridge-grafting. The operation is done to best advantage on warm days just after growth starts, at about the time the delayed dormant spray is applied or shortly after.

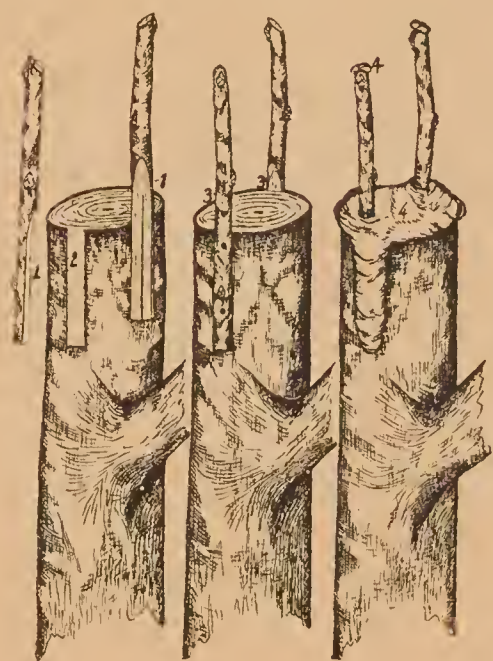
In top-working a tree only three or four years old, the entire top may be cut away and the cions set in the trunk, but it is usually best to select three or more of the main limbs, well spaced, and do the grafting in them. On young bearing trees, it will usually be advisable to graft more than three main limbs giving particular attention to the selection of limbs which will develop into a strong framework. It is very desirable that a considerable portion of the limbs of the variety being grafted over remain in the tree when the operation is completed. These are gradually removed during the following

three or four years. The branches to be grafted should be cut well back into the tree, and preferably four or five inches above a strong side limb.

Inlay-grafting

The limbs or trunks to be grafted should be cut at places where the bark is smooth and free from knots or any irregular formations. Two cions are usually set on each stub. Where the limb to be

(Continued on Page 11)



Right—Bridge-grafting. 1. Cions ready for nailing. 2. A natural crook at the base of the cion works to advantage in grafting on a root. 3. The cions are drawn into place by small nails (one-inch No. 18). 4. The cion is less likely to break away at the top if a wedge is used to give somewhat of a bow. 5. Wax thoroughly all cut surfaces soon after the cions are set.

Left—Inlay-grafting. 1. Cions cut ready for nailing in. 2. Bark on stock removed, exposing cambium cells. 3. Cions nailed in place. 4. Cut surfaces thoroughly waxed.



Editorial Page of the American Agriculturist

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No. 14

Outlook for Sheep

THE world's sheep flocks are increasing in size and number. Wool production in ten countries which ordinarily produce a little over two-thirds of the world output is estimated at 2,530,000,000 pounds, in the grease, for 1928. That estimate is an increase of 6 per cent over 1927 and 5 per cent over 1926.

In Australia, which furnishes a little over one-fourth of the world's wool supply, there is estimated an increase of 10 per cent over 1927, and 21 per cent over the average for the five years 1922-26.

In the United States, the clip has been increasing steadily for six years. The 1928 clip showed an increase of 6 per cent over 1927. Sheep numbers in eighteen countries reporting at the beginning or in the summer of 1928 totaled 411,000,000 head against 410,000,000 in 1927 and an average of 388,000,000 for the five years 1909-13. Prospects are that these increases will continue for a time at least.

It would therefore seem that it is time for sheep growers to be conservative. Mr. Mark Smith, our sheep editor, writes as follows:

"Recently I have been doing a little thinking along the line of marginal flocks, and I find, according to my figures, that it takes 225 sheep returning a gross income of \$9 a head a year to equal a net profit of 75 ewes returning a gross income of \$15 a year per head. From my method of figuring, it appears to me that when a ewe drops from \$12 a year gross income to \$9, half the profit has gone. I figure \$6 as the yearly cost of keeping a farm ewe."

There is a good deal of loose talk about running sheep on abandoned farm lands. It is to be noticed that good sheep men are not doing much of this kind of talking. They know that the sheep business has just as many problems as any other kind of farming and that only the skilled men and those who have a love for the business can make a success of it.

However, we do believe that the sheep business is going to increase in the East and that they can be handled on poorer lands, provided dogs can be controlled and the men who attempt to do it understand their business.

Ferdinand Foch

(1852-1929)

THE other day Marshal Ferdinand Foch answered the Last Call. As Supreme Commander of the Allied forces, Marshal Foch ruled over the destinies of the largest armies of the world's history and carried on his shoulders

the mightiest responsibilities of all time. He did it well. He was a brave and capable soldier, and a lovable and unassuming gentleman. All those who knew him loved him, and all the world mourns his passing.

I have a friend, who, ever since I was a boy, has been telling me about the glories of the marshals of France, so I have asked this friend to express for all of us a tribute to Ferdinand Foch, the greatest and the finest of all the long line of famous marshals of France.—E. R. E.

Marshal of France

*Ho, sentry by the watered moat,
Raise high the flambeau light;
Up with portcullis, down with float,—
Our captain rides tonight!*

*Uplift the light on gates aflank
And sound a fanfare gay;
Our captain rides to join rank
With Soult and Lannes and Ney.*

*His hand shall feel the grip around
That dour Macdonald gave,
And laughing Murat yield him ground
As Bravest of the Brave.*

*Lift high the flame-light by the gate,
Let bugles gaily blow;
The Marshals and the Emperor wait,—
"Allons y!" . . . Let's go!*

—G. D. E.

Little Recipes for Little Cooks

IN our last week's issue, we started one of the most interesting, and, we think, helpful features that we have had in AMERICAN AGRICULTURIST in a long time. We hope that every little girl and every mother in our big family noticed the article entitled, "Little Recipes for Little Cooks".

This new feature will appear regularly once a month, and in connection with it we furnish a large scrapbook which the little farm cooks may use to paste in the recipes that we in cooperation with their mothers will teach them to use.

If you did not notice this feature, look up last week's issue and turn to Page 2.

It is our belief that this new feature of AMERICAN AGRICULTURIST will help you mothers to teach your daughters to cook, and, what is more important, will help to convince them of the dignity and importance of the great profession of homemaking.

Watch the Bad Trespasser

"We repeat that unless Ohio farmers are given some protection from the swarms of inconsiderate gate-openers and fence-crashers that masquerade under the name of sportsmen every farm in the state will be posted against hunting. Those who like the outdoors and those who conduct themselves like gentlemen and true sportsmen will just be out of luck."—The Ohio Farmer, A Standard Farm Paper.

THE spring brings its problems along with its sunshine, and, so far as the farmer is concerned, one of them is well expressed by our friend, the Editor of the Ohio Farmer.

What he says is equally true of New York. There are thousands of farmers who themselves like to hunt and fish, but if these privileges are not to be cut off, then every good hunter and fisherman must cooperate to make the minority of bad sports respect their privileges.

A Plan for an Optional Quality Brand

A SUGGESTION has been made that New York State farmers adopt a protected or copyrighted brand or trade-mark held and controlled by some organized group or by the New York State Department of Agriculture and Markets. The use of this brand would be permitted under a license or signed agreement by the grower to comply with certain conditions as to its use. Failure on the part of farmers or their employees to comply with required conditions would result in withdrawal of the privilege of using this brand. Possibly a bond would be required which would be forfeited in case of lapses by the farmer.

The proposal, which is limited to apple grow-

ers, would provide that the grower could not stamp his package with this special quality brand unless it came up to certain specified and very strict qualifications. Arrangements would have to be made to inspect the apples packed by each farmer under this brand from time to time. This could be done at the packing house, the shipping point or at the point of destination, and the inspection might be made by State employees or by men appointed by the body issuing the privilege to use such brand.

The State or the licensing body would publish the list of growers, packers and dealers who were authorized to use this special quality brand or trade-mark and would also publish the names of those from whom such privilege is taken away. Every licensed grower would have his special number which would be plainly marked in the place provided in the brand. It would be possible under this plan for the State or licensing body to advertise New York apples packed under the brand.

We are most emphatically for a plan similar to this one, not only for apples but for other leading New York State products. A similar system is being used in New England and is working successfully. We sincerely believe that if New York State farmers are going to keep their hold on this great eastern market in competition with products that come from all other sections of the country and the world, they must do something, and do it soon, to impress consumers with the quality of eastern products.

Here is an opportunity to do it under an optional plan instead of a scheme which forces packing rules and brands upon farmers. The plan being purely voluntary, no person, firm or corporation need pack under it unless it is felt that it would be of value.

We would like to know what farmers think of this plan, and would be glad to have letters from you expressing your ideas.

Warning

"About two years ago, a representative of the New York State Farmers and Livestock Dealers' Association visited this locality and secured about sixty members at a charge of \$10 each. This man made great claims at that time about the good things the association would accomplish for the farmers. Since then, however, nothing has been heard from the association until the past week when another representative appeared and solicited new members. This man also has made big claims of what the association will do.

"What do you know about this association?"—F. L. B., New York.

WE answered this question fully on Page 3 of our February 9th issue of AMERICAN AGRICULTURIST. For full details, look up this article and read it again.

Briefly, we will state again that this New York State Farmers' and Livestock Dealers' Association has never made good on any of its claims. We would like to know how the hard-earned dollars are spent which it collects from farmers in the form of membership fees.

We strongly advise our readers to keep their ten dollars.

Eastman's Chestnut

A REAL estate man acquired a house that was said to be haunted. He was unable to sell it, and in order to prove that there was nothing to the ghost story told about it, he hired a negro to stay all night in it. The next morning he went around to see how Sam had gotten along.

He was unable to find Sam in the house, and the only sign of him was where he had gone through a window, taking the sash with him.

Three days later the real estate man met the negro coming up the road.

"Why haven't you been around, Sam?" he asked. "Where have you been for the three whole days since you slept in my house?"

"I'll tell you, boss," said Sam. "I done been comin' back!"

News from the Publisher's Farm

work just as soon as the weather permits.
It looks as though we were going to have an early spring.

Henry Morgenthau Jr.

IT has been an interesting job to get ready by the first of April to fulfill the requirements of our contract for Grade A milk. I know that my fellow Holstein breeders will be very much shocked when I tell them that I have bought a herd of pure bred Jerseys. By having half Holstein and half Jerseys, we felt that we



Henry J. Morgenthau, Jr.

would be able to deliver milk that would test 4% butter fat or better. I do not intend of course to do any cross breeding, but will keep both breeds purebred. Three or four years have passed since I have brought any new females into my herd and during this time we have been able to keep our cows free from tuberculosis and have practically gotten rid of contagious abortion. It was, therefore, with considerable fear and caution that I considered bringing on the farm a number of new cows. We corresponded with a great number of breeders and also visited a number of farms before we decided to do business with George T. Rich of Hobart, Delaware County, New York. We found that Mr. Rich had an excellent herd of producing, registered Jerseys. His herd had been accredited for six years. Mr. Rich was also willing to sell subject to the blood test for contagious abortion.

Mrs. Morgenthau, Henry, Robert, and our herdsman, Arthur Hoose, journeyed over the weekend to Hobart to inspect the Jerseys. After looking the whole herd over, we purchased twenty-two young cows, that average about three years old, five bred yearlings, and a full age bull. The herd of Jerseys arrived safely at Fishkill Farms and if they stay healthy, they are just what we need.

We have also installed an electric milk cooler which will take care of a maximum of twenty cans. This cooler will bring the temperature of the milk down to 36 degrees and will hold it there indefinitely. I am advised that one of the best methods of keeping the bacteria count of milk down is through rapid cooling of the milk.

With one side of the barn filled with Holsteins and the other side with Jerseys and with the whole herd entered in our cow testing associations, we ought to get some very interesting figures on production and the cost of the same. It will also be worthwhile to compare the two breeds under similar conditions.

* * *

During the past month we have sold the following two bulls:

FISHKILL VEEMAN PIEBE, H. B. No. 571402, sold to Mr. Sidney Van Leuven of Kerhonkson, New York.

FISHKILL DEKOL JENNIE PIEBE, H. B. No. 571403, sold to Mr. J. Kingsley Crane, Howells, New York.

* * *

I have not bought any farm horses in a number of years and was surprised to find how cheap they are compared to what they were four or five years ago. I have just bought a fairly good team of farm horses for \$200, delivered on the farm. With the great shortage of horses that is reported all over the United States, I feel confident that in a few years we will not be able to buy horses at the present prices and those of us who live in hilly country with plenty of rocks will always find good use for a team of horses.

* * *

We have ordered our fertilizer spray and dust materials,

seeds, new tractor plow, two new spring tooth harrows and we are already to start our spring

A Visit with the Editor

A Trip to the Land of Minnehaha

SOMETIME when you are going for a few days' journey away from home and find that it hurts to say good-bye, think what the pioneers must have suffered when they started Westward Ho. Well they knew when the wilderness shut from view the faces of their loved ones whom they were leaving behind that they probably would never see them on this earth again. What sublime courage those fathers and mothers of ours must have had, and how strong must have been that pull from the beckoning West to overcome the opposite pull on their heartstrings.

Consider what they did. In their crude covered wagon, they put a few meager possessions, strapped on the plow, that invincible instrument and symbol of advancing civilization, and with their immediate family, they set out for an unknown land filled with unknown dangers. Behind them they left father, mother, brother, sister and friends, and all the comfort and security of civilization.

Thoughts such as these were passing through my mind a short time ago when I was on a trip into the Northwest to Minneapolis and St. Paul.

The Northwest Limited, running between Chicago and Minneapolis, is the finest train I was ever on. Not even the famous Twentieth Century Limited can equal it. I get tired of eating in hotels and restaurants, and think that home cooking is the best, but I must admit I never have eaten a better meal than the dinner we had that evening on the Northwest Limited.

In addition to dining and sleeping cars, fitted with every convenience that man can devise for his comfort, there is a big club car on this train containing a library of magazines and newspapers, with easy chairs and soft reading lights, and desks with stationery if you happen to be

feeling a little lonesome and want to drop a line to the home folks! The railroad even provides a soda fountain where you can get all manner of ice cream and soft drinks.

But perhaps most interesting of all was the radio, clear and with large enough volume so that a description of a prize fight, then going on in Florida, was easily heard on this train rolling through the Northwest at fifty miles an hour.

The next morning when I awoke in the warm berth, I lay for a while looking across the rolling farm lands then covered by snow, and thought of the settlers of that country and their first trip over the same route that I was traveling. It was not so long ago that the pioneers contended with bitter toil, privations and constant danger from Indian attack, yet contrast the covered wagon and those times, if you please, with the modern pullman train and our times, and you will get some idea of the changes that have been wrought in one man's lifetime.

I was told that in Minnesota there are men and women still living there who could easily remember when they were obliged to flee from the fields and their homes to the forts because "the Injuns were coming!"

What a change! In the place of the small pioneer settlement, outposts of civilization, now stand the Twin Cities of Minneapolis and St. Paul, with several hundred thousand inhabitants, and where only a few years ago the buffalo and the Indian roamed the lonesome prairies stretching on and on into the horizon, there is now a cultivated and peaceful farm country.

Let no eastern farmer fool himself about the possibilities of those western lands, either. No one interested in farming and farmers can travel much about this broad country of ours without realizing its tremendous farming possibilities.

Since the settlement of the West and the opening of so much cheap and fertile lands, there has been a constant rivalry between the farmers of the East and the West for the markets. In spite of the fact that we have these markets almost under our very noses, the struggle, in many ways, has been a losing one for us here in the East.

The western farmer had to contend with long distance transportation, but he had a wonderful soil. With the bettering and cheapening of transportation facilities, many of his problems have grown less and less. He has paid particular attention to quality, with the result that the descendants of the pioneers who left the East to settle in the West are gradually taking the eastern farmers' markets away from them. If transportation continues to improve, we will continue to lose, unless we can produce and pack our apples, potatoes and other products so that they will be just as attractive to consumers as are the products from the West.

I cannot leave this little story without a word about the beautiful scenery of those parts of the Northwest which I have seen. The country about St. Paul and Minneapolis is called the "Land of Lakes" because of the large number of little lakes that dot the countryside. Per-

(Continued on Page 20)



The falls of Minnehaha

"Wormy Culls less than 2%"

S. J. Kitzmiller

"Previous to using NuREXFORM, and while using other forms of lead, my apples and pears were wormy to an extent of about 25 % but since using NuREXFORM I have had to cull out not to exceed, and I think, even less than 2% because of their being wormy."

"NuREXFORM mixes easily and has excellent suspension qualities."

"NuREXFORM has given me better results than I have obtained from any other arsenate."

S. J. Kitzmiller.

This is only one of hundreds of enthusiastic letters we receive from fruit growers praising the high qualities of NuREXFORM. All recommend it even if it does cost slightly more per pound. They look beyond first cost and consider NuREXFORM from the standpoint of adherence, suspension, easy mixing qualities with Lime Sulphur and finally the greater percentage of sound fruit it produces. If you once try NuREXFORM, you'll never go back to ordinary lead. You'll save money in the long run. Try it. Write for circular.

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A.A.'s Western New York Farm and Home Talk

Spring is Here

By M. C. BURRITT

SPRING came to western New York rather early this year. The winter was short, though vigorous and steady while it lasted, as the fall was late and warm. The steady cold and snow of January and February left us soon after the first of March and the mild temperature with the sun now high overhead soon took the frost entirely out of the ground. By mid-March we were down in the mud we usually get in April. If the present weather keeps up we shall be in the fields the first week in April or sooner. In fact, I saw a man plowing on sandy land on the Ridge Road on March 20th.



M. C. Burritt

Such an early spring always makes the fruit grower uneasy. It brings the fruit buds along too fast and greatly increases the risk of loss in subsequent cold weather which we are very likely to have yet. The great advantage of the Lake Ontario Shore Fruit Belt is that the more slowly warming body of water gives off cold and holds back the buds so that the risk of loss by frost is less in the area immediately along the Lake than it is in the interior. And yet with a spring as early as 1929 now appears to be, there is risk even here. Buds of all fruits are still in good condition and the present prospect is for a big fruit crop in Western New York. Our trees have had two light crops now and they went into the winter in a more vigorous and better condition than in several years. We ought to have a bumper crop, providing frosts and poor pollination weather at blossom time do not destroy our present prospects.

Pruning Has Been Well Done

It is my impression that more pruning than usual has been done in the fruit belt, and that there is greater interest in and intention to do good spraying. Apparently, the relatively better prices of the last two years and the educational propaganda are having their effect. More growers are hopeful of a come-back in Western New York orchards. Aside from the factors already enumerated that tend to justify this expectation, many figure that under the law of averages we are about due for a break of luck. Let us hope that we will have it for now, if ever, we need it.

Growers should not be mislead, however. In any case the competition of other apples, and of citrus fruits and bananas will continue to be felt, probably even more severely. Especially, will our poorer grades and quality suffer in comparison with competing fruits. The tendency is constantly to raise the standard and unless a grower prunes, sprays, fertilizes, thins and generally gives his fruit good care, he will in my opinion, be more and more at a disadvantage. Unless a fruit grower is able and willing to do his best to produce good fruit, he had better go out of the business, for he will find that a poor or mediocre product will have more and more limited outlets.

Partly as a result of Farm Bureau outlook and other meetings and partly because a study of the situation during the past few years has taught them that the right selection of crops and methods has made

some farmers successful, even in hard times, good farmers are taking a more intelligent interest than before in the adaptation, culture and cost of such cash crops as beans, cabbage, potatoes, and crops for canning and local markets. There are several good choices which promise results if soils and methods are wisely chosen. I hope to discuss some of these in more detail in later notes.

An Encouraging Sign

Another cause for encouragement is the continued reduction of the number of farmers, which is one of the few really effective remedies for the agricultural depression. There are 188,000 less farmers in the United States now than there were in 1927. Since 1920 New York has lost 34,000 farmers and since 1909 the United States has lost 4,489,000 of its farm population. In all probability these persons were, in general, its poorest farmers operating marginal land. Thus is the business of agricultural production gradually coming into adjustment with consumptive demand.

Spring is naturally the season of hope and of optimism. With these essentials to start with, a mixture of intelligent planning and thorough execution of plans should produce a result much more satisfactory than a discouraged outlook and haphazard methods. We must not forget that the man is, after all, a big factor in successful farming. We cannot justly ascribe all our failures to the weather and the times.

This is written enroute to Washington D. C. where "farm relief" legislation is brewing. Here we shall probably find a different outlook and atmosphere. I will write you about it next week.

Changing Spray Gun Discs

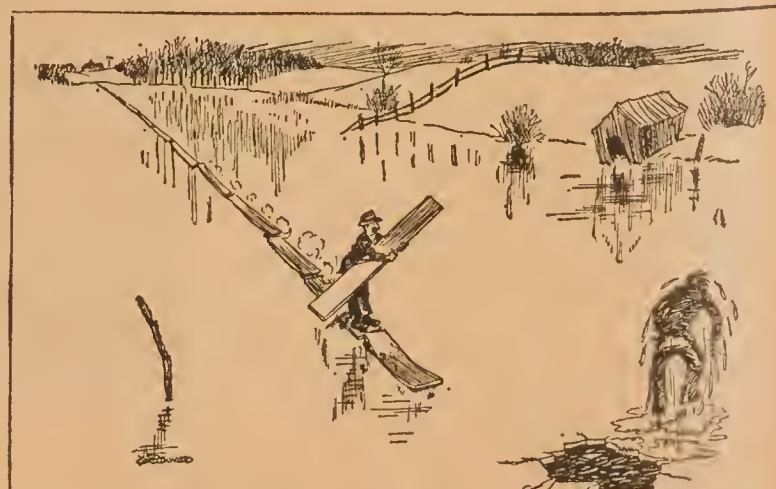
Is it necessary to change the discs on our spray gun and, if so, about how often should they be changed?—S. P., New York.

It is stated that forty-eight hours of actual spraying will cause a hole in a spray gun disc to enlarge from one-sixteenth of an inch to one-twelfth of an inch. The correct size of the hole for your outfit will depend upon the pressure you are carrying, the size of the pump, and other factors. These discs are low in cost and we recommend that you keep several of the correct size on hand and change them rather frequently.

Stippen Or Bitter Spot

Is there any way that stippen or bitter spot can be controlled?—L. M., New York.

THIS disease is not caused by a parasite but is supposed to result from variations in the water supply available to the trees during the growing season. It seems to be more prevalent on Baldwins; in fact, it is sometimes called Baldwin Spot. Little is known about its control except that it is less likely to occur in a cultivated orchard and where the trees do not have too heavy a set of apples.



WOULD BE RESCUER: "Aw, pshaw!"

—LIFE

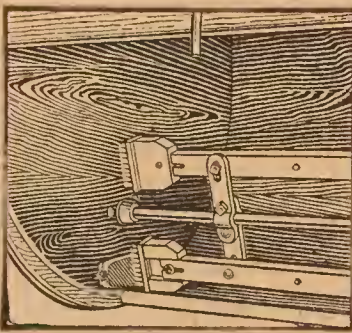


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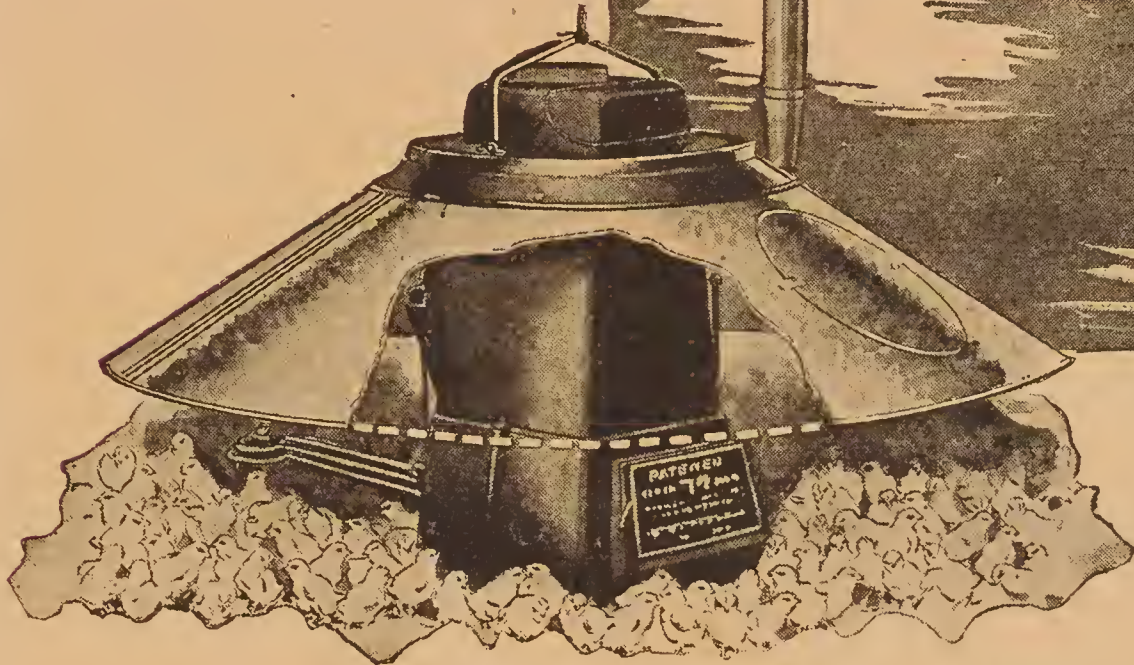
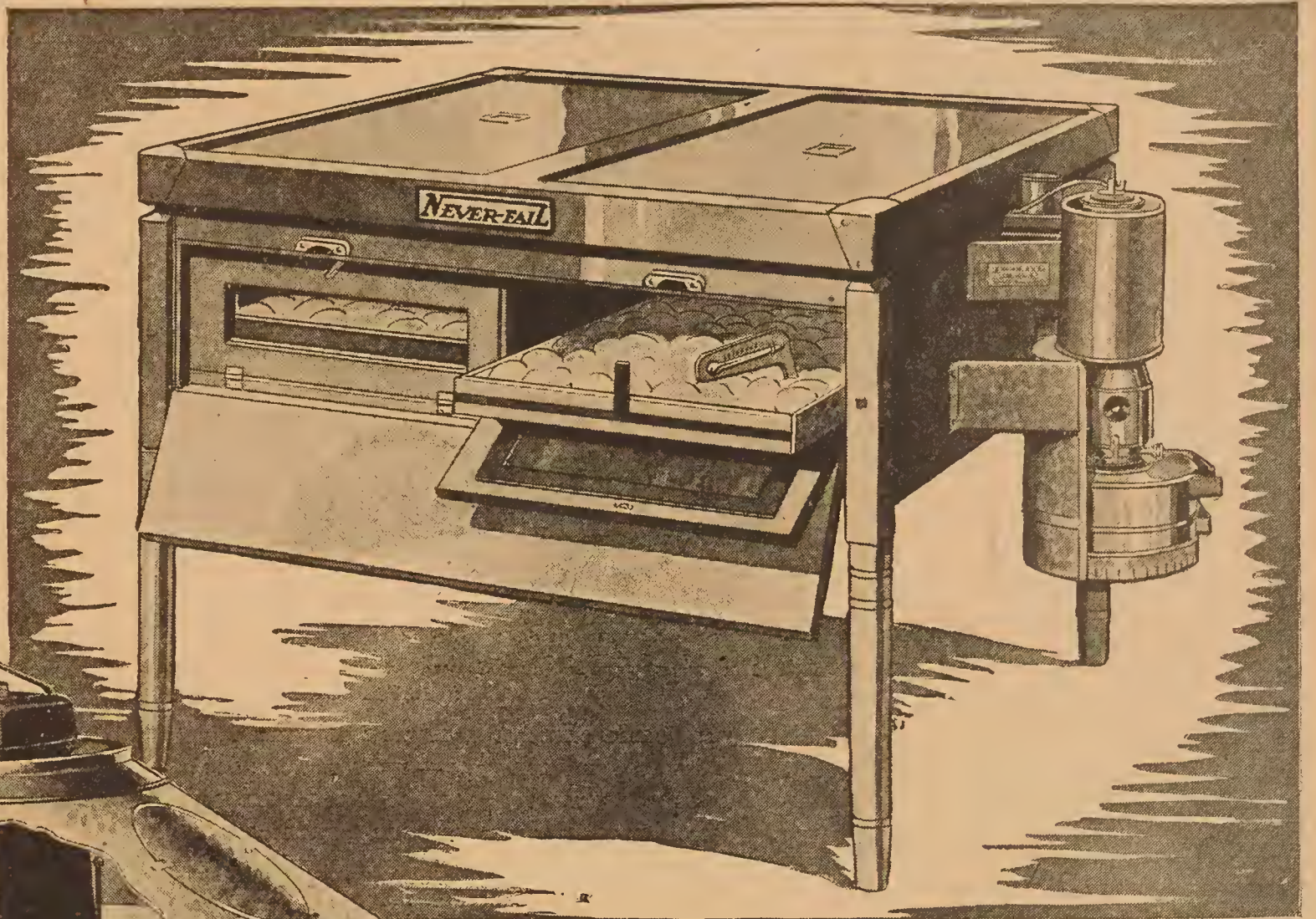
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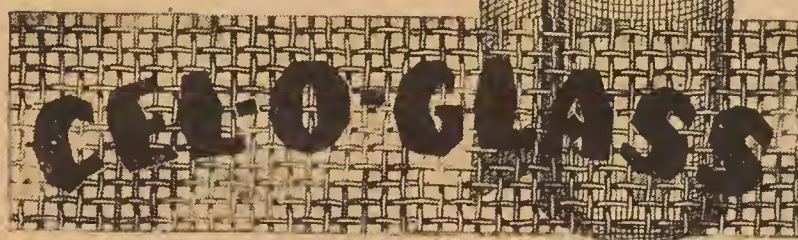
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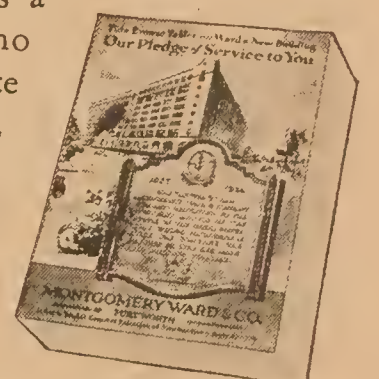
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What Will Potatoes Bring Next Fall?

(Continued from Page 3)

acre. The United States Department of Agriculture has recently issued a report showing that there are available this year over 10 million bushels of certified seed,—a 50 per cent increase over the supply available last year. It doesn't take a Philadelphia lawyer to figure out what the effect of so large a supply of high quality seed potatoes is likely to be during 1929.

Finally, it is felt by many keen observers that potatoes are being consumed in lesser quantities per capita than formerly. That is, of course, a debatable question. There can be little question, however, that the ever-increasing percentage of our population who hold "white-collar jobs" need less of the heavy type of foods than in the days of more manual labor. It takes comparatively little energy to sit at a desk all day, and then motor home, compared with the days of much heavy manual labor and limited transportation conveniences. Nor can the "green and leafy" vegetable and fruit campaigns waged by dietitians and health authorities all over the country be classified as boosters for increased potato consumption. During the past ten years, our population has increased 15 per cent. During this same period, carload shipments of green vegetables increased 140 per cent. If our population is eating more of green vegetables, it must be eating less of something else, and there is considerable evidence to show that it is potatoes that are being eliminated.

Disaster Will Follow Disregard Of Danger Signals

All of these trends constitute danger signals which the astute potato grower will regard with considerable respect. If better soils and more machinery are used, together with better seed and better care, it inevitably means that an adequate number of potatoes can be grown on fewer acres. If growers persist in maintaining present acreages in the face of these danger signals, real disaster is likely to result.

Trying to determine who is responsible for the large crop this year is much like asking "WHO KILLED COCK ROBIN". As a matter of fact, analysis of the following outline map of the United States (Figure 1) will show that the responsibility was generally shared by all of the important potato growing states. With the exception of Oregon and Washington, every important potato state in the Union increased appreciably the acres of potatoes planted during 1928. In the East, East Central and West Central States, the increased acreage was accompanied by greater yields per acre. In the Far Western States, poor weather reduced the total crop despite the increased acreage.

All of this is history, however,—so much water gone over the dam. The question of the hour is "WHAT WILL THE POTATO ACREAGE BE DUR-

ING 1929?" According to advices received by the United States Department of Agriculture on January 1, 1929, potato growers in the United States intend to plant about 3,410,000 acres of potatoes during 1929,—a decrease of 415,000 acres or approximately 11 per cent less than was planted in 1928. Without casting any reflections whatever on the good intentions of the growers who made up these reports, it is likely that the reported reductions of 11 per cent should be taken with a good large grain of salt. As a matter of fact, potato history during the past ten years shows clearly that it takes more than one year of low prices to bring about a drastic reduction in acreage. Research in potato prices, conducted by Warren and Pearson at Cornell University, indicate that a 50 per cent decrease in price has usually resulted in a reduction in acreage of about 5 per cent. The actual difference between prices received by growers for the 1927 and the 1928 crops of potatoes has been 42½ cents per bushel (96½ less 54 cents) or approximately 44 per cent.

There are no apparent reasons for believing that potato grower psychology has changed to any appreciable extent during the past ten years. Unless the potato growers of the United States exhibit unusual foresight this year, the 1929 acreage is, in the humble opinion of the writer, likely to be only about 5 per cent less than in 1928, or 3,634,000 acres. If the average yield for the past 5 years, 117 bushels per acre, is obtained (and after all, any calculations must be based on normal weather) the 1929 crop is likely to run around 425 million bushels and the average potato price to growers in the United States will probably run from 50 to 75 cents per bushel unless the unfavorable conditions of 1928 are repeated.

Holdings of Old Potatoes Are Heavy

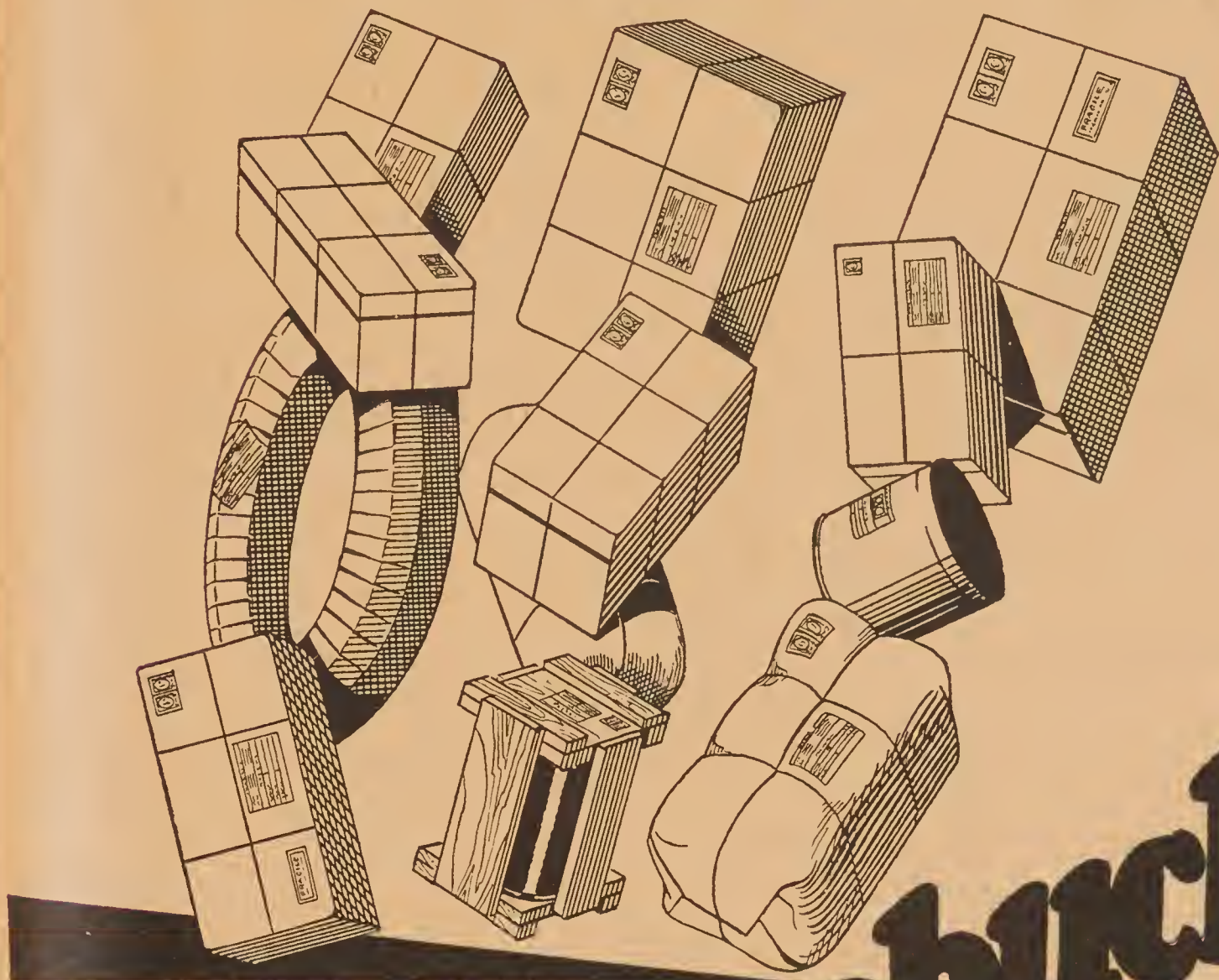
The year 1928 was unusual in that shipments, from the states producing early and mid-season potatoes, started considerably later than usual and then came on in much greater volume. This had the result of piling up the successive crops produced by the states all the way from Florida to New Jersey. The delayed movement of the crop from several of the mid-season states had a very depressing effect on the market during the fall and reduced to a considerable extent the possible outlet for the usual movement from the surplus late states at digging time. There is grave danger that this situation may be repeated during 1929! According to the United States Department of Agriculture, there were approximately 141 million bushels of potatoes on hand March 1, 1929, compared with 105 million one year ago. Carload shipments of late potatoes, up to

(Continued on Page 11)

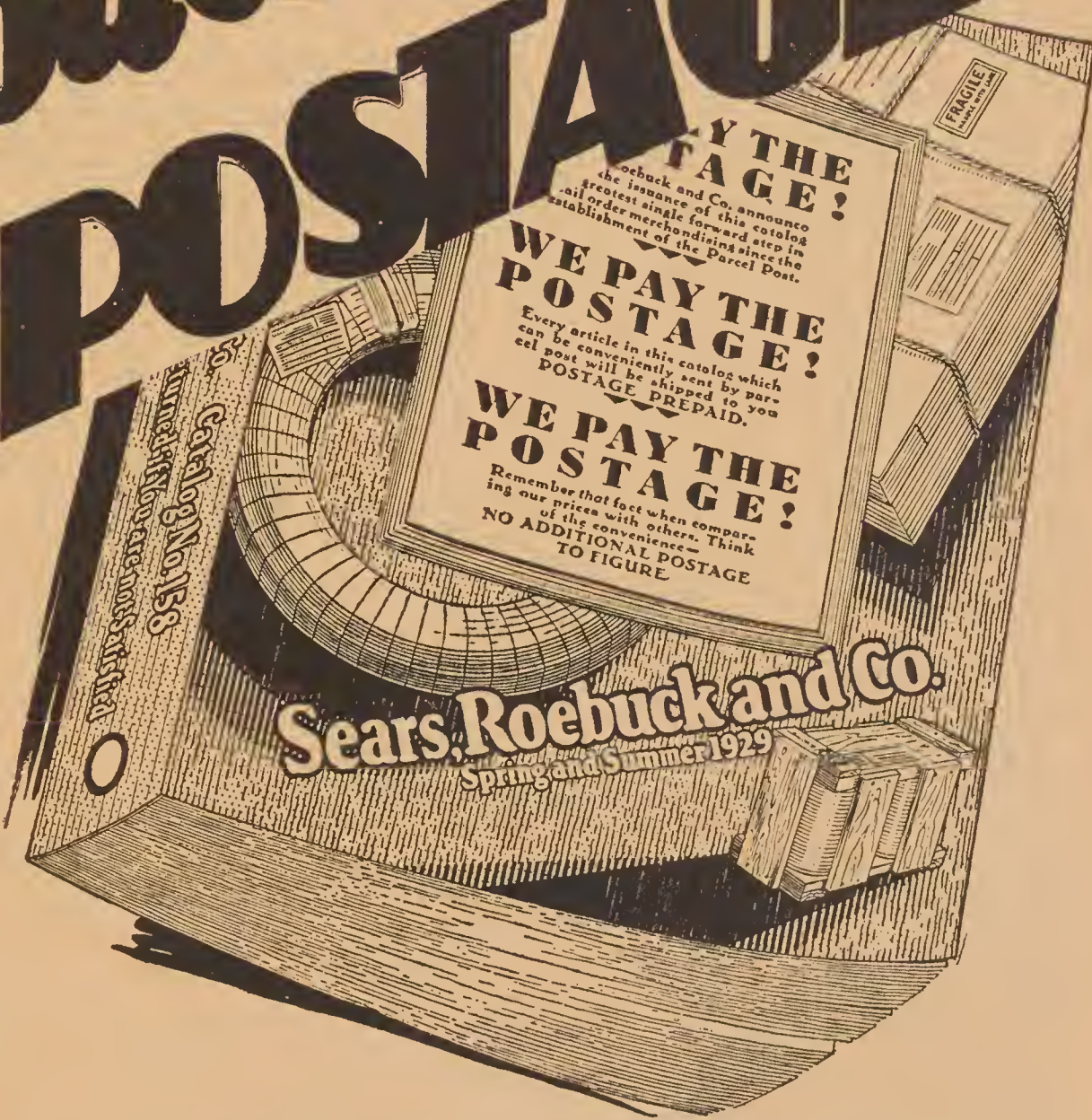


Those who plan to stay in the business of growing potatoes are interested in growing a quality product at the lowest possible cost per bushel. With this potato picker, which is attached to the digger, three men do the work of from seven to nine pickers.

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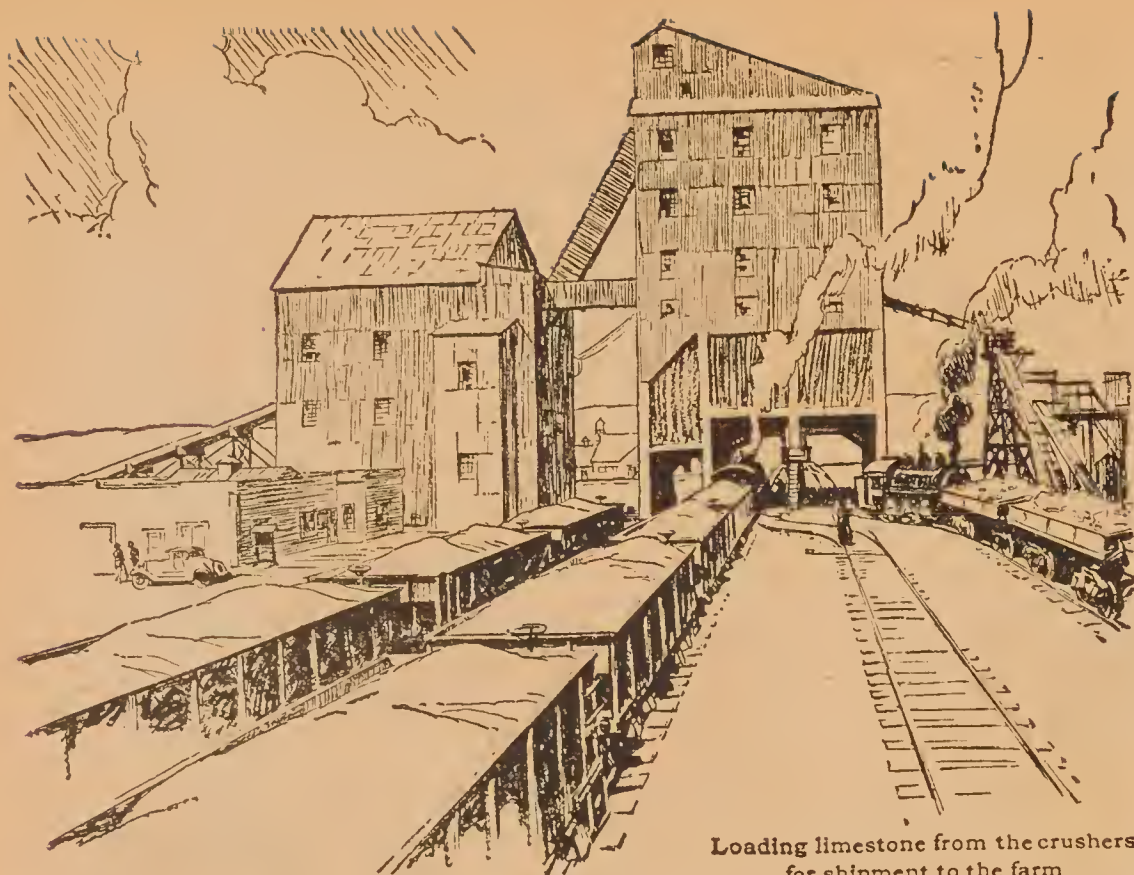
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With the A. A. Vegetable Grower

Grading Tomatoes For Cannery

AT the School for Cannery Field

By PAUL WORK

gether with Crosby's Egyptian and its

Men conducted at Geneva, March 6 to 8, Professor F. G. Gaylord of the Indiana Experiment Station, reported on the success of canners in that state in purchasing tomatoes on a graded basis. He pointed out that the grading system increased the percentage of No. 1's and very materially decreased culls, enabling the canner to buy his product more economically.



Paul Work

The Snider Packing Corporation tried out the graded method at its Irving plant the past year. Mr. John Wolf from, of this Company, reported great satisfaction with the results and stated that growers realized a material increase in returns. The prevailing flat rate price was \$15 a ton, but this Company paid \$20 for No. 1's, \$14 for No. 2's and nothing for culls. The average price paid was \$16.31 per ton. The cost of usable tomatoes was \$16.90 a ton which is believed to be considerably lower than under the flat rate system. Only 4 per cent of the growers' haulings were discarded as culls.

The grading system makes for economy for the canner, permits packing a higher quality product, provides an incentive for growers to improve their methods, and also reduces manufacturing costs. The plan is essentially fair.

Perhaps as important a factor as any for success under this method is the employment of an entirely unbiased inspector. This problem was solved by the use of the State Inspection Service and Mr. Spencer Duncan reported on this phase of the work. Other factories are interested in the plan for next year and it is expected that half a dozen will take advantage of this state service.

Local Association Incorporates

The business activities of the Central New York Vegetable Growers' Association have been increasing of recent years and the Association is now in process of incorporation under the name of "Onondaga Vegetable Growers' Co-operative Association, Inc." This will materially strengthen their position for business purposes.

The annual meeting of the Association was held March 4 with an attendance which overflowed the banquet room of Uhrig's restaurant, and what a feed the boys did get away with! E. L. Moxey of Jamesville, is President of the Association; L. E. Avery, R. D. No. 1, North Syracuse, is Vice-President; and E. R. Crockett, 106 Dougall Avenue, Syracuse, is Secretary.

New Variety Bulletin

Cornell University has just published an 84-page manual under the title "Commercial Varieties of Vegetables for New York State". This is Extension Bulletin 176, and may be had on request to the N. Y. S. College of Agriculture, Ithaca. Professor H. W. Schneek, until recently of the College staff and now with a seed house in Florida, is the author. The bulletin includes the results of a survey representing replies from 228 growers in the state. The questionnaire asked for information as to the relative importance of different varieties grown. In some vegetables, the plantings are fairly evenly distributed among several varieties, in other cases a single variety shows a great preponderance. For example, Davis Wax was the leader in wax beans with Pencil Pod and Wardwell's next. Sure Crop and Webber Wax are gaining and can quite well replace the Davis Wax. Detroit Dark Red to-

cousin Early Wonder practically monopolize the beet list. Early Jersey Wakefield has given way almost wholly to Copenhagen Market and Golden Acre cabbage for early market, and so with other kinds. Send for a copy of the Bulletin and study the results.

The main body of the Bulletin is devoted to concise but comprehensive descriptions of the leading varieties of all the vegetables. Around 200 varieties are described and there are 50 illustrations, many of them comparing different varieties side by side.

Strains of Danish Cabbage

F. O. Underwood of the College of Agriculture, in cooperation with various county agents, has conducted thorough comparisons of many strains of Danish Ballhead cabbage for several years past. The 1928 figures show yields ranging all the way from 10.04 to 18.76 tons per acre. Part of the difference is, of course, due to the fact that some of the strains are of the tall stem type and might perhaps have been planted a little closer together than the others. Even a 4-ton difference, however, may decide whether the crop is a loser or a payer in a year of moderate prices and the dollars-per-acre increase in a high price year such as 1928 is certainly highly significant. The New York State strains of Danish and also the Penn State Ballhead are hardly as even in type as some of the commercial strains, but they are outstanding in yield per acre.

Concentrated Fertilizers Recommended By Ratios

Why is it that the fertilizer recommendations of the State College are now put in terms of ratios rather than in terms of analysis as they were a few years ago?

THIS change has been brought about by the increased use of high analysis fertilizers. Under conditions a few years ago where the maximum plant food possible to get was about 26 per cent, there was no chance to get many different analyses having the same ratio. At present it is possible to get a number of analyses carrying the same ratio. For example, a 5-10-5 and a 10-20-10 both have the same ratio of 1-2-1. As a matter of fact, more and more attention is being given to applying fertilizer in terms of so much nitrogen, so much phosphoric acid and so much potash per acre, rather than in terms of so many pounds of fertilizer per acre.

How Drainage Improves Soil Fertility

1. Drainage reduces injury from drought.
2. It permits more efficient soil and crop management.
3. It reduces winter injury to crops.
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5. Air in the soil is essential to crop growth. Drainage takes water from the soil.
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7. Drainage improves the tilth of a soil.
8. Drainage helps to increase the available plant food.
9. It reduces the water in wet soils yet increases the moisture available for plant growth.

Invest some money in growing trees on your idle land. Each year they will be worth more to you. New buildings look like more at first but they are worth less each year.

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Buy Alfalfa Seed from Alfalfa Growers.

EVERY BAG has a TAG showing PURITY and GERMINATION TEST

Making an Old Tree Young

(Continued from Page 3)

grafted is not more than one inch and a half in diameter, it is not necessary to set more than one cion. In grafting large stubs, three inches or more in diameter, it is advisable to set three or four cions for the purpose of quickly healing over the stub.

The cion for the inlay-graft is cut from three to four inches long and with from two to four buds. Beginning at a point about two inches from the lower end of the cion an abrupt slanting cut is made to the center, or heart, and then straight to the end, leaving a smooth surface with the edges practically parallel, and with two inches of cambium, or growing cells, exposed on each side of the cut. The cut surface is now placed against a smooth portion on the stub where the cion is to be inserted and its outline plainly marked on the bark of the stock. This may be done with the point of a knife. The piece of bark on the stock corresponding in size with the cut surface of the cion is now removed by following the outline and cutting through to the wood with the point of the knife. If the grafting is done on a warm day about the time the buds are starting into growth, or a little later, the small portion of bark should slip readily leaving a clean surface of cambium cells exposed. If any of the inner bark adheres to the stock, it should be removed. The cion is now placed in position so that its exposed cambium comes in contact with that exposed by the removal of the small piece of bark from the stock. In this position the growing tissues of cion and stock are drawn into close contact by nailing. For this purpose use No. 20 three-quarter inch brads with flat heads.

Bridge-grafting

When a tree has been girdled, the only way it may be saved is by bridge-grafting. If a tree has been set only one or two years and has been girdled, it is questionable whether bridge-grafting is preferable to setting out a new tree or to grafting the stub just below the girdled portion. It is not uncommon for trees thirty years old or more to be girdled. There is no limit to the age of trees in saving them by bridge-grafting.

The most desirable time to do bridge-grafting is in the spring during a period of about a month, beginning when the buds are swelling. Cion wood must be kept dormant and in good fresh condition for late grafting.

In bridge-grafting, cions of sucker or water-sprout growths from hardy varieties as Northern Spy, Tolman, Stark and McIntosh, are very much more desirable than are those from tender varieties as Ben Davis, Rome or Baldwin. It is a waste of time to bridge-graft a tree with small, undeveloped, weak cions. If large one-year-old shoots are not available, two-year-old vigorous growths will be found to give good satisfaction. Cions for bridge-grafting a small tree may be slightly less in diameter than that of a lead pencil; while for trees with trunks more than three inches through, the diameter of the cions may well be one-half inch or more. The larger the tree to be bridged, the more desirable it is to use large cions. For trees that have been girdled down on the roots, coin wood with a curve at the base will be found to work to advantage.

Each cion should be four or five inches longer than the space to be bridged. At about two inches and a half from the end of the cion, a slanting cut is made to about the heart, or center, and then straight to the end, leaving the edges of the two inches or more of cut surface parallel. This exposes a considerable area of cambium layer to come in contact with that of the stock. The cut surface is then held against the stock at the place where the cion is to be inserted and its outline plainly marked on the bark of the stock. This may be done with a knife or any instrument with a sharp point. The small piece of bark on the stock corresponding in size with the cut surface of the cion is now removed by following the outline and cutting through

to the wood with the point of a knife. If the grafting is done on a warm day about the time the buds are bursting, there will be no difficulty in separating this small piece of bark from the stock, leaving a clean surface of cambium layer exposed.

The cion is now placed against the exposed stock so that the cambium layers come in contact. This end is held firmly in place while the other end of the cion is pressed against the other side of the girdle. In this position the end of the cion is marked with the blade of a knife, indicating the plane on which it should be cut in order that it may fit perfectly against the stock. This precaution need be taken only on twisted or crooked trunks. This end of the cion is then cut, placed against the stock, and the bark marked and cut out as before. The first cion of the bridge is now ready to be nailed. In order that there may be more or less curve to the cion, thus providing for its remaining firmly in place when the tree is swayed during severe wind storms, and also to give room for the growth of the cion the first year, until it grows solidly to the tree, a wedge one inch or less in thickness may well be used to hold it from too close contact with the tree. Two or three one-inch brads with large heads are now driven into each end of the cion, drawing the cambium layers of stock and cion into close contact. The wedge is then removed.

The cions of the bridge should be placed about one inch and a half to two inches apart all around the girdle. When the bridging is completed the area about the ends of the cions is carefully waxed to prevent drying out and possible infection and to exclude air and moisture. In sections where borers are troublesome, it is advisable to paint the whole girdled portion with a thin coating of wax.

Usually the buds on the cions of a bridge will start into growth; these should be removed early in the season. If any of the cions of the bridge fail to grow, they may be replaced the following spring.

Grafting Wax

There are a number of recipes for making grafting wax. Melted paraffine is sometimes used but it is not entirely satisfactory. Commercial wax may be obtained at drug and hardware stores. A good melted wax may be made cheaply and readily applied by melting together five pounds of crushed resin, one pound of paraffine or beeswax, then adding half a pound of powdered charcoal or flour and three-fourths of a pint of raw-linseed oil. This wax is put on warm with a small pointed ladle or may be applied hot with a small brush. It may be kept in workable condition for a considerable time by wrapping the hot container in several thicknesses of paper or some other good insulator.

What Will Potatoes Bring Next Fall?

(Continued from Page 8)

March 9, 1929, were 30,659 carloads behind last year's shipments up to the same date. This tremendous increase in storage holdings will offer exceptionally severe competition to the early potato crop and will, undoubtedly, restrict the marketing of that crop until later in the year. Reports from southern states are to the effect that heavy rains are delaying planting of potatoes anywhere from two to three weeks. All this probably means that there will be a large volume of mid-season potatoes still on hand next fall when the late crop should be moving. A large volume of mid-season potatoes on hand next fall would have the same effect on potato prices as an increased acreage of late potatoes.

Potato growers may well ponder the question as to whether they can afford to grow potatoes during 1929 at prices ranging from 50 to 75 cents per bushel. If an exceptional yield per acre is obtained during 1929, the price can easily be lower.

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Swift's Red Steer Fertilizers

"IT PAYS TO USE THEM"

KEEPING ABREAST OF THE TIMES



THE old "bone shaker" bicycle was well enough in its day. Reckless youths of fashion were frightening horses with it all over the land in the 'eighties. Ten years later saw it improved almost beyond recognition—chain drive, brakes, pneumatic tires—and it appeared on the highways in fleets.

And now the improved bicycle has been driven from the roads by its more efficient successor—the high-powered, eight cylinder motor car. Which leads us to wonder, "What does tomorrow hold forth?"

DURING the last twenty-five years the change in poultry and dairy feeds, feeding methods and results has been just as marked as in the field of transportation. Only the change has not been so apparent because the physical aspect of feeds has not altered greatly.

Twenty-five years ago wet mash feeds, home mixed, were the order of the day in the then infant poultry industry. Incomplete dairy rations, also home mixed, were preferred by dairymen.

And then came progress. The dry mash system of feeding, originated by The Park and Pollard Company, revolutionized the poultry field. The economies in labor and results that it effected have produced flocks of 5,000 birds where but 500 were before.

With dairy cattle the development into present day methods has been more gradual. Advanced knowledge of nutrition has resulted in feeds that produce more milk by meeting every one of the animal's dietary needs. The addition of Iodol Fish Meal to dairy feed by The Park and Pollard Company is one of the latest advances that are responsible for greater profits to the dairyman.

The experimental farms and laboratories of The Park and Pollard Company, under the supervision of scientific authorities on animal nutrition, have always been on the alert to test and originate new ideas in feeds. It is an expression of the firm's policy of keeping abreast and a little ahead of the times. It is also an insurance of the purity and greater profit results of Park and Pollard feeds.

Abreast of the times yesterday, today—and tomorrow.

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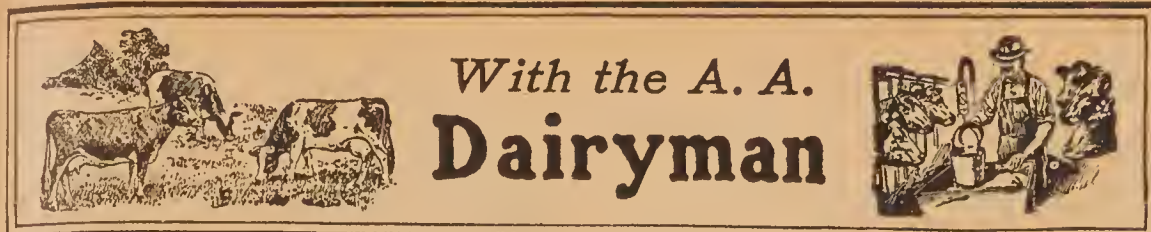
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A New Pasture Improvement Plan

IN dairy circles, a great deal of interest is being manifested in a plan for pasture fertilization, which is now practiced very extensively in many of the northern European countries. This practice is based on entirely new ideas and new methods. Experiments are now under way to demonstrate the practicability of its adoption in this country.

This plan involves three major considerations, (1) large areas of pasture lands are better adapted to the growing of grasses than to the growing of clover; (2) grasses are voracious feeders and when their roots completely occupy the soil the recovery of fertilizer nitrogen, under close grazing conditions, is practically 100 per cent; (3) the maximum feeding value of the pasture is attained when it is divided into several fields and rotational grazing is followed.

To start with, it must be understood that best returns can be obtained only on pastures which are in proper condition. Brush lands and other rough pastures are not adapted to the successful operation of the plan. There must be a good stand of grass. Liming and draining must also be done where soil conditions require it. The water level must be low enough not to encourage the growth of sour grasses and high enough to insure sufficient moisture during the growing season; the humus condition of the soil must be good; and the bacterial life in the soil should be active.

Under this new system of pasture treatment, a complete fertilizer is applied early in the spring, before growth starts, the pasture being first harrowed to break up the surface matting. It has been proven that, with a balance of plant-food to begin with, the protein production of young grasses is doubled when quickly available nitrogen is applied as a top dressing several times during the summer. Three nitrogen applications, early summer, mid-summer and early fall, are advised.

Under the present system of pastureage, the animals are put onto the pasture and kept there as long as they can possibly find some food. As the pasture acreage is, in many cases, too large for the number of animals, the result is that they are usually kept in the pasture too long. The more palatable and richest grasses are eaten first, the other grasses become increasingly high in tough fibre and decreasingly low in digestible protein.

Under this new system of pasture management, the animals are rotated more quickly from one fertilized field to the next, so that the grass, when eaten, may have the maximum feeding value. Under this system, the feeding of high-protein grains during the pasture season may be greatly reduced or even eliminated.

A fact not generally appreciated is that grasses grown and fed under these conditions are much more nutritious than grasses grown under ordinary conditions. Not only is there a large increase in tonnage grown per acre, but the grass is also much richer in food value. Probably due to its low content of fibre, it is also more easily digestible. The protein content can be increased to as much as 25 per cent of the dry matter.—K. P.

What a Dairy Improvement Association Did

MR. O. HANSON, General Manager of the Farmers Equity Cooperative Creamery Association of Nebraska, sends us the following interesting story:

"About December 1st, 1927, a cow testing association was started in Harlan, Phelps and Furnas Counties, Nebraska, with 26 herds of cattle, composed of about 300 cows, with Charles Grothe in charge. The average yearly production of these 300 cows at the time they started, based on the production at that time, would run about 150 pounds. In one year's time this cow testing association has been responsible for showing the farmers how to feed more and better, and also to cull out some unprofitable cows to such an extent that the average production of those 300 cows increased to 287 pounds of butterfat per cow, for the year.

"Now, please allow me to do a little rapid calculation for you, friends. This cow testing association increased the production of these cows from 150 pounds per year to 287 pounds of butterfat per year, an average increase of 137 pounds of butterfat per cow. Please multiply this by the 300 cows they had under test and you will see that they extracted 41,100 pounds more fat from those 300 cows this year than the year before. The average price of butterfat delivered to our creamery last year was 47.5 cents per pound. Multiplying this by the gain of 41,100 pounds of fat, is \$19,522.50.

"Now, you may be curious to know what the so-called 'ante' in this game was, so allow me to explain that phase of it.

The cow tester and his expenses	
cost	\$ 1,200.00
Estimated additional feed at \$20	
per cow for 300	6,000.00
Total Cost	\$ 7,200.00
Total Winning	19,522.50

Net winning after all expenses were paid....\$12,322.50

Not so bad when you consider this winning was brought about by only 26 dairymen scattered over three counties or really less than 1% of our total population of dairymen in those counties. What a 'splendid hazard' it would be to watch the results, if we could only get the rest

(Continued on Page 14)



A group of high producers grazing on a demonstration plot at the Massachusetts Agricultural College at Amherst.

The Wonderful · NEW De Laval Magnetic Milker



Perfect Milking

Easy Handling

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ALREADY the De Laval Magnetic Milker is making a great name for itself—users are delighted with it—they say no milker ever approached it in perfection of milking, ease of handling and cleaning, in reliability and satisfaction.

The De Laval Magnetic retains the famous De Laval principle of controlled and uniform pulsations, but accomplishes it with a new and patented application of electro magnetic force which provides simplicity of construction and installation, requires less power to operate, and gives controlled and uniform pulsations which milk cows in the best possible manner. The new Magnetic is easy to operate, easy to clean, and will give more profit and satisfaction to every cow owner. Made in a variety of sizes for milking one to 1000 or more cows. Can be operated by electric motor or gas engine. Sold on such easy terms it pays for itself while you are using it—send coupon for full information.

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A quality milker for the low price field. Units can be used on existing single pipe line installations, or it can be used as a complete outfit. Made in one and two unit sizes for milking one to 20 cows. Sold on easy terms—send coupon for full information and prices.

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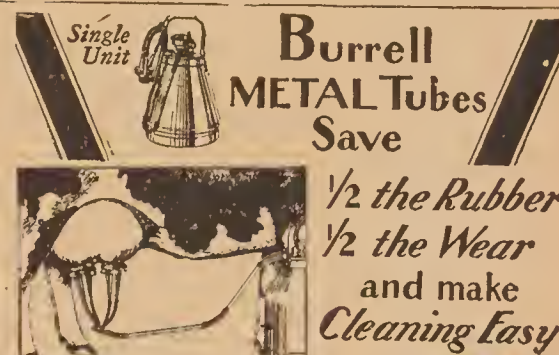
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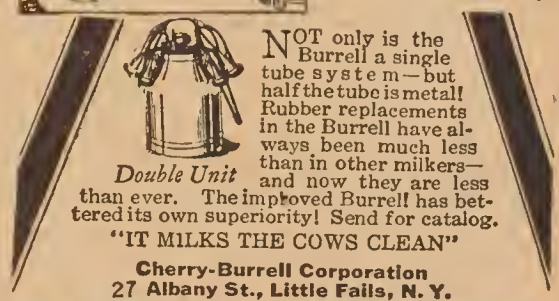
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MILKING MACHINES AND CREAM SEPARATORS



Model Silos

For those who have to count every penny, as well as for those who can afford the best, there's one outstanding silo—the Unadilla.

Strong—well built, time-saving, silage-saving and money-saving, the Unadilla represents the best outlay you can make for farm buildings. Our catalog describes line fully. Discount for cash settlement. Time if wanted.

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40 Years Making Clipping and Grooming Machines Only.



YOUR COWS—AND THE OTHER FELLOW'S

Ever stop to think that no two herds have just the same requirements, as regards the grain ration? Down the road from you Bill Jenkins is growing alfalfa. Bill's cows produce well on a grain mixture of only 18% or 20% protein. But you've never been able to grow anything better than timothy and a little clover. Your cows need a 22% or 24% mixture. What of it? That's nothing to worry about.

The thing to worry about—the most important question—is to feed the ration that gives your cows all the nutrients they need, as economically as possible. Whether you have to buy a 20% or a 24% mixture, that mixture will be an economical and efficient one if it contains

Diamond Corn Gluten Meal

as a big protein ingredient. Why? Because Diamond is an all-corn feed, containing over 80% of total digestible nutrients, and a minimum of 40% of protein which is of high digestibility and of good quality for milk production... If you buy a ready-mixed ration, look for Corn Gluten Meal in the list of ingredients. If you mix your own, the same principle applies.

Do you want good formulas? Write:
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CORN PRODUCTS REFINING CO.,
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40% Protein

28 YEARS ON RECORD

OVER a quarter-century of giving satisfaction to thousands of customers! That's your best guarantee that you, too, will be 100% satisfied with a Craine-Line Silo. Craine Silos built in 1901 are still giving good service today! Silos built this year will be earning profits in 1958—and every year they'll prove the greatest money-making and money-saving factor on your farm. Let us prove this!

LET CRAINE
LIFT YOUR DAIRY
TO A HIGHER LEVEL
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30 Wilson Street, Norwich, N. Y.

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AMERICAN AGRICULTURIST

(Continued from Page 13)

of our dairymen (I am now speaking about the 99%) to join this kind of a game of chance. And, here is a little more power for the players. Why stop with producing an average of 287 pounds of fat, per cow per year—why not produce 500 pounds per cow or more? Indeed the 'sky is the limit'. Why not make a 'killing' while you are at it?"

The Way to Inspect Milk

THE inspection of milk for consumption in the cities of the state is on the wrong basis. I cannot see for the life of me, what business it is of the city, what kind of barn the farmer has. He is not selling his barn, he is selling the milk product of the dairy cow kept in the barn. The city is concerned only in the product which he offers for sale. If that product meets the city's requirements that is all that is necessary; if that product does not, it will be rejected and the penalty will be upon the farmer who produces it and my contention is that he will not long continue to produce an unwanted and unsalable article and will then put his buildings and surroundings in such condition that the milk he produces will meet the city requirements.

The effect upon the farmer will be entirely different than it now is when he is told by some city inspector that he must do so-and-so to his surroundings and his buildings. The psychology of the present method is entirely wrong. You know that the average man hates to do what somebody else tells him he must, but if the quality and the appearance of the product which he offers for sale is such as to bring a low price, the penalty inflicted is self-imposed and he will not long continue to impose this penalty.—G.C.R., New York.

Cost of Keeping Bulls

FEW dairymen realize how high the maintenance cost of the herd sire is. Even though bulls may not require so large or so costly rations as milking cows, investigations have shown that the cost of bull service ranges from seven to eight cents for each hundred pounds of milk produced.

Most of this cost is necessary or justified, for the best results are had from feeding the bull well and from giving him excellent care. Cutting the cost of keeping the bull must be done by making sure that he is worthy of his keep and by raising the average production of the cows in the herd.

A Question About Artificial Refrigeration

In your opinion is it likely to be profitable to install refrigeration for cooling milk?—W. N., New York.

WE know a number of dairymen who have already installed such outfits and they are very enthusiastic about them. This eliminates the work of providing ice for milk cooling and especially where a premium is paid for a low bacteria count, the outfit is likely to pay for itself in actual profits. We have little doubt but that artificial refrigeration will steadily increase on dairy farms.

California Reports Control of "Foot and Mouth Disease"

RECENTLY several cases of foot-and-mouth disease were found in the State of California. This disease is highly infectious and dairymen will well remember the quarantine which was placed upon much eastern territory a few years ago. Due to the prompt action by the United States Department of Agriculture, it is believed that this disease was promptly stamped out.

It was discovered in a large herd of garbage-fed hogs and the entire herd was slaughtered on January 19, one day after diagnosis was made. The premises were thoroughly disinfected and it is therefore believed that the trouble was "nipped in the bud." It is

for HEALING Udder and Teats



It is good business to carefully guard the organs that directly and immediately affect the milk-flow. Cuts, chaps, cracks, bruises and inflammation seriously hamper production.

For quick, certain results in healing such injuries, or for treating Caked Bag, Bunches and similar disorders, Bag Balm gives unusual results because of its remarkable penetration. By our own exclusive process we have combined a vigorously penetrating antiseptic oil with the medicated Bag Balm ointment. By striking into the tissues and promoting unusually quick healing this ointment has won an enviable reputation among cow owners.

Clean, pleasant to use; cannot taint the milk. Big 10-ounce package, only 60c. Mailed postpaid if your dealer is not supplied. Booklet, "Dairy Wrinkles" mailed on request.

DAIRY ASSOCIATION CO., INC.
Lyndonville, Vermont



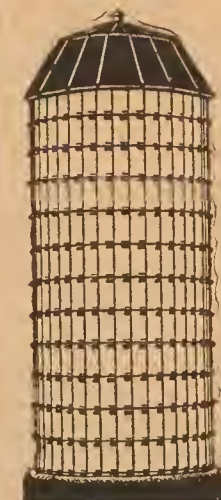
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Erected by Our Own Crew

Within the limits of New York State, we are prepared to offer a special service to dairymen who desire a high-grade Concrete Stave Silo. Our crew of trained workers will erect the silo on your place, insuring perfect construction throughout. We use patented reinforced concrete staves and bind them securely with Harder Galvanized Steel Hoops, never known to break.

Terms arranged to suit your income.

Write for particulars and prices
HARDER SILO CO., Inc.
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Filter through Moore Bros. cotton discs and get better prices for milk. Special price. 300 size 6 1/4, \$1.60, postpaid. Refund if not satisfied.

Write for big catalog listing over 500 specialties for milk and egg producers.

MOORE BROS., Dept. A, Albany, N. Y.

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New York Holstein-Friesian Association Offers Calf Club Prizes

By John P. Willman

THE New York Holstein-Friesian Association has appropriated \$760 for 4-H Holstein calf club work in 1929. This money is to be awarded as follows: \$525 will be awarded to the regularly enrolled 4-H Holstein calf club members who exhibit their heifers in the 4-H club classes at the 1929 New York State Fair; \$125 will be contributed toward the expenses of sending an exhibit of Holstein calf club heifers to the 1929 National Dairy Exposition at St. Louis, Missouri; \$100 will be awarded to the winners of a special New York Holstein-Friesian Association Calf Club Contest; and \$10 will be used to print certificates of proficiency which will be awarded to the Holstein calf club members doing outstanding work during the year of 1929.

The New York Holstein-Friesian Association has selected 4-H calf club work as one of their major projects for 1929. This is not the first year they have offered prize money to calf club members. They appropriated \$600 for this work in 1928 and appropriated liberal prizes also in previous years.

The Holstein-Friesian Association of America also offers \$100 in special prizes this year to the New York Holstein calf club boys and girls.

It is encouraging to see the various breed associations offer special prizes to the calf club members who are raising one or more heifers of their breed. These associations would not offer these prizes if they did not have faith in the dairy industry and the young folks coming on in the business.

Producing Milk With a Low Bacteria Count

In your opinion, what is the most important point that should be watched in our attempt to get the premium for a low bacteria count on our milk?—C. W., New York.

DIRT and bacteria always go together. Although it is important to have a modern dairy barn, it has been demonstrated that milk with low bacteria count can be produced under average conditions. The thing to remember is that bacteria gets into the milk from the things with which the milk comes in contact. Consequently, the things to watch are: First, not only to wash but also to scald with boiling hot water or steam all utensils which the milk touches. Second, these utensils should be properly cared for after they are washed. The best way seems to be to turn pails and cans bottom upward on a rack in a clean room so that no moisture will remain in them. Third, do not feed cows roughage until after the milk is completed. Fourth, it has been demonstrated that it helps considerably to wipe the flanks and udders of cows with a damp cloth just before they are milked. Fifth, milk should be cooled preferably to 50 degrees Fahrenheit as soon as possible as this checks the growth of bacteria.

Heifers Fail to Breed

I have two heifers which will be two years old next April. I would like to breed them this month and for some reason they do not come around. They are in good flesh. They have been in heat when in pasture before I put them in the barn. I would be grateful for any advice. Is there anything I could feed them?—P. W., New York.

SOMETIMES when heifers are well fed during the winter they do not come in heat regularly. The best thing I know to do is to have a good veterinarian examine them and see if they are in condition to breed. He can induce heat in them. If you are so situated that you cannot do this the only thing I can suggest is that you watch them very closely because sometimes in the winter it is hard to tell whether they are in heat or not.—E. S. Savage.

Uncle Charlie
says
"At the
FEED BOX

You decide Whether
or Not your cow will be



A Big Producer at the Pail"

MY DAD used to say: "You and I can do a lot of different things, but there's only one thing that a melon on a vine can do. It can just grow."

Plenty of dairymen feel the same way about their cows—they can just give milk, so much and no more. If they are good milkers, fine, and if they are poor milkers, it's just too bad.

But I have learned different in my thirty years' experience with dairy feeds. I have found that a dairyman's profits or losses are a long ways decided at the feed box. I've seen many a good dairy cow produce like a scrub because she wasn't fed a milk-making ration. And I've seen many a poor milker pull herself up into the two-hundred-dollar-annual-net-profit-class, just as soon as she was given the right feed.

Let All Pay Their Way

The important thing to my way of thinking is to get the most milk from every cow. There is no surer way than to feed Bull Brand Dairy Ration.



The World's Most
Modern Mill



Made on a perfectly balanced formula, from choicest protein concentrates, minerals and other essential ingredients, it has held a ten-year record for being the most productive per dollar of feed cost.

Read that over again: *the most productive per dollar of feed cost and guaranteed so.* And now read what a few of the thousands of dairymen who use Bull Brand say about it.

Do You Get These Results?

"My cows gained 10 gallons of milk a day on B-B Dairy Ration," writes Oscar Martin, of Oakdale, Md. "Last month, (December) I fed \$82.50 worth of Bull Brand 24% to my 15 T. B. tested cows and my milk check was \$378.20," reports Wm. King, of Chester Springs, Pa. "My cows keep in better condition and produce more milk on B-B than on any other feed," says Charles W. Pike, Rensselaer Falls, N. Y. "My herd jumped 40 quarts per day," writes Robert Bell, New Egypt, N. J. "553 pounds of milk in 7 days from one cow," says J. E. Slyder, Seven Valleys, Pa. "Two full pails more milk a day," says M. B. Ryan, Bomoseen, Vt.

We Guarantee You More Milk - or Money Back

Bull Brand offers you the same increased milk production and profits. Feed it to your cows and watch them pick up. Note the improved condition. Count your extra profit dollars. And remember that you are using B-B with this provision: If you find that it doesn't give the most milk per dollar of feed cost, take back the empty sacks to your dealer and get every penny of your money back.

Start your profits at the feed box!

Maritime Milling Co., Inc., Buffalo, N. Y.

FEED BULL-BRAND

Dairy Ration (24%), B-B Red-E-Mixt (20%), B-B Hi-Test (20%) or B-B Marmico (16%), whichever is most suitable for your roughage. Use the Bull-Brand full line of Poultry Feeds

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EVERY Economy Silo is equipped with Anchoring System that makes it absolutely permanent. It can't blow over. Every convenience. A-1 material. Also silos of Tile and Cement Stave. Catalog and manufacturer's prices on request.
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Ready to milk when you get it. Send for sensational offer! Milk 18 to 40 cows an hour—easy. Costs nothing to install. Easy to clean. Milks the human way—easy on the cows. 30 Days Trial—10 Year Guarantee—satisfaction guaranteed or money refunded. Write today.
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Post Your Farm AGAINST TRESPASSERS

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SERVICE BUREAU OF
AMERICAN AGRICULTURIST,
461 Fourth Ave., New York City

Reviewing the Latest Eastern Markets

Milk Prices

The following are the April prices for milk in the basic zone of 201-210 miles from New York City.

Dairymen's League prices are based on milk testing 3.5%. Sheffield on the basis of 3%.

Class	Dairymen's League	Sheffield Producers
1 Fluid Milk....	3.37	3.17
2 Fluid Cream		2.30
2A Fluid Cream	2.46	
2B Cond. Milk..		
Soft Cheese..	2.71	
3 Evap. Cond. Milk Powder		2.15
Hard Cheese	2.35	
4 Butter and American cheese, Based on New York City Market quotations on butter and American cheese.		

The Class 1 League price for April 1928 was \$2.90 for 3.5% milk and Sheffield's \$2.80 for 3%.

The above prices in each class are not the final prices the farmer receives. The final price received from the dealer is the result of the weighted average.

Butter Market Continues Unsettled

CREAMERY	Mar. 27	Mar. 20	Mar. 28, 1928
SALTED			
Higher than extra....	47 1/4-48	47 -47 1/2	47 1/2-48
Extra (92sc).....	46 3/4-47	46 1/2-	47 -
84-91 score.....	45 1/2-46 1/2	45 -46 1/4	44 1/2-46 3/4
Lower Grades.....	44 1/2-45	44 -44 1/2	43 -44

The butter market has been a sensitive, restless and unsettled affair since our last report. Prices during the week ending March 23 were up and down in the butter trade, but as the week ended prices tended to recover. On March 25, the trade held steady with operators reporting a satisfactory clearance of goods. Receivers were glad to keep stocks moving and did

not force the price. On the 26th, offerings were more restricted and there was a little more bullish activity. Prices on creamery extras were forced up to 47 1/4c. By Wednesday, the 27th, a sharp reaction set in. It was very evident that the advance on Tuesday was unwise for a pressure to sell developed that again carried prices below 47c. Naturally under the circumstances such as these buyers are showing a very indifferent attitude which keeps the market in an unsettled condition. However, this is not unexpected for the market is subject to these attacks of spring fever.

Cheese Remains Stationary

STATE	Mar. 27	Mar. 20	Mar. 28, 1928
FLATS			
Fresh Fancy.....	23 1/2-25	23 1/2-25	22 1/4-23
Fresh Average.....			
Held Fancy.....	27 1/2-29 1/2	27 1/2-29	29 -28 1/2
Held Average.....			

The cheese market has not changed a hair since last week. The demand for high grade well cured cheese holds the market steady. Fancy held goods are bringing from 27 1/2c to 28c, while specials sell up to 29 1/2c. Fresh cheese, on the other hand, is still selling slowly. As has been the case in the past we are receiving a comparatively small amount of fresh cheese which is a very fortunate circumstance. If we were getting heavy supplies the market would be unable to hold its present level. On March 21, the holdings of American cheese in the ten cities making daily reports, totaled 11,306,000 pounds, compared with 8,067,000 pounds at the same time last year. From March 14 to March 21 withdrawals from the store houses in these ten cities totaled 385,000 pounds whereas, a year ago only 152,000 pounds were taken out. If the out-of-storage movement can keep pace for a few weeks we will soon be down to a safe level.

Egg Market Changes Slight

NEARBY WHITE ..	Mar. 27	Mar. 20	Mar. 28, 1928
Hen's Sel. Extras....	34-35	34-35	36-38
Hen's Av'ge Extras....	33-	33-	33-35
Extra Firsts.....	32-32 1/2	32-32 1/2	32-32 1/2
Firsts	31-31 1/2		31-31 1/2
Undergrades			29-30
Pullets			
Pewees			
NEARBY BROWNS			
Hennery	32-34	33-34	34-37
Gathered	29-31	30-32	29-33 1/2

There have been comparatively few changes in the egg market. White eggs are substantially the same as they were a week ago. Brown eggs are not quite as firm. The Easter trade is undoubtedly responsible for some of this. The Chicago market also is having an indirect influence that is helping to hold our market steady. Chicago prices are still above a parity with New York, although we are still getting enough eggs locally to meet the current trade needs. The market is spotty. There is a little speculative interest here and there in storage packed goods. Then there are some choice selections from certain areas that are bringing a slight premium. The market is in general unsettled, although on the surface it appears to be unchanged. The domestic demand has been very satisfactory, being supplemented by active buying for export. The markets in the Argentine are reported to be in good shape and that country bids fair to offer some needed relief.

Reports from the Central West indicate that production there is increasing while in the Southwest they have about reached the flush of production. Indications are that the total lay has not yet increased to last year's volume at this time. On March 22, the ten cities making daily reports were credited with having on hand 23,292 cases of eggs, whereas on March 15, a week previous they had only 1,326—an into-storage movement of 21,966 cases. During the same period a year ago the into-storage movement amounted to 38,240 cases with a total holding on March 20, 1928 of 168,902 cases. In other words we are running behind a year ago but those who have studied statistics for the past years realize that a late start is not a sure clue to a total season's production. However,

these figures are creating some speculative interest, which will now have a big influence on the market.

Live Poultry Prices Hold Steady

	Mar. 27	Mar. 20	Mar. 28, 1928
FOWLS			
Colored	-37	-37	1928
Leghorn	-37	-37	31-33
CHICKENS			30-
Colored	32-36	32-36	
Leghorn	32-36	32-36	
BROILERS			
Colored	47-55	40-50	40-50
Leghorn	50-52	43-45	40-45
CAPONS	50-55	-45	50-55
TURKEYS	30-45	25-40	30-50
DUCKS, Nearby.....	28-32	28-30	26-28
GEES	20-22	20-22	15-16

On March 27, the live poultry market is like an old fashioned Florida land boom. Express fowls are being snapped, and here and there fancy stock is being held at a premium. In the broiler market we also find a good selling situation. This is evidenced by the fact that practically all broilers are on a top price basis. Only the poorer birds are procurable at slightly reduced figures. Practically all lines of poultry have been selling well. Naturally the factor that is responsible for all of this is the coming holiday. Sad to relate, there are a few shippers who will be disappointed for some consignments of Barred Rocks are having a hard time finding buyers because of the poor quality.

In our reference issue we published a schedule of the legal and Hebrew holidays that attract buyers of live poultry. We urge our readers to refer to that schedule in order to time their shipments. Next month occurs the Jewish Passover, when fat fowls, turkeys, ducks and geese will be in demand. The best shipping days will be the 22nd. and 23rd. Undoubtedly the 22nd. will be the best for the 23rd. will be the big buying day. Only choice birds are wanted at that time.

Potato Market Very Dull

STATE	Mar. 27	Mar. 20	Mar. 28, 1928
150 lb. sack.....		1.75-1.90	3.50-3.75
Bulk, 180 lbs.....			
MAINE			
150 lb. sack.....	1.75-2.00	1.75-2.00	3.50-4.10
Bulk, 180 lbs.....	2.00-2.25	2.00-2.25	4.50-5.00
PENNA.			
150 lb. sack			
No. 1.....		1.75-1.90	3.75-4.00
Bulk, 180 lbs.....			
LONG ISLAND			
150 lb. sack			
No. 1.....	2.00-2.25	2.00-2.25	4.50-4.75
Bulk, 180 lbs.....	2.35-2.90	2.35-2.65	5.40-5.75

The potato market continues to be a very dull affair and there is nothing that would indicate that it will take a change before it gives its dying gasp; unless, perhaps, a lot of holders of old potatoes suddenly make up their minds to stop shipping. However, we feel that if the price were to advance enough potatoes could be resurrected to supply all our needs. The potato deal of 1928 was a sad affair. We all know the contributing factors and we all hope they will not occur again, at least as far as the low prices are concerned.

New potatoes from Florida are generally selling from \$6.75 to \$7 per barrel.

Feeds and Grains

FUTURES	Mar. 27	Mar. 20	Mar. 28, 1928
(At Chicago)			
Wheat (Mar.).....	1.16 1/2	1.23 1/2	1.42 1/2
Corn (Mar.).....	.99 1/2	.93 1/2	.98 1/2
Oats (Mar.).....	.45	.46 1/2	.57 1/2
CASH GRAINS			
(At New York)			
Wheat, No. 2 Red..	1.48 1/2	1.55 1/2	1.84
Corn, No. 2 Yel....	1.10 1/2	1.13 1/2	1.20 1/2
Oats, No. 2.....	.58 1/2	.60	.70 1/2
FEEDS			
(At Buffalo)			
Grade Oats.....	33.50	37.00	39.00
Spring Bran.....	30.00	31.00	41.00
Hard Bran.....	32.25	35.00	43.50
Standard Mids.....	29.00	30.00	40.00
Soft W. Mids.....	38.00	39.50	46.50
Flour Mids.....	35.00	35.50	41.00
Red Dog.....	37.50	38.00	41.50
Wh. Hominy.....	37.00	38.00	43.50
Yel. Hominy.....	37.00	38.50	41.00
Corn Meal.....	39.50	41.00	41.50
Gluten Feed.....	48.50	48.50	44.75
Gluten Meal.....	60.00	60.00	54.00
36% C. S. Meal....	43.00	45.50	53.00
41% C. S. Meal....	48.25	49.25	58.00
43% C. S. Meal....	50.75	52.25	60.00
34% O. P. Linseed Meal	55.50	56.50	56.50

Hay a Shade Easier

The hay market has eased off a fraction since last week. The best timothy

failing to bring better than \$27. Other grades lower in proportion. If some of the No. 3 and sample hay were held back it would not hurt the market the slightest bit.

Suggestions for Shippers of Live Poultry

Shippers of live poultry can increase their returns received from the sale of this commodity on the New York City market by observing the following suggestions which have been furnished by

Market Reports Daily by Radio

Up-to-the minute market information and prices are broadcast daily for your benefit by American Agriculturist co-operating with the New York State and Federal Departments of Agriculture, through station WEAf. The reports are broadcast at 12:30 standard time.

the New York City office of the New York State Department of Agriculture and Markets.

- See that all coops, crates or baskets are clean before placing poultry therein.
 - As far as practicable, do not mix breeds. When Leghorns, Rocks and Rhode Island Reds are in one basket, the buyer pays for the whole at the rate of the lowest priced.
 - Do not mix ducks, fowls and broilers in one coop.
 - Do not mix culls and good stock. The price obtained generally is the value of the culls only.
 - Do not feed live poultry until after the weight has been taken by the agent of the express company.
 - Count the number of head and advise your merchant accordingly. Place on the coop a label with the merchant's name plainly written thereon, also the correct contents.
 - Keep your express receipts as well as the account of sales from the merchant. If you believe that you have not received the proper returns on your consignment, write to the New York State Department of Agriculture and Markets, 53 Park Place, New York City.
- Editor's Note—Or write to the A. A. Service Bureau.
- If you do not know the best man to whom to ship your product, write and ask the New York State Department of Agriculture and Markets, stating what you have for sale and you will be supplied with a list of licensed and bonded dealers who can handle your shipment.—N. Y. S. Dept. of Agriculture and Markets.

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Bonded Commission Merchants

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Oldest Live Poultry house in New York City.
Established 1883, offers you an unlimited outlet for your live poultry. Write for shipping tags and free holiday calendar folder K 27.
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Ship BROILERS MARKET GOOD

Live and Dressed Poultry, Calves, Lambs and Eggs

Write or wire for quotations, tags, market conditions, etc. Prompt returns—Top prices—Take advantage of 25 years experience. Try us.

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are often the forerunners of serious complications, trouble and expense. Don't allow your horses to be laid up when you need them most. Keep them working with **SPOHN'S** Horsemen swear by it—sold for 35 years. 60 cents and \$1.20 at drug stores or direct.
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Write today for free trial bottle—convince yourself at our expense.
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is the title of a pamphlet that gives valuable information regarding water supply for farms and country homes. If you have a spring, artesian well or swift running stream, write for this pamphlet—free. Rife Hydraulic Engine Company, 90-G, West St., New York.

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night and day with Rife's Hydraulic Ram. No attention, no expense. Write for free catalog.
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Approved Varieties Officially Analyzed and Tested.
BEANS, BARLEY, BUCKWHEAT, POTATOES, CORN, OATS
Write for circular and sample. **E. F. HUMPHREY, Ira, N.Y.**

SWINE

FARMERS BUY FROM FARMERS

Let us suggest to you as breeders the best kind of a pig to start to raise is a good one. You save time and money. We sell all pigs with a trial of two weeks, and then if dissatisfied, return pigs and we will return your money.
7-8 wks. old, \$4.50 ea.; 8-10 wks. old, \$5.00 ea.
Breeds—Chester and Yorkshire cross, and Berkshire and Chester cross. Crating free. These prices F.O.B. our depot. Will ship any number C.O.D. or send check or money order.

MISHAWUN STOCK FARM,
MISHAWUN ROAD, WOBURN, MASS.
P. S. No pigs sold at the farm; only by appointment.

SPRING PIGS FOR SALE

Buy where quality is never sacrificed for quantity. We sell only high grade stock from large type Boars and Sows, thrifty and rugged, having size and breeding. Will ship any amount C.O.D.

Chester & Yorkshire — Berkshire & Chester
7 TO 8 WEEKS OLD.....\$5.00
8 TO 10 WEEKS OLD.....\$5.50

Also a few Chester barrows 8 wks. old, \$6.50 each
Satisfaction guaranteed or money refunded. 10 days trial allowed. Crates supplied free. **A. M. LUX, 206 Washington St., Woburn, Mass. Tel. Wob. 1415.**

PIGS FOR SALE OLD RELIABLE STOCK

Heavy legged, square backed, Chester and Yorkshire crossed, Poland China and Chester crossed. Barrows, boars or sows 6-8 weeks old \$4.25—8 to 10 weeks old \$4.50 each. Fancy Berkshires, also Chester Whites, 2 months old Sows and unrelated Boars, 6.00 each. 10 days trial or your money back. Shipped C. O. D. Crating free of charge. Yours for quality hogs.

ED. COLLINS, 35 Waltham Street, LEXINGTON, MASS.

The Latest News from Albany

State to Bear Expense of Retesting Accredited Herds--County Notes

PERHAPS the legislation of greatest interest to the dairymen of New York State is a bill which was introduced by Senator Kirkland and just signed by the Governor amending the law on the retesting of accredited herds. In brief, it provides that the

Milk Market Conditions in New York

IN spite of the fact that Dairymen's League figures and other established records show that production of milk is considerably below what it was a year ago, there is evidence that some dealers are following the same practice which has been followed for years, of utilizing seasonal surplus production for the purpose of obtaining new business. This means of course cutting of prices with a resultant weakness in the market.

The seasonal surplus which has begun to appear is the time-worn excuse used by those who have no surplus facilities and have to seek new markets for their additional supplies. As a whole the situation is better than it has been for some time but the cutting of prices even on the part of a few is nevertheless a threatening factor in the whole stabilization program, which at present the industry as a whole and allied agencies is working hard to carry forward.

Some of the New York City bids for milk for the month of April, which include hospitals and similar institutions, were taken at a price fully a dollar a can below the regular delivered price of wholesale milk. There is also considerable evidence of some of the same type of buyers seeking additional markets through price concessions throughout the wholesale trade.

cost of retesting accredited herds shall hereafter be borne by the State. Up to this time, the individual herd owners have borne the cost of retesting after the herd was accredited except in counties where this expense has been met by appropriations by the board of supervisors.

There was some misunderstanding in the minds of dairymen concerning this provision, and the change in the law will doubtless receive the approval of all who are interested in the eradication of this disease.

The Witter dog bill which has re-

ceived considerable comment, both favorable and otherwise, was signed by the Governor on March 25th. The bill, which entirely rewrites the old dog law is a result of a report of the legislative committee appointed in 1928 and headed by Assemblyman Witter.

Briefly, this law provides first for a change in the enumeration to dog owners. Whereas this listing has previously been done by the assessors, the new law provides that the town board shall appoint a resident or residents, to be known as enumerators, to prepare lists of persons owning dogs. This method is already in force in Suffolk County and has given good results.

Another important change concerns the indemnity for damages by dogs. In the past, counties have been liable for damages done by dogs to domestic animals only to the extent that money was available from dog licenses. The new law provides that dog license moneys are to be used so far as adequate but if they are inadequate, funds from other sources must be appropriated by the supervisors to pay for damages done by dogs to livestock.

One of the provisions of the bill which was fought by dog breeders was the provision allowing anyone to kill a dog which was found chasing or attacking farm animals. As a matter of fact, this part of the law does not differ from the old law. Apparently, certain interests had not realized that such a law was on the books and when their attention was called to it by the new bill, they conducted an energetic fight against it.

Legislature Passes Gas Tax

The legislature passed a bill just before adjournment providing for a tax of two cents a gallon on gasoline. This bill would make the tax effective May 1, and restrict it to gasoline used by motor vehicles on the public highways. The gas tax, as passed, is without the rider requested by the Governor providing for a 20 per cent cut in the state income tax.

Tied in with the gas tax are provisions which have been commonly spoken of as the Republican plan for tax relief. This plan, together with measures already adopted, calls for the elimination of the direct State tax on real estate, amounting to \$13,500,000, and a \$4,000,000 cut in the personal income tax. This cut in the income tax is brought about by increasing exemption for single persons from \$1,500 to \$2,500, and exemption for married persons from \$3,500 to \$4,000.

A total of \$14,600,000 in tax relief is provided by the Republican program,

exclusive of the income tax cut and omission of the real estate tax.

Altogether the State relief projected amounts to \$29,600,000, as follows:

Rebate to localities, \$5,500,000.

Relieving counties of State highway construction expense, \$5,500,000.

Toward support of one-teacher schools, \$2,050,000.

Toward support of two, three and four-teacher schools, \$1,000,000.

State assumption of town costs for State highway upkeep, \$550,000.

Income tax reduction, state's share, \$1,500,000.

Omitting real estate tax of half mill, \$13,500,000.

Total, \$29,600,000.

Farm Loan Association Representatives Discuss Problems

OF the \$54,700,000 loaned in the First Land Bank district which includes New York, New Jersey, and New England, approximately one-half has been made available to the farmers of New York—\$26,780,000—to be accurate. As the record now stands in respect to farms foreclosed and acquired by the bank, New York has more than her proportion. The investment throughout the district in farms taken over is approximately \$544,000, of which \$428,472 is in New York farms.

These facts were brought out by H. H. Johnson, assistant secretary, and C. J. Grant, fieldman, representing the bank at the meeting this week at Syracuse with 70 representatives of the 50 National Farm Loan Associations in the state and officials from the Farm Loan Board at Washington.

As a program for the 50 National Farm Loan Associations to follow, Dr. George F. Warren, director-at-large for the First Land Bank District and professor of farm management at Cornell, urged the "making of more good loans, fewer bad loans and to sell the farms which they have been forced to take over."

Dr. Warren advocated amending the rules or law so that loans could be made which would more adequately cover specialized farming which he said, contrary to his early beliefs, is the most profitable form of farming. "The Federal Intermediate Credit Act should also be amended. It should be made possible for farmers' cooperative purchasing organizations to use the Intermediate Credit Bank as a source of credit in the purchasing of supplies to sell to their members." He also favored amending the law so these banks could lend to farmers' cooperative organizations offering marketing contracts as collateral and who wished to use the loan to purchase warehouses, creameries, skimming stations, packing sheds or other physical facilities, and pay back the loan over a series of years, much as is done by farmers who borrow on their farms and gradually repay the loan from the Federal Land Bank.

At the banquet, the principal speakers were Jared Van Wagenen of Lawyersville, John H. Guill of the Farm Loan Board, P. R. Evans of the Bureau, and E. R. Eastman, Editor of the AMERICAN AGRICULTURIST.

O. E. Bradfute, Former Farm Bureau Federation President, Dies

OSCAR E. BRADFUTE, who was president of the American Farm Bureau Federation from 1922 to 1925, as well as a prominent advocate of farm relief died at Xenia, Ohio, on March 25th. Mr. Bradfute was head of the firm of O. E. Bradfute & Sons, breeders of Aberdeen-Angus cattle, and was known as a frequent lecturer at agricultural colleges and farmers' meetings.

Mr. Bradfute was for years a trustee of the Ohio State University and a member of the board of control of the Ohio Agricultural Experiment Station. In 1925, President Coolidge named him as the American delegate to the world conference on agriculture in Rome.

The death of Mr. Bradfute will be a loss not only to Ohio agriculture but to the entire nation.

New York County Notes

Chautauqua County—Sugaring is the order of the day among many of the farmers at this time. Most of the tapping was done the first of last week from the 11th to the 15th but the weather was so warm that the run was small. At this time the run is quite large and things look better. Prices range from \$1.85 to \$2.50 a gallon according to market and grade of syrup. Many of the best sugar bushes in this neighborhood have been cut down and sold for wood and lumber. A few farmers are enlarging their operations.—A. J. N.

Genesee County—Farmers are selling their surplus hay before the rush of the season's work. A number of herds of registered cattle have been sold at auction in this county this spring. There is an epidemic of horse distemper which some say is the result of shipping western horses into the vicinity. Three highways in the county have been closed to heavy traffic till the excessive rains are over. Wheat fields are looking green again.—Mrs. R. E. G.

Jefferson County—Much interest is being taken in the milk situation in regard to widening the New York milk shed. It would be very easy to produce more milk in November if the cows freshening in April and May were well cared for during the summer months. Eggs have dropped in price—36c to 45c being paid. Sugar

orchards are in operation, but there is not much of a run. Hay is moving slowly—\$12 being the top price.—Mrs. C. J. D.

Clinton County—March has been very mild and the frost is nearly over. Most of the dirt roads are impassable for cars. Many farmers are buying hay which is \$15 per ton, baled and delivered; \$10 to \$12 is being paid for loose hay. There is not much demand for potatoes. Eggs are from 40c to 45c per dozen. All kinds of beans are very high.—R. J. M.

Sullivan County—Daniel McNamee of Chatham, Columbia County, has been named by Governor Roosevelt to succeed the late Judge George Smith. Mr. McNamee was Smith's opponent last fall. Weather is ideal and farmers are busy building fences. Feed remains about the same in price, butter the same and eggs have taken a drop in price. So far the sap business has not proved very good on account of the warm weather. Potatoes are in very bad condition. In many ing up after the long cold winter. Roads are in very bad condition. In many places where cars are unable to travel, horses are a God-send.—P. E.

Suffolk County—Plowing was started and some potatoes planted the week of March 23. The following week more plowing and hundreds of acres of potatoes were planted. Last year's crop is moving slowly at 40c and 50c.—F. S.



STRAWBERRY PLANTS

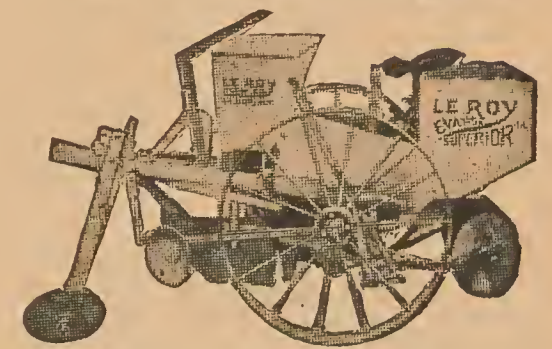
Now is the time to start that Strawberry patch. Luscious berries. Real profits. Start right with the finest plants you can buy—Healthy, Vigorous, Well-rooted, True-to-name. Here's the price list. Order direct to save time because early planting pays.

VARIETIES	25	100	250	1000	5000
Aroma	\$0.30	\$0.90	\$1.60	\$5.00	\$21.25
Big Joe .....	.40	1.00	1.90	6.00	25.00
Big Late (Imp.) ..	.40	1.00	1.90	6.00	25.00
Chesapeake .....	.50	1.10	2.15	7.00	30.00
Champion (Ever) ..	.50	1.30	2.35	8.00	35.00
Dunlap .....	.30	.90	1.60	5.00	21.25
Gibson .....	.40	1.00	1.90	6.00	25.00
Gandy .....	.40	1.00	1.90	6.00	25.00
Haverland (Imp.) ..	.40	1.00	1.90	6.00	25.00
Klondike .....	.25	.70	1.25	4.00	17.50
Lupton .....	.40	1.00	1.90	6.00	25.00
Mastodon (Ever) ..	1.00	2.40	4.35	15.00	65.00
Missionary .....	.25	.70	1.25	4.00	17.50
Premier .....	.40	1.00	1.90	6.00	25.00
Sample (Imp.) .....	.40	1.00	1.90	6.00	25.00
Wm. Belt .....	.50	1.10	2.15	7.00	30.00

All prices F.O.B. Salisbury, Md. Illustrated, descriptive catalog free. "You get your money's worth with ALLEN'S Plants." We guarantee our plants to reach you in good growing condition. Prompt shipment.

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BIG HEALTHY, TRUE - TO - NAME PLANTS fresh dug for your order. Satisfaction guaranteed.

	50	200	500	1,000	5,000
Premier (per)	\$0.60	\$1.30	\$2.25	\$4.50	\$21.35
Sen. Dunlap (per) ..	.50	1.20	2.00	3.75	17.85
Ford (per) .....	.60	1.30	2.25	4.50	21.35
Big Joe (per) .....	.60	1.30	2.25	4.50	21.35
Chesapeake (per) ..	.65	1.40	2.50	5.00	24.25
Lupton (per) .....	.50	1.25	2.00	4.00	19.00
Mastodon E. B.	1.10	3.00	5.00	10.00	47.50
Champion E. B.60	1.75	3.00	6.00	28.50
Progressive E. B.60	1.75	3.00	6.00	28.50

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"Plants that Please"

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Used extensively for snow protection along Highways. Write for prices and catalog.

NEW JERSEY FENCE CO., Burlington, N. J.

A LIFETIME ROOF

Here is a guaranteed pure iron roof that resists rust. Our catalog explains why it is lightning proof and fire-proof. Most economical you can buy and easily put on. Write today for free catalog.

ARMCO IRON ROOFING
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PURE IRON NOT STEEL

When writing advertisers be sure to mention the American Agriculturist.

The MIRACLE

Laying
Paper Mulch
in Hawaiian
Pineapple field



One planting of corn. Under paper mulch at left—unmulched at right

Make this your Mulch Paper Year, too!

NINETEEN-TWENTY-NINE is to be the Mulch Paper Year in American agricultural history. Thousands of planters, spurred on by reports of miraculous crops from all over the country and convinced by actual Mulch Paper experiments, which they themselves made in 1928, are putting ACRES under Gator-Hide in 1929.

Why not make this YOUR Mulch Paper Year too? You can't afford to ignore this newest contribution to agricultural development any more than industry could afford to ignore the motor-truck. Mulch Paper farming is here to stay.

Consider These Gator-Hide Facts Carefully

Gator-Hide Mulch Paper is a tough, strong, durable paper treated with a special grade of asphaltum by a process that renders it practically impervious to light and moisture. Unrolled directly over the pre-

pared plant beds for planting either through or between successive rows of the paper, Gator-Hide stores up solar heat in the soil, directs rainfall to the root area of the plants and then CONSERVES this moisture by preventing evaporation and the cooling of the soil that is the result of evaporation.

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Mulch Paper is beyond the realm of theory today. It has demonstrated its ability in thousands of actual tests. The U.S. Department of Agriculture has issued an illuminating bulletin covering the subject. But the best way to convince yourself is to order a supply of Gator-Hide now and try it on your own land.

Order from your dealer today, or if he is unable to supply you, order direct, mentioning your regular dealer's name.

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"The Miracle of Mulch Paper" tells the history of Mulch Paper—its use, benefits and possibilities.

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A New England Vacation

(Continued from Page 1)

amid the mountains that they discovered and within sight of the broad, gleaming river up which they once sailed the Half Moon. It is true that Hawthorne has made a very wonderful Parable of "The Great Stone Face" but after all, the Old Man of the Mountains is not half as human and likable as the genial, philosophical, hen-pecked ne'er-do-well, Rip Van Winkle.

Our own Catskills are in truth a pleasant friendly mountain group, threaded by fertile valleys and with good, even if rocky, pastures running far up the steep slopes. The White Mountains are utterly different, being made up of almost naked masses of granite with only the scantiest of soil covering. With the exception of certain summits in North Carolina they are the highest mountains east of the Rockies.

Mount Marcy in the Adirondacks is a little more than a mile high but Mount Washington goes full one thousand feet above that. In a word the White Mountains are like the Adirondacks only more so. We were there on a particularly glorious day in early October. In the valley it was bright, sunny and pleasantly warm but around the highest summits were clinging wreaths of gray mist and when it would be swept away for a time they stood out white with snow. Their long winter had already begun.

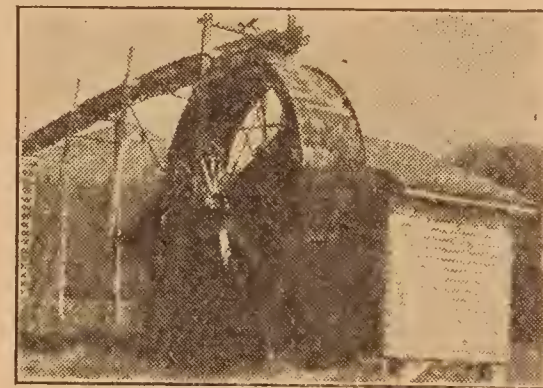
Of course we drove through Franconia Notch to see the Old Man of the Mountains. I confess that I was not disappointed. Rather it exceeded my expectations. Standing at the right spot beside Profile Lake and looking up at an angle of perhaps 45 degrees it needed no imagination to see the profile of a rugged, bearded old man outlined against the sky. The great beetling promontory of granite carved by the frosts and suns of endless eons forms one of those "freaks of nature" which men have long wondered at and which forms a fitting inspiration for Hawthorne's tale. Men who live in mountain regions have always delighted in naming them for certain fancied resemblances. Further down this same Notch is the "Indian Head." I have had pointed out to me the "Sleeping Lion" lying among the hills at the head of Otsego Lake and right here in Schoharie County we have "Vroman's Nose" but I suppose that the "Great Stone Face" of New Hampshire remains—in this country at least—the most famous example of Nature's sculpturing.

We made a leisurely detour of about fifty miles before we came back again to the Boston-Portland road. This trail runs for miles in plain sight of the Presidential Range and then through the Crawford Notch down into the lowlands. We felt that (except for the Face) the Franconia was much less impressive than the Crawford Notch but we met some people who declared that the Dixville Notch (further north and close to the Canadian line) was much the finest of the three. This whole region has been a play ground and resort country for a great many years. There are hundreds of stopping places ranging from modest homes to the most palatial hostleries—two or three of which are world famous and of almost unbelievable size.

A long time ago a cog-wheel railroad was constructed to the summit of Mount Washington and recently an automobile road has been opened. We were told that it was eight miles up and so steep that a car should go in low gear in both directions. The automobile toll is several dollars and we were warned that October is no fit month to go up into these polar regions. Last June in order to open the

road it had been necessary to blast out 15 feet of ice and already in October there had been deep snow drifts and fierce storms so we took a look and passed on.

The narrow defile of the Crawford Notch carries a brawling stream, the automobile road and a steam railroad of unbelievably steep grades, while the surrounding mountains made up largely of naked granite are what I suppose would be called Alpine in character. A little farther down we ran into the New Hampshire State Forest and for long miles drove through leafy tunnels luminous with a strange radiance of scarlet and gold. The brilliant sunshine filtered through the screen of blazing autumnal foliage and the lighting effect suggested not a woodland road but rather a strange, fantastic, many-colored fairy land.



The natural power possibilities of New England have been largely responsible for its industrial development. Here we have a small overshot water-wheel which operates a private electric lighting system.

Running down toward Portland we left the mountains—a mass against the western horizon and came to a region of low but still rugged hills with stretches of pleasant valley land between. It was our first glimpse of Maine. This is traditionally the state of clipper built sailing ships, tall pine trees and tall men. I have read the statement that in the Civil War the Maine regiments were on the average distinctly taller and broader than the men from other states. Also the state shares along with the rest of New England the reputation of having contributed more than its fair share of the outstanding leaders of America. There must be a good many readers of the A. A. who will remember Dr. W. H. Jordan, for many years Director of our New York State Agricultural Experiment Station at Geneva. He is a "Maineiac" who is neither very tall or broad but who exemplifies the finest virtues of that sterling Down-East Yankee stock.

Right here will be a good place for me to mention the one outstanding feature of the farmsteads of northern New England. It is the joining together of all the farm buildings, including the house, into one single unit. First comes the house and behind that the summer kitchen and the wood house to which is joined the horse barn and the cow barn and so on to the farthest outbuilding. The plan has a good many features to commend it. It grew up to meet the conditions of a region of deep snow and long cold winters. Certainly the arrangement makes for efficiency. The greatest objection that a fire once started means a veritable calamity because it sweeps away every thing. On the whole I admire the Yankee farmer who has solved the problem of doing all his chores without going out doors or putting on his felt boots. In the north eastern corner of our state you find occasional examples of this type of farm architecture. In Vermont it is very common but in Maine it may be called almost universal—at least on the larger and more pretentious farms.

There is another fine feature of this plan. The Yankee farmer has on the whole rather precise ideas of how a farmstead ought to look. More than men in other states he believes in neatness and the use of paint. Because his barn is nothing more than a rear extension of his house he must as a matter of course paint it and of the same color. Moreover, one can hardly tolerate a manure pile under the living room window so if he has any thing of the kind he at least manages to keep it out of sight. In a word he brings the standards of the barn up to the house. Emphatically he does not allow the house to slip down to the level of the

(Continued on Opposite Page)

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barn. I do not know that a New York City milk inspector would give cordial approval to the general idea but it exactly suits a Down-East Yankee and I believe he could make out a most excellent case in its defense.

We found western Maine to be a land of rocky hills and pleasant valleys with some especially attractive farmsteads and characterized by a multitude of lakes both great and small. The lakes of central New York are almost without exception long, narrow and deep with very regular outlines and almost without islands, but these Maine lakes sprawl all over the map in every conceivable fantastic shape and with numberless islands.

The October dusk was dropping down when we crossed the bridge to the peninsula on which is built the fine old New England seaport of Portland. It is the chief city of the state with a splendid harbor and a population of seventy thousand. It is also the birthplace or home of many famous men. Longfellow was born here. O yes—I know it is the fashion of ultra intellectual modern critics to pour contempt on him as related to the mid-Victorians—whatever that may mean. I suppose it means that he is never either pessimistic or blasphemous or obscene. It remains however that he is still the best known and best beloved of American poets and I opine that generations of school boys yet unborn will declaim the Psalm of Life and the Ride of Paul Revere and that by household firesides Hiawatha and Evangeline will be read long after the author of Elmer Gantry and his ilk have crept into unremembered graves.

I suppose most of us visualize Maine as a state with an iron bound sea coast and rugged lands and an unkindly winter climate—not forgetting that she has one county the fame of whose potatoes has run half way around the world.

But in any case, the state was settled only three—perhaps only two—years after Massachusetts. As early as 1623 the first colonists came to Saco and within a half century the coast was pretty well dotted with towns. Occupying a region with many excellent harbors and with a mainland unfavorable for the rapid extension of agriculture the men of Maine felt almost from the beginning that their destiny and their fortune lay on the sea. So it was that even in Colonial days Maine built vessels which carried the flag to the seven seas and the Yankee sea-captain was a familiar figure in every place in the world where men go down to the sea in ships.

If You Can Use a Ten Dollar Bill, Read About This Contest

COULD any of our readers use a ten dollar bill? Don't crowd! Just be patient and we will explain how one reader can easily win \$10.00, another \$5.00 and ten others, \$1.00 each.

We have often claimed that our readers keep their copies of American Agriculturist for reference, and now we are going to see whether we are right or wrong. Many readers have written us that they find a lot of valuable information in the advertisements which appear in American Agriculturist. Granting that this is true, they should keep back issues.

We are printing on this page a number of slogans and descriptive sentences taken from advertisements which appeared in American Agriculturist during the month of March. In order to make it interesting, we are giving \$10.00 to the reader who is able to find the largest number of advertisements in which the slogans occurred. A slogan is a short, catchy phrase, that is recognized by the public as applying to a particular product. For example, "It Floats," reminds everyone of Ivory soap, and "For Economical Transportation" makes us think of Chevrolet Automobiles.

The Contest Rules

(1) Write on one side of the paper only. In sending answers, give, first, the slogan; second, the name of the

advertiser, third, the page and issue of American Agriculturist on which you found the ad.

(2) Every person who enters the contest will be expected to send with the list of advertisers, a letter containing not more than two hundred words, on the subject, "Why I read American Agriculturist Advertisements."

(3) The following prizes will be paid by American Agriculturist: Ten dollars will be given to the reader sending in the most complete list of advertisers using the slogans printed, and the best letter on "Why I Read American Agriculturist Advertisements", five dollars for the second best, and one dollar each for the next ten.

(4) All letters to be entered in the contest must reach the office not later than April 20.

Come on, boys and girls, old and young; dig out the March issues of

American Agriculturist, and enter our latest contest!

Here Are the Slogans

To be sure of profit making feed, look for a ——— dealer.

With ——— fertilizers, crops, and profits increase together.

Test it yourself.

Double mixed, triple tested.

Everything for the farm.

We pay the postage.

Turn idle acres into profit.

The Strawberry Man.

——— pedigreed seeds.

Double the dollars at harvest.

Look for this sign.

Point for point—a ——— offers you more.

Standardize on ——— brand.

Just dip and plant.

Plan now for summer profit.

Certified true-to-name fruit trees.

Prepare now for a dry summer.

The miracle of ———.

There is a ——— store near you. Make your grain fields pay more this year. You can clear more land at the same cost.

Sealed for your protection. The greatest name in rubber. It milks the cows clean. For trouble-free udders and teats. Look for the tag in the window. The ——— dealer will save you money, and serve you better.

For economical transportation. Milks like the calf. Sweetening for two million farms. ——— paints cover the earth. ——— pays on all crops. How will they milk the last four months?

Accept the opportunity ——— offers. Ask the man who owns one. Metal tubes replace rubber. Don't let them die. Good fencing saves many times its cost. The name ——— on every hook. More dollars per cow per year.

The only LOW-PRICED CAR with all these costly car FEATURES

WHIPPET
4-COACH



\$535

World's Lowest Priced
Four-Door Sedan

\$595

Coupe \$535; Roadster \$485; Touring \$475;
Commercial Chassis \$365.

WHIPPET 6 with 7-Bearing Crankshaft

Coach \$695; Coupe \$695; Coupe (with rumble seat) \$725; Sedan \$760; Sport De Luxe Roadster \$850 (with rumble seat and extras). All Willys-Overland prices f. o. b. Toledo, Ohio, and specifications subject to change without notice.

1 Silent timing chain—For quiet, smooth operation and long life, an adjustable silent timing chain drives the camshaft and auxiliary shaft of the new Superior Whippet.

2 Full force-feed lubrication—The heavy, rugged crankshaft of the new Superior Whippet is drilled for full force-feed lubrication.

3 Aluminum alloy invar steel strut pistons—This design prevents piston distortion and assures faster pick-up, greater speed and power, smoother operation and longer life.

4 Big four-wheel brakes—Mechanical type brakes, positive and quick-acting, afford maximum driving safety.

5 Snubbers and oversize balloon tires—These features, together with increased wheelbase and longer springs both front and rear, give exceptional riding comfort.

6 Mono-control windshield—The windshield can be quickly and easily wound open or shut with one hand, even while the car is running.

7 "Finger-Tip Control"—A single button, in the center of the steering wheel, starts the motor, operates the lights and sounds the horn. Aside from its great convenience, this fundamental improvement is also an important safety factor, as you can keep your foot always on the brake when starting or re-starting on a hill.

**NEW
SUPERIOR Whippet**
WILLYS-OVERLAND, INC., Toledo, Ohio

Conspicuously Successful POSTAL LIFE

Opens the Door of 1929



with

Increased Insurance in Force;
Increased Assets;
Increased Reserves;
Increased Income;
Increased Surplus;
Insurance in Force Totals
\$56,000,000.
Capital, Reserves and Surplus
Over \$20,000,000.

Policy Claims

The promptness of the Company in making payments on policies evokes pleasant commendation from all sections of the country. Operating by the direct method it is enabled to avoid various

intermediary steps inherent in business as usually transacted. This method simplifies the conduct of its business, saves time and eliminates every possible source of dissatisfaction.

Conditions Contributing to Low Cost and giving to the Company increasing popularity

- The Decidedly Low Lapse Rate, showing that policyholders prize their policies and keep them in force;
- The Distinctly Low Death Rate, showing that policyholders are well selected and have been benefited by the Company's Health Bureau service;
- The Payments Under The $9\frac{1}{2}\%$ Guaranteed Dividend, showing how policyholders, acting for themselves in applying for policies, save expense.

Is Your Life Insurance Quota Filled?

Nowhere can the average man invest his money so advantageously as in standard life insurance *issued by this Company.*

Deal with this most modern Company employing the direct method; avail yourself of its economy. A knowledge of its benefits is now very widely spread

gaining for it a nationwide membership.

Write for information; get the glow of a personal satisfaction in acting for yourself and saving money.

Simply use the Coupon, or write and say, "Mail me information as to the Policy mentioned in AMERICAN AGRICULTURIST of April 6th" Be sure to give

1. Your Full Name;
2. Your Occupation;
3. Exact Date of Your Birth.

All standard forms of Life and Endowment insurance are issued by this Company and information as to any of them will be gladly furnished.

When your inquiry reaches us no agent will be sent to visit you. We desire to co-operate with you directly, and have you think out with us your problems, from documentary matter submitted. Because we employ no agents the resultant commission savings go to you. It is the only non-agency life insurance company in America.

POSTAL LIFE INSURANCE CO.

Wm. R. Malone, President
511 Fifth Avenue, Corner 43rd St., New York



Amer. Ag. 4-6-29
Postal Life Insurance Company
511 Fifth Ave., New York
Without obligating me, please send full insurance particulars for my age.

Name.....
Address.....
Occupation.....
Exact date of birth.....
Amount.....



With the A. A. Farm Mechanic



How to Prepare Surfaces for Painting

New unpainted wood usually needs very little preparation. Dusting off loose dirt, removing mortar, plaster, or cement with a scraper or sandpaper, and filling nail holes and loose joints with putty after the priming coat is dry may be enough. If the wood is resinous or waxy or contains knots and coarse grain figures full of rosin or pitch, however, special treatment is necessary.

Charring with a blowtorch will kill the pitch in knots, but the usual method is to apply a thin coat of orange shellac to all pitch places before the surface is painted. Resinous wood like yellow pine should be brushed over with turpentine just before it is painted; cypress should be brushed over with solvent naphtha or benzol.

A painted surface that is simply chalky needs only to be dusted. All paint that has begun to scale or peel must be removed by scraping or brushing with a wire brush; more adherent paint that is checked may be softened with a blow-torch and then scraped off. All loose putty should be removed from nail holes, joints, and cracks, and fresh putty put in after the first coat of paint has dried.

Surfaces that have been varnished or enameled should be rubbed with fine sandpaper, curled horsehair, or fine steel wool until the gloss is removed. If such surfaces are marred, prepared varnish remover should be used, smoothing the wood after it is dry with steel wool or sandpaper. Painted or varnished woodwork in kitchens and bathrooms should be washed with soap and water and then thoroughly sponged with clean water. Floors that have been treated with some mineral oils can not be painted or varnished.

Shingles or other wooden surfaces that have been treated with creosote or creosote stains can not be painted until they have weathered for several years.

Wood that has been whitewashed can not be painted until the whitewash has been removed as completely as possible.

Surfaces that have been coated with tar or other bituminous materials should be coated with shellac varnish before they are painted with oil paints. If soft, such surfaces should be coated with sand before they are painted or whitewashed.—U. S. Department of Agriculture Farmers' Bulletin No. 1452.

New World's Record Set for Non-Stop Tractor Run

WITH the only mechanical difficulty experienced during the course of the trial the loosening of a valve push rod, which was adjusted without stopping, the world's record non-stop tractor run—seventeen days and nights of continuous operation—recently was established in California by engineers of the state agricultural farm.

The test was held on a large ranch near Rio Vista, near Davis, the site of the state farm. The tractor was put at the task of disking a field from which a crop of sugar beets had just been harvested.

The first time over the field was very rough, some clods being so large as to scrape on the bottom of the tractor crankcase. The only stops which were made were those for refueling and servicing, about fifteen minutes four times a day serving this purpose. Even then, the engine was not stopped.

The tractor was equipped with thermometers by which the temperature in the radiator, fuel tank, crankcase and transmission were read at regular intervals. The machine also was equipped with special recording mechanisms to determine the distance traveled and the amount of the load pulled.

Immediately after the close of the

official run the tractor was put on a maximum power test to determine the power the engine could develop after its gruelling run without readjustment. Calculations revealed that this was twenty-one horsepower and that its maximum pull was 3000 pounds.

In its 408 hours of operation, only twenty-three of which were required for servicing, the tractor covered 1330 miles and disked 1280 acres. The fuel consumption was 1151½ gallons and the oil consumption 117½ quarts.

A complete report is to be published by the engineers showing the amount and location of engine wear and other pertinent facts relative to the run.—Kenneth Anderson.

Blasting Caps Are Dangerous

FARMERS, contractors and builders, and all others who use blasting caps in connection with explosives, are asked to take special care to see that no blasting caps are left about where children can find them. During the past year approximately 500 children were maimed or crippled as a result of explosions of blasting caps which they picked up where they had been left by careless workmen. In some cases children were killed.

Statistics gathered on accidents of this nature show that about eighty per cent of them occur in rural or semi-rural districts. Blasting caps seem to have a fascination for many boys, who try to explode them by hammering, picking or throwing them into bonfires. Numbers of cases at law have resulted from the injuries sustained by boys. Parents have sued and obtained damages against companies and individuals who have been responsible for leaving blasting caps carelessly about. But above all, this carelessness takes a serious toll of the children of the country, because it results in loss of eyes, hands limbs and other injuries which unfit them for useful occupations in later life.

A Visit With the Editor

(Continued from Page 5)

sonally, I do not care for a too level country where the flat land stretches on and on monotonously to the distant horizon as it does in many parts of the West, but Minnesota and Wisconsin, at least those parts which I have seen, are rolling country with many small lakes and pretty little streams and rivers. One of the most beautiful little waterfalls in one of these streams is now included in the city of Minneapolis, and was made famous by Longfellow in his "Song of Hiawatha". These are the Falls of Minnehaha, about which the poet wrote:

In the land of the Dakotahs,
Where the Falls of Minnehaha
Flash and gleam among the oak trees,
Laugh and leap into the valley.
There the ancient Arrow-maker
Made his arrow-heads of sandstone,
With him dwelt his dark-eyed daughter,
Wayward as the Minnehaha,
With her moods of shade and sunshine,
Eyes that smiled and frowned alternately,
Feet as rapid as the river,
Tresses flowing like the water,
And as musical a laughter;
And he named her from the river,
From the waterfall he named her,
Minnehaha, Laughing Water.
Hear the rustling of her garments
From behind the waving curtain,
As one sees the Minnehaha
Gleaming, glancing through the branches,
As one hears the Laughing Water,
From behind its screen of branches?



With the A. A. Poultry Farmer

Brooding Chicks

BROODERS are a good deal like incubators. There are plenty of them on the market, using almost every conceivable kind of fuel. Here, again, it is largely a case of a man living up to the instructions that come with the ordinary brooder equipment. There are, however, certain outside conditions which have a great bearing on the operation of such equipment.



L. H. Hiscok

For instance, one would hardly think of installing the modern electric brooder in a colony house that is at the mercy of all kinds of weather; the cost

of the current under practically perpetual operation and its probable inability to give sufficient heat would be the deciding factors against its use. Such conditions demand heat, and the heater that is used should be of such a nature that it will have plenty of reserve to meet any emergency. The best way to test your equipment, especially if it is new, is to set it up and run it for a few days before you put chicks under it. A great many persons ask me if oil brooders are as good as coal. I have used both at various times and found them very satisfactory. During cold weather, especially where brooder houses are subject to cold winds, coal is more economical and has somewhat more reserve from the standpoint of heat.

Small Details Are Important

The trouble with young chicks today is not so much with the brooding equipment as it is in the actual care of the young birds themselves. Poor feeding, chilling, overheating, crowding, contamination, and last, unavoidable disease, cause many losses. The great stress, today, is all on disease, and I do not want to minimize the seriousness of such a condition, but right here in the immediate vicinity I have seen so many times the little things that make or break a bunch of chicks, and it is about some of these things that I want to write now.

First of all, what about feed? And right here is where I will get in wrong with certain persons, but if you want my honest opinion and advice, start your chicks on the best commercial chicks starters that any given company has to recommend. The ordinary home-mixed ration is high in fiber content, poor in the mix, and probably too coarse for good assimilation.

Many Chicks Killed By Kindness

Second, do not feed your chicks until they are at least around sixty hours old, and here again I am in disagreement with many persons who recommend otherwise, but on the fifty thousand chicks that went away from my hatchery last year, the chicks that almost invariably did the best were those that received no feed until they were around that age. On the other hand, while chicks unquestionably can go longer without food—I recall one lot that received no food for eighty-four hours without ill effect, yet seventy hours ought to be the outside limit.

This brings us to the brooder house itself plus the equipment for heating. What is the right temperature? A thermometer is the guide of the actual heat, but the chicks themselves are the best indication of successful brooding. If they are jammed against the stove they are cold; if they are out running around, eating and drinking, dodging in under the hover now and then for a moment or two, there is no reason to worry. If they are away from the stove, out against the walls of the house and never go near or get under the hover, your temperature is too

high. After dark, take a trip out to the house; if your brooder is just about O. K. in operation you will find them just about under the outer edge of the hover. If they are too warm they may be out a little beyond the actual hover, but if they are cold they will be actually under it. The only thing that may actually disturb this balance is when the house is exposed and wind or drafts strike the floor. Then they will generally all be found on the warm side. For early spring and for exposed positions I really think it is a mistake not to bank the house a little so that the wind will not come up through the floor.

A great many people run a wire fence around their brooders during the first two or three days, confining the chicks to within three or four feet of the outside of the hover. Where houses

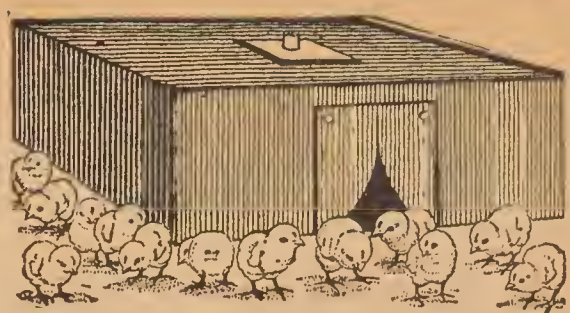
are large this has an advantage in actually training chicks to learn to use the heat of the stove rather than straying away to colder parts of the house where they will get chilled. Whether you actually use this idea or not, it is a good idea to round off the corners of your house to prevent chicks from crowding and piling up.

Broiler Marketing Hints

The season of broiler marketing is at hand and it would be well to review some pointers in regard to their marketing:

1. Study the markets at hand to determine which you can best supply advantageously.
2. The markets prefer broilers from 2 to 2½ lbs. in weight that are of good quality, with the keel bone well covered with flesh, and deep-meated.
3. Live poultry coops should be strong, light, high enough for the birds to stand and easy to handle. A coop 3 ft. long, 2 ft. wide and 1 ft. deep will accommodate from twelve to twenty broilers comfortably. Overcrowding should always be avoided.
4. Plan to have the birds arrive on

(Continued on Page 22)



Brooder \$4.80 Complete

In a few minutes you can make a better brooder than you can buy. No tools needed but a pair of ordinary shears. The materials, including Heater, will cost you only \$4.80. Broods 40 to 100 chicks.

I want you to try my brooder and will send you plans for making it, together with a Putnam Brooder Heater, for \$4.75. All postpaid. The Putnam Brooder Heater holds one quart of oil and

Burns 10 Days Without Attention

Try the brooder out and if you don't say it's the best brooder you ever used, return the Heater in 30 days and get your money back. When ordering, please give your dealer's name. Send for my free Booklet "Poultry Helps."

I. PUTNAM Route 427-K ELMIRA, N. Y.

AVENARIUS
TRADE MARK
CARBOLINEUM
The Standard Insecticide for 53 Years

applied ONCE A YEAR
in Poultry houses
**Kills Mites
Blue Bugs**

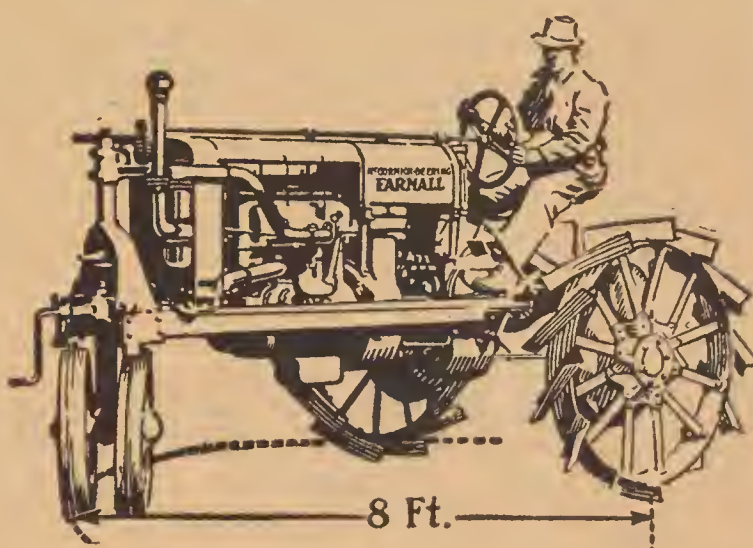
Write for Circular OR MONEY REFUNDED
CARBOLINEUM WOOD PRESERVING CO.
MILWAUKEE, WIS Dept. 26

The Farmall Story is well told by these men

They farm with Farmalls.
Their letters make interesting reading, too.

... The FARMALL

plants up to 60 acres in an 8-hour day, with 4-row planter. In cultivating, with 4-row outfit as shown here, it cleans 35 to 50 acres a day, and in later cultivations 50 to 60 acres a day. Two-row work in proportion. Handles all haying jobs, cutting a 14-foot swath with 7-foot Farmall-powered mower and 7-foot trailer mower attached; also rakes, loaders, etc. Plows two furrows, pulls all seed-bed implements, and operates grain and corn harvesting machines.



"JUST FINISHED cultivating 75 acres of corn. My Farmall will work in crooked rows where a snake would get lost, and it does a fine job of cultivating."

ROBERT SOWLE
Mona, Mont.

"I HAD 235 acres of corn which I cared for alone, besides milking 8 cows. If I hadn't had a Farmall I would have had to use three 4-horse teams and two hired men. I think horse farming is a thing of the past. Wouldn't sell my Farmall at any price unless I could get another. It has saved me time and labor and made me money."

REGGIE GARRETT
Amherst, S. D.

"I WILL NEVER cultivate corn with horses again when the Farmall can be had. The Farmall is the best all-purpose tractor that can be bought. Give me McCormick-Deering machines every time. They are the only kind I will recommend to my friends and neighbors."

C. ELMER WRIGHT
Springhope, Pa.

"I HAVE GIVEN the Farmall a good trial in plowing. I surely think the world of it and don't want to farm without the Farmall."

SAMUEL H. FROELICH
Princeton, Minn.

"I USE a Farmall but I have not as much as a singletree to hitch horses onto. Have no desire to own horses."

ADOLPH ANDERSON
Montevideo, Minn.

"WE FARM 200 acres with our Farmall—105 of corn and 75 of oats. Put the oats in in 2 days, had a tandem disk and 2-section harrows on the Farmall. With a 2-row cultivator we cultivated 20 to 22 acres a day the first two cultivations and 36 to 35 on high speed the last 2 cultivations. It is the best corn plow I ever handled."

CLAUDE WESSLING
Paton, Iowa

"I HAVE two little boys (13 and 11 years) and they do anything I can do with my Farmall. They run it all the time."

BOB TAYLOR, Savannah, Tenn.

"I CONSIDER my Farmall the most wonderful tractor made. I cultivate, mow hay, plow, disk, run our binder, cut wood, etc. I am astonished at the amount and kind of work it will do. The Farmall is to my mind the greatest piece of machinery ever brought onto this or any other farm. I cannot praise the Farmall too highly, and really love to use it."

F. P. LeCOMPTE
Urbana, Va.

"THE FARMALL is the greatest machine developed for farmers since the reaper."

H. A. FINCH, JR.
McKinney, Tex.

"I AM sure I am safe in saying it is at least one-third cheaper to farm with a Farmall than with horses."

LESLIE G. ARNOLD
Arcadia, Neb.

"THE ONLY job for which I find the tractor not practical is gathering the eggs."

ORVIS SCHROYER
Maple Park, Ill.



Write for the FARMALL catalog.
See the dealer for a demonstration.

INTERNATIONAL HARVESTER COMPANY

606 So. Michigan Ave. of America Chicago, Illinois
(Incorporated)

BABY

CHICKS

PINE TREE CHICKS

DEPENDABLE FOR 37 YEARS—REDUCED APRIL PRICES
Let the Reliable Pine Tree Hatchery supply you with dependable April chicks. Prices sharply reduced. All our S.C. White Leghorn Chicks are from A. P. A. Certified matings.

SHIPMENT THIS WEEK AND WEEK OF APRIL 15TH

White Leghorns, A. P. A. Certified.....	25	50	100	500	1000
R. I. Reds and Bd. Plymouth Rocks.....	\$3.75	\$7.00	\$13.50	\$65.00	\$125.00
Wh. Wyandottes.....	4.75	8.75	16.00	77.50	155.00
White Rocks.....	5.50	10.50	20.00	97.50	190.00
Br. Leg. and Anconas.....	5.25	10.00	19.00	95.00	185.00
Jersey Black Giants.....	4.75	8.75	16.00	77.50	155.00
Mixed Chicks.....	7.75	14.75	28.00	137.50	275.00
	3.50	6.75	11.00	55.00	110.00

SPECIAL MATINGS 4c a chick higher. From breeders of outstanding quality. We prepay postage and guarantee safe arrival. No shipments C. O. D. S. C. White Leghorn Pullets, 10 weeks old, May delivery, \$1 each, express collect. From A. P. A. Certified matings.

PINE TREE HATCHERY Box 55 Stockton, New Jersey
Jos. D. Wilson, Founder and Owner Since 1892

THE OLDEST HATCHERY IN THE U.S.

EIGENRAUCH FARMS

RED BANK,

NEW JERSEY

18TH YEAR

breeding White Leghorns for size, vigor and heavy production of large White EGGS. 8,000 LAYERS are housed on our farm.

Our Chick Guarantee

100% satisfactory arrival on the exact date we promise shipment. Every chick sold by us is hatched from eggs laid by breeders on our own farm.

Write for Free Folder and Prices on Pullets and Chicks

EIGENRAUCH FARMS Dept. G, Red Bank, N. J.

WOLF SELECTED CHICKS

BABY CHICKS C. O. D.

Don't miss this chance to get a start with Wolf's extra quality pure-bred high producing stock. Every breeder produced on free range and health of chicks is safeguarded. Get Our Catalog and Price List

Tells about prizes won by our birds. Read about Mary Hencel who made over \$1000 profit in one year with birds of our breeding. All leading breeds—prices very attractive. Write today. Chicks shipped C.O.D. Toe picking stopped instantly with Wolf's "No-Pick." Order box today. \$1.00 postpaid. Satisfaction guaranteed or money refunded.

WOLF HATCHING & BREEDING COMPANY, BOX 1, GIBSONBURG, OHIO

FOR YEARS WE HAVE HATCHED AND SOLD SATISFACTORY CHICKS

POSTPAID PRICES—AMERICA'S FAMOUS PRIZE WINNING STRAINS—

100% Live Delivery Guaranteed	25	50	100	500	1000
S.C. Wh., Br., Bf., Blk. Leghorns; Sheppard's Anconas.....	\$4.00	\$7.00	\$13.00	\$60.00	\$115.00
Bar., Wh. & Bf. Rocks; Bf. Orp.; Reds; Blk. Minorcas.....	4.50	8.00	15.00	70.00	135.00
Barron Wh. Leghorns; Wh. Wyandottes; Bf. Minorcas.....	4.75	8.50	16.00	75.00	145.00
Ex. Qual. Wh. Wyand.; Reds; Rocks; Wyckoff W. Leg.; Wh. Min.....	5.00	9.50	18.00	85.00	160.00
Heavy Mixed 50, \$6; 100 \$11.50; 500 \$55; 1000 \$105. Light Mixed 50 \$5; 100 \$9; 500 \$42; 1000 \$85. J. Blk. Giants 100 \$20. Wh. Pekin Ducklings 28c each. Not Postpaid to Canada.					

We have bred the Highest Quality for 21 years. Matings culled and selected by Experts for Heavy Winter Laying. Careful, personal service on all orders. We ship C.O.D. Bank References. THE NEW WASHINGTON HATCHERY CO. Box R, NEW WASHINGTON, OHIO



Catalog FREE. Member I.B.C.A.



Here: Nearly Everyone Raises Full Blooded "AMERICAN" Quality Chicks

Write now for our new low prices. Your opportunity to get our special flock mating chicks at utility prices. Chicks shipped C. O. D. Catalogue and prices on request. 100% live arrival guaranteed. 15 breeds. Write now.

American Chickeries, Box 214, Grampian, Pa.

BABY CHIX

Cash or C. O. D.	25	50	100	500	1000
Barred Rocks.....	\$4.00	\$7.50	\$14	\$67.50	\$130
Tancred Strain S.C.W. Leghorns.....	3.50	6.50	12	57.50	110
Leavy Mixed.....			11	52.50	
Light Mixed.....			10	47.50	

These chicks are from free range and heavy egg producing flock. 100% live delivery guaranteed to your door. Write for Special Mating prices.

FRANK NACE, Cocolamus, Pa., Box No. 120

CLEAR SPRING QUALITY CHICKS

S.C. White Leghorns.....	per 100	500	1000
Barron and Wyckoff Leghorns.....	\$11.00	\$2.50	\$100.00
Barred Rocks and R.I. Reds.....	12.00	57.50	110.00
	14.00	67.50	130.00
Light Mixed, \$9.00 per 100; Heavy Mixed, \$12.00 per 100, for March and April. 100% live delivery. Postpaid. New circular free giving full details of all breeds.			

CLEAR SPRING HATCHERY, McAlisterville, Pa. Box 49

SINGLE COMB Vt. Certified: Tested free from B.W.D. Males from 200-300 egg hens. Pullets: Started Chicks: 3000 Baby Chicks weekly. Circular. ASCUTNEY FARMS, A10, HARTLAND, VT.



Breed equine and make money. Sold by millions at higher prices than chickens. Write at once for two free books telling how to do it. One is 48 pages printed in colors, other 32 pages. Ask for Books 3 and 4. You will be surprised. Plymouth Rock Squab Company, 334 H Street, Melrose Highlands, Massachusetts. Established 28 years. Reference, any bank.

Chick Bargain

FREE IMMEDIATE DELIVERY
of SHO-ME CHICKS if desired. Direct from Missouri's Great \$100,000 Hatchery. World's Lowest Prices for quality offered—low as 7c each. \$1.00 per 100 books order. Guaranteed, vigorous chicks from big-type, heavy weight flocks. Same strains that win at famous egg laying contests.

100% alive, prepaid. Poultry course, 10 lessons, filled with secrets of poultry raising. FREE to customers. Write now for FREE CATALOG & BARGAIN PRICES. SMITH BROS. HATCHERIES, Box 410, MEXICO, MO.

BABY CHICKS

From Heavy Laying Free Range Flocks

S.C.W. & Br. Leghorns.....	\$3.50	\$6.00	\$12	\$57.50	\$110
S.C.B. and Wh. Rocks.....	4.00	7.50	14	67.50	130
Buff Orpingtons & Reds.....	4.00	7.50	14	67.50	130
White Wyandottes.....	4.00	7.50	14	67.50	130
Assorted Chicks.....	3.00	5.00	9	42.50	80

100% prepaid safe delivery guaranteed. Order from this ad. or write for circular Box 161 J. N. Nace Poultry Farm RICHFIELD, Pa.

WYCKOFF & BARRON CHICKS FOR MAY

United strain Leghorns.....	100	500	1000
Wyckoff or Barron Leghorns.....	\$8.00	\$37.50	\$70.00
Barred Rocks.....	9.00	42.50	80.00
Mixed Chicks.....	10.00	47.50	90.00
	7.00	35.00	70.00

L. E. STRAWSER, BOX 30, McALISTERVILLE, PA.

When Writing Advertisers, Be Sure to Mention American Agriculturist

(Continued from Page 21)

the market early in the morning so that an early weighing will be assured, and preventing some loss from shrinkage.

5. Never have birds arrive on the market on Saturday or they may be held over until Monday before being weighed.

6. Before shipping, feed the birds well on some well soaked grain and give them plenty of water or skimmed milk to drink. If the broilers will be on the road longer than four hours, fasten a large tomato can filled with well-soaked grain inside the coop.

7. Do not put a can of water alone in the coop, and do not throw feed on the shipping crate floor. They will both be wasted.

8. One ounce of grain is allowed in the crops of broilers on arrival in the New York markets.

9. Ship only healthy stock. It is the cheapest in the end as you may pay transportation on birds that will die en route, or be taken out by health officers on the markets.—Douglas Roy.

Hens Have Lumps Under Skin

I would like to ask a question concerning our hens. In dressing several for canning we discovered three that had small pumpkin seed shaped, hard particles lying in the tissues directly under the skin. They were uniform in shape and covered with a very thin transparent membrane. They were mostly in clusters. They seemed calcareous in nature for after cooking they would crumble between your thumb and fore finger. These hens were very fat but not laying and apparently would not lay for some time. Is this a disease? If so is it contagious? Would this condition make the meat unfit for eating?—C. H. S., New York.

THE condition which you describe is very unusual and apparently is not an infectious disease. The only authority that seems to describe a condition of this sort, which I have been able to find, is Professor Kaupp. He says that these bodies may form in most any breed, but birds of a thin skin are apt to be more susceptible. They are apparently of no constitutional significance, and all efforts to isolate or reproduce the organism that causes the condition have been unsuccessful. His only suggestion for a possible cause of the condition is that it may be the "calcification of a parasitic invasion."

Under the circumstances, especially in view of no active organism being responsible for the condition, I can see no harm in the use of the meat for eating.—L. H. Hiscock.

It's easier to pick the poor layers out of a good flock, than to select the good layers who may be in a flock with a bad record.



"TIME IS MONEY"

Why Not Save Both?

No need to spend time carpentering when we can supply a Brooder, Colony or Laying House for less than you would pay for the materials alone. Approved designs; select kiln-dried lumber; skilled workmanship. Send for free Catalog showing many types of Poultry and Pigeon Houses, Rabbit Hutches and Dog Kennels.

E. C. YOUNG CO. 97 Depot Street, Randolph, Mass.

FINGER LAKE REGION BABY CHICKS

with an official record. Ask for our Baby Chick Book describing our Pedigreed Cornell Chicks from stock that has laid from 200 to 312 eggs in their pullet year and mated to breeders that have averaged over 200 eggs in their pullet year. Also describes our 144,000 egg hatchery with 22 years' experience in hatching Baby Chicks. Leghorns, Reds, Rocks, Wyandottes, Minorcas, and Giants. The home of better Chicks at lower cost. THE DERORY TAYLOR CO., NEWARK, NEW YORK

White Leghorn Baby Chicks a Specialty

S. C. W. Leghorns.....	Per 50	100	500	1000
Barred Rocks.....	\$6.50	\$12.00	\$57.00	\$110.00
R. I. Reds.....	7.50	14.00	67.50	130.00
Heavy Mixed.....	7.50	14.00	67.50	130.00
Light Mixed.....	6.50	12.00	57.50	110.00
	5.00	9.00	42.00	80.00

Our White Leghorn Cockerels: Sire—from hen that laid 312 eggs per year. Hens—254-290 eggs. Actual 365 day trap nest record. All chicks Postpaid to your door. 100% live delivery guaranteed. Order direct or write for free circular.

PENN HATCHERY, Dalmatia, Penna. Formerly Sunshine Hatchery

HIGH GRADE CHICKS

Immediate and April delivery

White & Brown Leghorns.....	100	500	1000
Bd. Rocks, R. I. Reds, Anconas.....	\$13	\$62.50	\$120
Wh. Rocks, Wh. Wyand., Bl. Minorcas.....	15	72.50	140
Assorted: Light 10c, Heavy 12c; Pekin Ducklings 32c each, \$30 per 100. All chicks for May delivery 1c less. Also special mating blood tested chicks and two and six weeks old chicks. 100% Live delivery guaranteed. Order direct from adv. or write for circular. 10% books order, balance cash or C. O. D.			

TAYLOR'S HATCHERY, BOX 12, LIBERTY, N. Y.

BABY CHICKS

hatched by the best system of incubators from high class bred-to-lay stock. White, Brown, Buff Leghorns, Anconas \$14.00 per 100; Barred, White Rocks, Minorcas, Reds \$16.00 per 100; White Wyandottes, Buff Orpingtons \$17.00 per 100; Giants \$20.00 per 100; Heavy Broilers \$12.00 per 100; Light Broilers \$10.00 per 100; Pekin Ducklings \$30.00 per 100. Add 25c on orders for less than 100. Safe delivery guaranteed by parcel post.

Nunda Poultry Farm, Desk H, Nunda, N. Y. Member of the International Baby Chick Ass'n, and the N. Y. State Co-Operative Chick Producers Ass'n.

Pennsylvania Co-Operative Leghorn Farms

Breeding COCKERELS with RECORDS to 303 EGGS. PURE TANCRED-HOLLYWOOD-BARRON STRAINS. WHITE Leghorns—Brown and Buff Leghorns—QUALITY EXTRAORDINARY—PRICE WAY DOWN—SHIP C. O. D. Get our prices quick.

Pennsylvania Co-Operative Leghorn Farms, Box 314, Grampian, Pa.

BABY CHICKS ORDER DIRECT from this ad. and save time.

Free range bred	25	50	100	500	1000
Wh. & Brown Leghorns.....	\$3.25	\$5.25	\$12.00	\$58.75	\$115
Ancona & Black Leghorns.....	3.25	6.25	12.00	58.75	115
White & Barred Rocks.....	3.75	7.25	14.00	68.75	135
Rhode Island Reds.....	3.75	7.25	14.00	68.75	135
Heavy Mixed Broilers.....	3.25	6.25	12.00	58.75	115
Light Mixed Broilers.....	2.25	4.25	8.00	38.75	75

Full count and quality guaranteed. Catalogue free. For Greater Profit ULSH POULTRY FARM & HATCHERY Hatchery Chicks. Port Trevorton, Penna.

BARRED ROCK CHICKS

A large modern Breeding Farm and Hatchery devoted exclusively to the production of BARRED PLYMOUTH ROCKS. MARVEL POULTRY FARM, GEORGETOWN, DEL.

BABY CHICKS

White Leghorns.....	25	50	100	500
Barred Rocks.....	\$2.75	\$5.25	\$10.00	\$47.50
Rhode Island Reds.....	3.25	6.25	12.00	57.50
Heavy Mixed.....	3.25	6.25	12.00	57.50
Light Mixed.....	2.75	5.25	10.00	47.50
Peking Ducklings.....	2.50	4.75	9.00	42.50
Mixed Ducklings.....	7.50	14.50	28.00	
	6.50	13.00	25.00	

John Shadel Hatchery McAlisterville, Pa. Route 2.

TAKE NOTICE 75,000 CHICKS for APRIL DELIVERY

S. C. Wh. Leghorns.....	25	50	100	500	1000
Rocks or Reds.....	\$3.50	\$6.50	\$12	\$57.50	\$110
Silver Laced Wyandottes.....	4.00	7.50	14	67.50	130
Light-Mixed.....	4.50	8.50	16	75.00	
Heavy Mixed.....	3.00	5.00	9	42.50	80
	3.50	6.50	12	57.50	110

From carefully selected free range flocks. 100% arrival Postpaid. Write for illustrated catalogue.

The Richfield Hatchery, Box 80, Richfield, Pa.

CHICKS

Pure bred. Blood tested free range breeders. Leghorns, Anconas, 12c. Rocks, Reds, 14c. Wyandottes, Orpingtons, Minorcas, 15c. Black Giants, 20c. 100% live delivery. Valuable Chick Manual Free. Seidelton Farms, Washingtonville, Pa.

BABY

CHICKS

5 Lb. Leghorns

The old reliable Heavyweight stock. Produced High Up on Pennsylvania's healthy mountain top. Get your chicks from certified record strains above 300 eggs. R.O.P. Hollywood, Tanager, Barron Matings. Hatch weekly pure white eggs up to 24 ounces per dozen. Beautiful Color Plate Leghorn Catalogue Free.

FARM SERVICE

ROUTE A10 TYRONE, PENNA.

CHERRY HILL CHICKS

S.C.W. Leghorns—Wyckoff Strain.....	100	\$12.00
S.C. Everlay Brown Leghorns.....	100	12.00
Barred Rocks—Wm. Nace's select.....	14.00	
S.C. Rhode Island Reds.....	15.00	
Mixed or Broiler Chicks.....	9.00	

1/2c less in 500 lots. 1c less in 1,000 lots.
25 chicks add 2c, 50 chicks add 1c. Full count.
100% live arrival guaranteed. Parcel Post prepaid.
Bank reference. Order direct from this ad or write for free circular.

CHERRY HILL POULTRY FARM,
WM. NACE, Prop. McALISTERVILLE, PA.

BABY CHICKS

S.C.W. Leghorns.....	25	50	100	500	1000
Bd.Rocks & S.C. Reds.....	3.25	6.50	12	\$57.50	\$110
Heavy Mixed.....	3.25	6.50	12	57.50	110
Light Mixed.....	2.50	4.75	9	42.50	80

A Special Discount on orders placed in advance
Will ship C.O.D.

PINECREST POULTRY FARM & HATCHERY

Herbert Miller, Prop. Box 12 Richfield, Pa.

QUALITY BABY CHICKS Five extra given of one hundred ordered. April hatched chicks. Leghorns, White, Brown, Buff, Black—\$14.00 per 100; Barred Rocks, Reds, Minorcas, Anconas, \$16.00 per 100; White Rocks, Wyandottes, Buff Orpingtons, \$18.00 per 100. March, \$2 more; May, \$2 less; June \$4 less. Custom hatching. Eggs for hatching. Odds and Ends, Left Overs, Mixed broiler chicks, Light, 10c; Light and Heavy, 12c; All Heavy, 14c; Better order now. Will send C.O.D. Thousands hatching daily all year around. Active, husky, chicks hatched from healthy free range breeders that will live, grow and lay. Prompt shipments. Postage prepaid. Live delivery. Send for folder. **SCHOENBORN'S HATCHERY**, 335 Main St., Hackensack, N. J. Phone 1603 or 1604.

STOP! LOOK! LISTEN!

Cash or C.O.D.	25	50	100	500	1000
Wh. Wyandottes.....	\$4.50	\$8.50	\$16.00	\$77.50	\$150
Rocks or Reds.....	4.00	7.50	14.00	67.50	130
Wh. Leghorns.....	3.50	6.50	12.00	57.50	110
Heavy Mixed.....	3.50	6.50	12.00	57.50	110
Light Mixed.....	2.75	5.00	9.00	42.00	80

From carefully selected free-range flocks. 100% arrival. Postpaid. Valuable illustrated 96-page booklet FREE. Telling all about poultry.

The Commercial Hatchery,
Box 75-A (The dependable plant) Richfield, Penna.

Green Forest Husky Chicks

English and Tanager Strain	25	50	100
Ship C. O. D.	25	50	100
S. C. White Leghorns.....	\$3.25	\$6.25	\$12
S. C. Barred Plymouth Rocks.....	3.75	7.25	14
Mixed Chicks.....	2.75	5.25	10

Leghorns are out of hens with trapnest records of 201-300 eggs. We pay parcel post and guarantee 100% good, strong chicks on arrival. Free circular.

GREEN FOREST POULTRY FARM
J. W. Amig & Son, Props. Star Route Richfield, Pa.

BABY CHICKS

FROM A HEAVY LAYING STRAIN. Three years blood tested for heavy diarrhea and under State supervision. Barred Rocks, White Wyandottes, Reds, White Leghorns. Moderately priced. Write for Catalogue and Prices.

BYRON PEPPER & SONS
BOX 11, GEORGETOWN, DEL.

Wyckoff Tanager CHIX White Leghorns

Book your order now for March and April Chicks.
\$12.00 per 100 \$57.50, 500 \$110, 1000

100% prepaid safe delivery guaranteed.

J. N. NACE POULTRY FARM, Box No. 50, Richfield, Pa.

GOLD MEDAL CHICKS

Choice Chicks at Popular Prices. 50 100 500 1000				
Wh., Br., Buff Leghorns, Anconas.....	\$7.50	\$14	\$67.50	\$130
Barred, Wh., Buff Rocks, Reds.....	8.50	16	77.50	150
Wyandottes, Orpingtons, Minorcas.....	9.00	17	82.50	160
Mixed Chicks, \$12. 100. All shipments Postpaid. Finest				
Stock. Greatest Profit Makers. 100% Safe Delivery.				

Gold Medal Chickeries, Box 444, Wallkill, N. Y.

DUCKLINGS

\$33; EGGS \$14.100
"Duck News" Free.
ROY PARDEE,
Islip, L. I., N. Y.

Hampton's Black Leghorn Day Old Chicks.
Circular free. A. E. HAMPTON, Box A, Pittstown, N.J.

ATHENEON CHICKS

EXHIBITION QUALITY—BRED TO LAY

Big—Husky—Vitality Chicks

From Healthy Bred-To-Lay Flocks

Atheneon Chicks are from Selected Eggs that hatch 12 to 13 pounds per hundred boxed for shipment. CHICKS YOU CAN RAISE and that will grow into SURE PROFIT meat and egg production.

Special Matings from the World's Finest Exhibition and Egg Laying Strains

Consider these high quality strains which we have established in our matings: White Leghorns—IMPORTED and PEDIGREED TOM BARRON. Barred Rocks—PARK'S BRED-TO-LAY. OWEN'S S.C. Reds. HOLTERMAN'S ARISTOCRAT PEDIGREED LINE Barred Rocks. FISHER'S White Rocks. DILLINGHAM'S Buff Rocks. MARTIN'S 200 EGG LINE White Wyandottes. Similar dependable quality in 14 Popular Varieties.

Mr. Moody of Connecticut orders 7500 White Leghorns for March shipment—his third year with

ATHENEON VITALITY CHICKS ARE BRED FOR PROFIT

Long experience in flock breeding and scientific incubation is a guarantee of protection to our customers that few hatcheries can equal.

ORDER NOW—direct from this ad, or write for FREE ILLUSTRATED CATALOG and IMPORTANT INFORMATION ON RAISING CHICKS, also complete prices on our Special Pedigreed matings. Ref. Athens National Bank. I. B. C. A.

PRICES ON GRADE A CHICKS	50	100	500	1000
S. C. White, Buff, Brown Leghorns; Anconas.....	\$7.00	\$13.00	\$62.00	\$120.00
Barred and White Rocks; S. C. and R. C. Reds.....	8.00	15.00	72.00	140.00
White Wyandottes; Buff Rocks; Wh. Minorcas; Campines.....	8.25	16.00	77.00	150.00
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Meals for Tourist Lodgers

Good Food Always Attracts and Holds Trade

EDITOR'S NOTE—The following article is one of a series the AMERICAN AGRICULTURIST is printing written by specialists at the New York State College of Home Economics.

By KATHERINE W. HARRIS
N. Y. State College of Home Economics

or three days' supply which, if the weather is very warm, may be seared. Smoked meats and fresh eggs must fill in when fresh meat is not available. Broilers during their season are quite profitable and very popular. It saves time to halve or quarter them after cleaning and, if a pressure cooker is available, to partially cook them.

meats and fresh eggs must fill in when fresh meat is not available. Broilers during their season are quite profitable and very popular. It saves time to halve or quarter them after cleaning and, if a pressure cooker is available, to partially cook them.

Soup Breaks Awkward Wait

Serving soup helps out because it gives the housewife a longer time for preparation of the meal and keeps the guest satisfied to wait. This means having a good beef or chicken stock on hand and adding to it a can of prepared vegetable, tomato or chicken soup.

The combinations to choose for the main part of the meal and ways of utilizing left-overs sometimes prove troublesome. The following suggestions include the foods which the average housekeeper living on a farm would have available. These combinations include at least one fresh vegetable because vegetables crisp and fresh appeal to the average tourist and do much for the general palatability and appearance of the meal.

Baked ham steak with baked potato, creamed string beans, and lettuce salad. Ham loaf with scalloped potatoes, spinach or beet greens, lettuce, cucumber and tomato salad.

Potato and ham souffle (ground ham, mashed potato, egg yolk and stiffly beaten egg white) with creamed carrots and cabbage salad.

Shepherd's pie (cooked diced meat with vegetables, gravy and mashed potato top) buttered beets, tomato salad.

Southern hash (hash with pimientos, green peppers and tomatoes added) poached egg, fresh vegetable salad.

Bacon and fried apples with creamed potatoes and corn on the cob.

Creamed eggs and chipped beef on toast with scalloped tomatoes and onion and radish salad.

Welsh rabbit (cheese in cream sauce with beaten egg folded in) on toast with bacon and fruit salad.

Last but not least, the housewife must think of some dessert. It is not possible to make up cake or pie at a moment's notice, but fresh fruits with cream and cookies makes a good substitute. On a cool day a sour cream pudding goes well and is quickly made. The recipe is given below.

In the long run good country food simply prepared, abundantly and neatly served will be the slogan which will make tourist lodgers popular.

Sour Cream Pudding

Butter	3 tablespoons
Sugar	3 tablespoons
Eggs	1 tablespoon
Milk	2/3 cup
Bread Flour	1 1/3 cups
Baking Powder	1 tablespoon
Salt	1/3 teaspoon
Sour Cream	1 1/2 cups
Brown Sugar	2 cups
Flour	1 1/2 tablespoons

Mix the sour cream, brown sugar and flour together. Mix the other ingredients as for cake. Pour into a baking pan and cover with first mixture. Bake in a moderate oven. Serves eight.

San Diego Sandwich

IT was served to me in a little grill in San Diego, and after the first bite, I promptly investigated the make-up, so that I could make similar sandwiches for the home folks. A large round roll was split, and toasted. While the toasting process was going on, the hamburger was browned in a little butter. It was then spread on the toast, a bit of prepared mustard added, next a spoonful of pickle relish, and three pieces of cheese. The upper half was then put on, and the heat of the toasted roll melted the cheese slightly. A paper napkin was wrapped round half the sandwich as a "hand hold." Try some when the man of the house has some friends in to listen to the radio all evening!—ELSIE DUNCAN YALE.

Provide Cocoa for the Children

Frequently there are children to be fed and it may be necessary to have weak cocoa for them. For this purpose it saves time to make a cocoa syrup which may be kept in a covered jar in a cool place. The following recipe uses one cup of sugar, one-half cup of cocoa, one and one-half cups of boiling water. This is brought to the boil over direct heat, then cooked in a double boiler for an hour. One tablespoon of the syrup is enough for each cup of hot milk.

Fruit, cooked or uncooked cereal, toast and a beverage make a good foundation for any breakfast. To this may be added any of the typical country breakfast dishes such as buckwheat cakes and sausage, bacon and eggs, ham and eggs, fried ham with cream gravy, pork tenderloin, bacon and fried apples, french toast with maple syrup, creamed dried beef on toast, or liver and bacon.

The supper meal is more difficult since it is usually not possible to keep much fresh meat on hand in warm weather. It is practical to have a two

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Seven months ago the leading mills of America began to bring us samples of their first Spring weavings. Week after week their representatives brought us new selections, until our offices bloomed with the loveliest flowered prints and bright-hued fabrics that the great mills of the country could achieve.

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Ask, also, to see the four plain-colored cottons and rayons that are our own brands. All are fast color and remarkably durable. Ramona, Daisy Bell and Pen-Ray, each 39¢ a yard, and Golden Dawn, 59¢.

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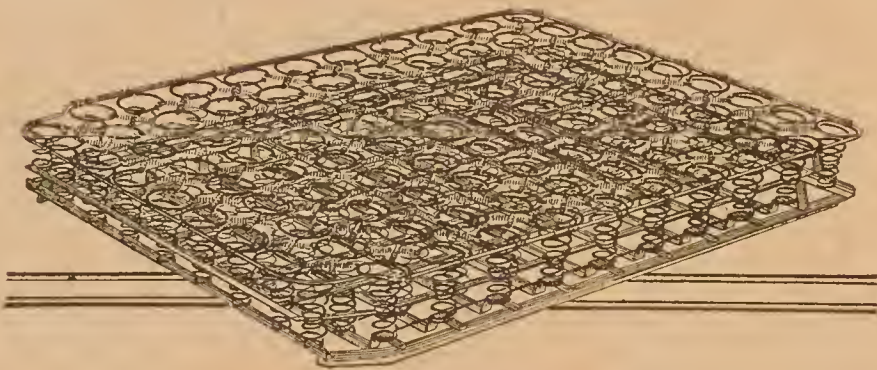
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Come, join us in a polar flight,
Our plane has room for you,
We'll "take off" sure on Tuesday night.

Ant Arctic lands to view!

In the lower left hand corner write the name of the hostess, and the place of the party. Perhaps cards with a winter decoration may be procured for the invitations. Christmas decorations are suitable if the party is given near

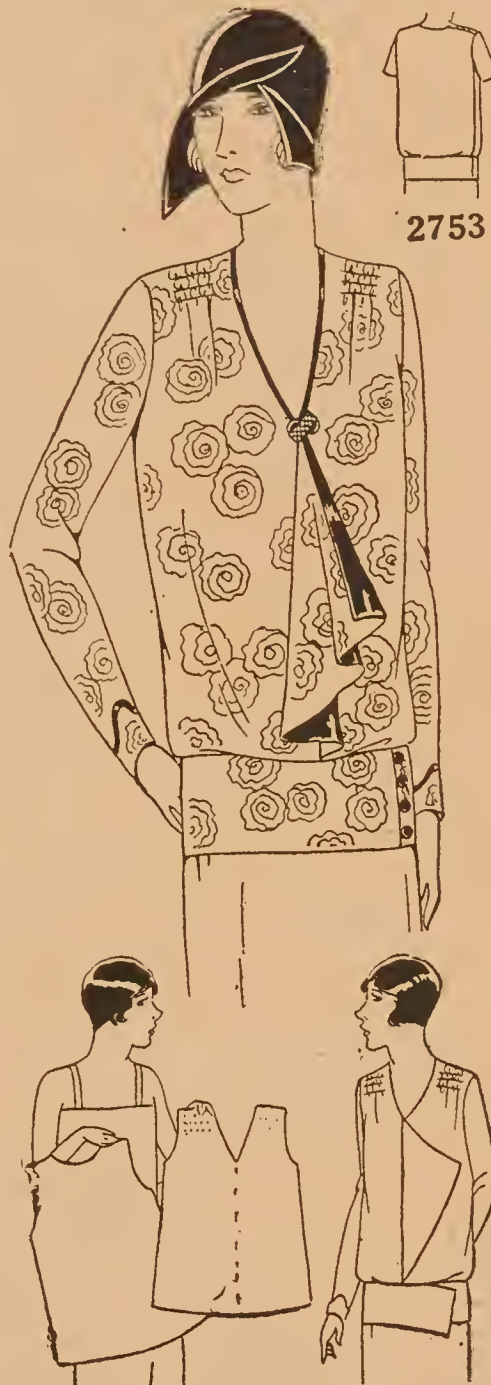
a hoop, as an airplane, and tries to toss it over the "South Pole" while standing a fixed distance from it. The hostess may allow each guest one trial or several as she wishes. Those who "reach the pole," by tossing the hoop over it, are rewarded with a stick of white candy.

If the party is held in a large room, Polar Outfit is a very amusing game. At one end of the room place a pile of discarded rubbers, boots, arctic overshoes, rubber boots, lumbermen's socks, and other winter footwear. Let the men line up at one end of the room, and at a signal race across to the pile, and each try to fit himself to "arctic" footwear as quickly as possible. Whoever succeeds in fitting himself first, receives a sock cut from white net and filled with candy. After the men have all fitted themselves, they march around the room to display their footwear.

For a social in a large room, a Snow Shoe race to the Pole is very hilarious. Take white cardboard and cut in the form of snow shoes, giving each contestant a pair. Now have the "racers" walk the length of the room on the snowshoes, by placing them on the floor, standing on them. Pick up a showshoe while balancing on one foot, and set it a step ahead. Then take another step forward. A white popcorn ball rewards the winner.

Refreshments may carry out the "non-stop" flight idea and comprise ham sandwiches, sweet chocolate and coffee or cocoa in thermos bottles. If a daintier menu is preferred, provide ice cream balls rolled in shredded cocoanut, white cakes, cream mints and coffee.—Elsie Duncan Yale.

Effective Blouse



BLOUSE PATTERN No. 2753 with its frilly jabot offers an attractive adjunct to the tweed suit or to use with a pleated silk skirt. Printed silk, chiffon voile, and silk crepes make up nicely in such blouses. The pattern cuts in sizes 16, 18 years, 36, 38, 40 and 42 inches bust measure. The 36-inch size requires 1 1/2 yards of 40-inch material. PRICE 13c.

the first of the year, otherwise trim the rooms in white and silver-bare branches hung with glass icicles, silver tinsel suspended over window frames and doorways, and at one end of the rooms a broomstick painted white, and tacked to a white draped wooden box so that it will stand upright. This is, of course, the South Pole!

The first game is Equipment.

The guests sit in a circle and the first begins, "I am going to the South Pole and will take a thermos bottle." Says the second one, "I will take a thermos bottle and chocolate." The third continues "I will take a thermos bottle, chocolate, and a flashlight." The game continues, the list of equipment growing longer and longer, and whoever leaves out an article must withdraw from the circle. A cake of chocolate is awarded the one who remains the last.

The second game is Polar Flight:

Have a number of embroidery hoops, wound with white, and attach to each one, the outline of a plane cut from heavy white paper. Each guest has

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TO ORDER: Write name, address, pattern numbers and sizes clearly and correctly and enclose the correct remittance in stamps or coin (although coin is sent at own risk). Add 12c for one of the new fashion catalogs and send to Pattern Department, American Agriculturist, 461-4th Avenue, New York City.

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Aunt Janet's Corner

Treasures May Foster Family Sentiment

MOST families have treasures which are dear to them for the associations if not for actual and intrinsic worth. A short time ago some friends showed a pair of mahogany candlesticks which had been passed down from mother to eldest daughter for seven generations. The head of the house said, "I don't care what kind of wood is in them. The thing I prize is the sentiment and affection that go with them."

To another family very dear to me there belongs a marvelous "laid-work" quilt, the handiwork of a clever southern woman long "fo' de wah." A few weeks ago it was opened for my inspection and I commented on some circles which stained the lining. "Don't you know how that happened? This quilt and the rest of the good bedclothes were put in grandma's walnut

oughly. Let stand in deep oblong bread pan twenty minutes before baking. Oven should be moderate, and time for baking should be about thirty to thirty-five minutes.—ROBERTA SYMMES.

This quick bread is good for lunch box sandwiches or for any occasion requiring a little fancy cooking.

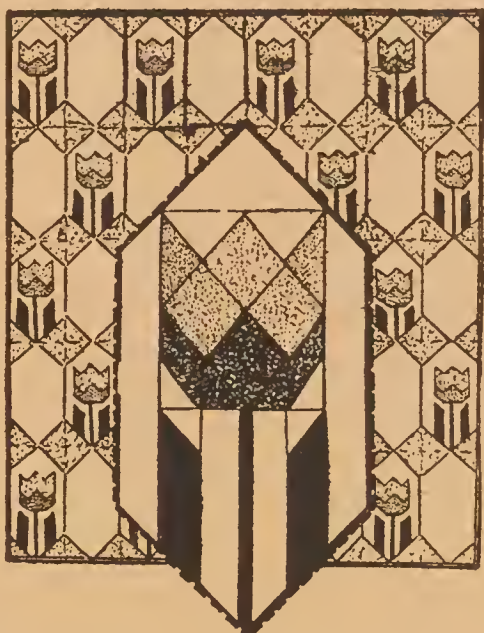
* * *

Nut Caramels

1 lb. light brown sugar $\frac{1}{2}$ cup cold water
1 tablespoon butter $\frac{1}{2}$ cup evaporated milk
1 cup broken nut meats (preferably pecans)

Mix sugar, water, milk together, add butter. Cook to boiling point, then stir steadily to prevent curdling. When it reaches the soft-ball stage stir in nuts and remove from fire, pour in small buttered pan and when set cut in squares. Remove when cold.—ROBERTA SYMMES.

If you have a candy thermometer the soft-ball stage means 238 degrees.



No. 554, 20 Cents

This beautiful tulip quilt design includes cardboard cutting patterns for each part and full instructions. The tulip is most simple to do and is especially attractive in yellow, orange and green on a white ground. It sets together like a diamond paned window with white blocks and yellow squares. Patterns only 20 cents.

This requires 20 blocks $10\frac{1}{2} \times 19$, and $7\frac{3}{4}$ yards assorted colors. We can supply this material in Peter Pan, fast colors, \$4.65. Percales, fast colors, \$2.35.

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chest and buried for safety when Sherman's army came through this section. A hard rain came and some of the things got wet. That is what made these circles."

To others the circles might detract but to this family they mark a very significant chapter of the family's life history which made the family ties all the stronger.

In these days of strenuous living when family ties are strained and threatened with extinction, some of these old sentiments become all the more precious. We might even bend over backward a little to strengthen them because the pull away from family life is so strong.

The little walnut table, the old clock, and the chest with the secret drawer may not command a great price as antiques, but the fact that they were a part of great-grandmother's and grandmother's lives and stood for eras in the family history makes them important to me.—Aunt Janet.

Tested Recipes

Baking Powder Nut Bread

2 cups milk	1 teaspoon salt
$\frac{3}{4}$ cup sugar	4 teaspoons baking powder
1 cup nut meats	
4 cups flour	1 cup seedless raisins
1 egg	

Sift flour, salt, baking powder together, stir in raisins and nuts. Beat egg quite light, add sugar slowly, continue beating until very light. Add milk and flour alternately. Mix thor-



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The Little Shepherd of Kingdom Come *By John Fox, Jr.*

Several times she had to dart into the bushes while men on horseback rode by and once she came near being caught by three men on foot—all hurrying at Daws Dillon's order to the Gap through which she must go. When the road turned from the river she went slowly along the edge of it, so that if discovered, she could leap with one spring into the bushes. It was raining—a cold drizzle that began to chill her and set her to coughing so that she half afraid that she might disclose herself. At the mouth of the Gap she saw a fire on one side of the road and could hear talking, but she had no difficulty passing it, on the other side. But on, where the Gap narrowed—there was the trouble. It must have been an hour before midnight when the tremblingly neared the narrow defile. The rain had ceased, and as she crept around a boulder she could see, by the light of the moon between two black clouds, two sentinels beyond. The crisis was at hand now. She slipped to one side of the road, climbed the cliff as high as she could and crept about it. She was past one picket now, and in her eagerness one foot slipped and she half fell. She almost held her breath and lay still.

"I hear somethin' up thar in the bresh," shouted the second picket. "Halt!"

Melissa tinkled the sheep-bell and pushed a bush to and fro as though a sheep or a cow might be rubbing itself, and the picket she had passed laughed aloud.

"Goin' to shoot ole Sally Perkins's cow, air you?" he said, jeeringly. "Yes, I heerd her," he added, lying; for, being up all the night before he had drowsed at his post. A moment later, Melissa moved on, making considerable noise and tinkling her bell constantly. She was near the top now and when she peered out through the bushes, no one was in sight and she leaped into the road and fled down the mountain. At the foot of the spur another ringing cry smote the darkness in front of her:

"Halt! Who goes there?"

"Don't shoot!" she cried, weakly. "It's only me."

"Advance, 'Me,'" said the picket, astonished to hear a woman's voice. And then into the light of his fire stepped a shepherdess with a sheep-bell in her hand, with a beautiful, pale, distressed face, a wet, clinging dress, and masses of yellow hair surging out of the shawl over her head. The startled picket dropped the butt of his musket to the ground and stared.

"I want to see Ch—, your captain," she said, timidly.

"All right," said the soldier, courteously. "He's just below there and I guess he's up. We are getting ready to start now. Come along."

"Oh no!" said Melissa, hurriedly. "I can't go down there." It had just struck her that Chad must not see her; but the picket thought she naturally did not wish to face a lot of soldiers in her bedraggled and torn dress, and he said quickly:

"All right. Give me your message and I'll take it to him." He smiled. "You can wait here and stand guard."

Melissa told him hurriedly how she had come over the mountain and what was going on over there, and the picket with a low whistle started down toward his camp without another word.

Chad could not doubt the accuracy of the information—the picket had names and facts.

"A girl, you say?"

"Yes, sir"—the soldier hesitated—"and a very pretty one, too. She came over the mountain alone and on foot through this darkness. She passed the pickets on the other side—pretending to be a sheep. She had a bell in her

hand." Chad smiled—he knew that trick.

"Where is she?"

"She's standing guard for me."

The picket turned at a gesture from Chad and led the way. They found no Melissa. She had heard Chad's voice and fled up the mountain. Before day-break she was descending the mountain on the other side, along the same way, tinkling her sheep-bell and creeping past the pickets. It was raining again now and her cold had grown worse. Several times she had to muffle her face into her shawl to keep her cough from betraying her. As she passed the ford below the Turner cabin, she heard the splash of many horses crossing the river and she ran on,

rang through the woods from the Yankees to the startled guerillas.

"Surrender!" A fusillade followed. Again:

"Surrender!" and there was a short silence, broken by low curses from the guerillas, and one stern Yankee voice giving short, quick orders. The guerillas had given up. Rebel Jerry moved restlessly at Dan's side and Dan cautioned him.

"Wait! Let them have time to disarm the prisoners," he whispered.

"Now," he added, a little while later—"creep quietly, boys."

Forward they went like snakes, creeping to the edge of the brush whence they could see the sullen guerillas grouped on one side of the fire—

been all Dan's except that the Yankee suddenly loosed his wrist and gripped him tight about the body in an underhold, so that Dan could not whirl him round; but he could twist that wrist and twist it he did, with both hands and all his strength. Once the Yankee gave a smothered groan of pain and Dan heard him grit his teeth to keep it back. The smoke had lifted now, and when they fell, it was in the light of the fire. The Yankee had thrown him with a knee-trick that Harry used to try on him when they were boys, but something about the Yankee snapped, as they fell, and he groaned aloud. Clutching him by the throat, Dan threw him off—he could get at his knife now.

"Surrender!" he said, hoarsely.

His answer was a convulsive struggle and then the Yankee lay still.

"Surrender!" said Dan again, lifting his knife above the Yankee's breast, or, damn you, I'll— The Yankee had turned his face weakly toward the fire, and Dan, with a cry of horror, threw his knife away and sprang to his feet. Straightway the Yankee's closed eyes opened and he smiled faintly.

"Why, Dan, is that you?" he asked. "I thought it would come," he added, quietly, and then Harry Dean lapsed into unconsciousness.

Thus, at its best, this fratricidal war was being fought out that daybreak in one little hollow of the Kentucky mountains and thus, at its worst, it was being fought out in another little hollow scarcely twenty yards away, where the giant twins—Rebel Jerry and Yankee Jake—who did know they were brothers, sought each other's lives in mutual misconception and mutual hate.

There were a dozen dead Federals and guerillas around the fire, and among them was Daws Dillon with the pallor of death on his face and the hate that life had written there still clinging to it like a shadow. As Dan bent tenderly over his brother Harry, two soldiers brought in a huge body from the bushes, and he turned to see Rebel Jerry Dillon. There were a half a dozen rents in his uniform and a fearful slash under his chin—but he was breathing still. Chad Buford had escaped, and so had Yankee Jake.

XXVII

AT THE HOSPITAL OF MORGAN'S MEN

IN May, Grant simply said—Forward! The day he crossed the Rapidan, he said it to Sherman down in Georgia. After the battle of the Wilderness he said it again, and the last brutal resort of hammering down the northern buttress and sea-wall of the rebellion—old Virginia—and Atlanta, the keystone of the Confederate arch, was well under way. Throughout those bloody days Chad was with Grant and Harry Dean was with Sherman on his terrible tri-secting march to the sea. For, after the fight between Rebels and Yankees and Daws Dillon's guerilla band, over in Kentucky, Dan, coming back from another raid into the Bluegrass, had found his brother gone. Harry had refused to accept a parole and had escaped. Not a man, Dan was told, fired a shot at him as he ran. One soldier raised his musket, but Renfrew the Silent struck the muzzle upward.

In September, Atlanta fell, and, in that same month, Dan saw his great leader, John Morgan, dead in Tennessee. In December, the Confederacy toppled in the west under Thomas's blows at Nashville. In the spring of '65, one hundred and thirty-five thousand wretched, broken-down rebels, from Richmond to the Rio Grande, confronted Grant's million men, and in April, Five Forks was the beginning of the final end everywhere.

At midnight Captain Daniel Dean,

(Continued on Page 31)

The Story Thus Far

CHAD leaves "Lonesome" with his dog "Jack." His foster parents care both dead from the plague and plans have been laid to bind Chad out to a hard fisted neighbor. After the funeral, Chad collects a rifle, some powder, and shot and a haversack and with "Jack" by his side, starts out for unknown parts. He meets the sons of Joel Turner from over the mountain who take him home. Chad's cleverness at school gains the admiration of Caleb Hazel, the schoolmaster. They become close friends. Hazel tells Chad of the "Bluegrass Country" beyond the hills. Logging operations take Chad to a distant city where he gets lost and starts home on foot. He is picked up by Major Calvin Buford. It appears that Chad is also a Buford and is believed to be a kinsman of his new found friend, who takes him to his home in Lexington in the heart of the "Bluegrass." Chad accepts the Major's offer of a home and an education. Chad enters into the social life and becomes very popular at school. He falls in love with Margaret Dean, daughter of General Dean, neighbor of the Bufords. Meanwhile feeling grows bitter between North and South and war clouds gather. Chad joins the Union forces under Grant. His command takes him back to Lexington.

frightened and wondering. Before day broke she had slipped into her bed without arousing Mother Turner, and she did not get up that day, but lay ill abed.

The splashing of those many horses was made by Captain Daniel Dean and his men, guided by Rebel Jerry. High on the mountain side they hid their horses in a ravine and crept toward the Gap on foot—so that while Daws with his gang waited for Chad, the rebels lay in the brush waiting for him. Dan was merry over the prospect:

"We will just let them fight it out," he said, "and then we'll dash in and gobble 'em both up. That was a fine scheme of yours, Jerry."

Rebel Jerry smiled: there was one thing he had not told his captain—who those rebels were. Purposely he had kept that fact hidden. He had seen Dan purposely refrain from killing Chad Buford once and he feared that Dan might think his brother Harry was among the Yankees. All this Rebel Jerry failed to understand, and he wanted nothing known now that might stay anybody's hand. Dawn broke and nothing happened. Not a shot rang out and only the smoke of the guerillas' fire showed in the peaceful mouth of the Gap. Dan wanted to attack the guerillas, but Jerry persuaded him to wait until he could learn how the land lay, and disappeared in the bushes. At noon he came back.

"The Yankees have found out Daws is thar in the Gap," he said, "an' they are goin' to slip over before day tomorrow and s'prise him. Hit don't make no difference to us, which s'prises which—does it?"

So the rebels kept hid through the day in the bushes on the mountain side, and when Chad slipped through the Gap next morning, before day, and took up the guerilla pickets, Dan had moved into the same Gap from the other side, and was lying in the bushes with his men, near the guerillas' fire, waiting for the Yankees to make their attack. He had not long to wait. At the first white streak of dawn overhead, a shout

their arms stacked, while a tall figure in blue moved here and there, and gave orders in a voice that all at once seemed strangely familiar to Dan.

"Now, boys," he said, half aloud, give 'em a volley and charge."

At his word there was a rattling fusillade, and then the rebels leaped from the bushes and dashed on the astonished Yankees and their prisoners. It was pistol to pistol at first and then they closed to knife thrust and musket butt, hand to hand—in a cloud of smoke. At the first fire from the rebels Chad saw his prisoner, Daws Dillon, leap for the stacked arms and disappear. A moment later, as he was emptying his pistol at his charging foes, he felt a bullet clip a lock of hair from the back of his head and he turned to see Daws on the farthest edge of the firelight levelling his pistol for another shot before he ran. Like lightning he wheeled and when his finger pulled the trigger, Daws sank limply, his grinning, malignant face sickening as he fell.

The tall fellow in blue snapped his pistol at Dan, and as Dan, whose pistol, too, was empty, sprang forward and closed with him, he heard a triumphant yell behind him and Rebel Jerry's huge figure flashed past him. With the same glance he saw among the Yankees another giant—who looked like another Jerry—saw his face grow ghastly with fear when Jerry's yell rose, and then grow taut with ferocity as he tugged at his sheath to meet the murderous knife flashing toward him. The terrible Dillon twins were come together at last, and Dan shuddered, but he saw no more, for he was busy with the lithe Yankee in whose arms he was closed. As they struggled, Dan tried to get his knife and the Yankee tugged for his second pistol—each clasping the other's wrist. Not a sound did they make nor could either see the other's face, for Dan had his chin in his opponent's breast and was striving to bend him backward. He had clutched the Yankee's right hand, as it went back for his pistol, just as the Yankee had caught his right in front, feeling for his knife. The advantage would have

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C. O. D. FROST PROOF Cabbage plants. Leading varieties now ready. 500, 65c; 1000, \$1.00; 5000, \$4.50. FARMERS PLANT CO., Tifton, Ga.

SEND NO MONEY. C.O.D. Frost proof Cabbage and Onion plants. All Varieties now ready. 500, 65c; 1000, \$1.00; 5000, \$4.50. STANDARD PLANT CO., Tifton, Ga.

CABBAGE PLANTS, NOW Ready. My frost proof Cabbage plants will head three weeks earlier than home grown plants. Varieties: Jersey and Charleston Wakefield, Succession, Flat Dutch, Golden Acre and Copenhagen Market. Prices by parcel post postpaid: 500, \$1.25; 1000, \$2.25. Express: 1000, \$1.00; 5000, \$4.50; 10,000, \$7.50. Bermuda Onion plants same prices as Cabbage plants. Roots wrapped in moss and shipped promptly. Satisfaction Guaranteed. P. D. FULWOOD, Tifton, Ga.

STRAWBERRY, BLACK, PURPLE and Red Raspberry plants, let us mail you our circular, giving description and prices. Our plants are strictly fresh dug from new fields. F. G. MANGUS, Maple View, N. Y.

CERTIFIED SEED POTATOES. Smooth rural type. High yielding strain, grown by APPLETON BROS., Canandaigua, N. Y.

PAY THE POSTMAN. Send No Money. Frostproof Cabbage and Onion plants. Leading varieties, 500, 65c; 1000, \$1.00. ALBANY PLANT CO., Albany, Ga.

EARLY VEGETABLE PLANTS. Frostproof Cabbage: Wakefields, Copenhagen, Golden Ace, Flat Dutch, Bermuda Onions, Beets, Lettuce. Postpaid: 100, 40c; 500, \$1.25; 1000, \$2.25. Collect: 1000, \$1.00; 5000, \$4.50. Tomato Plants: Earliana, Bonny Best, Baltimore. Postpaid: 100, 50c; 500, \$1.50; 1000, \$2.50. Collect: 1000, \$1.75; 5000, \$7.50. Write for prices on Potato, Pepper, and Egg Plants. Carefully Packed, Varieties Labeled, Delivery Guaranteed. PIEDMONT PLANT CO., Albany, Ga.

FREE GLADIOLUS BOOK—36 pages, 45 illustrations. Describes 171 exquisite varieties, many new. Tells how to grow. It's free! The famous beautiful Rainbow Collection of thirty bulbs, all different, \$1. postpaid. HOWARD GILLET, Gladiolus Specialist, Box J, New Lebanon, N. Y.

RAISE BEARDLESS BARLEY. New two rowed, stiff strawed, heavy yielder. Also Burbank Oats and Gold Nugget Corn. Descriptions and samples free. LONG-ACRE FARM, Route 2, Geneva, N. Y.

SPECIAL LOW PRICES on pedigreed Green Mountains, Russets and Cobblers. Catalogue. ROY HASTINGS, Malone, N. Y.

Additional
Classified
Advertising

On
Page
30

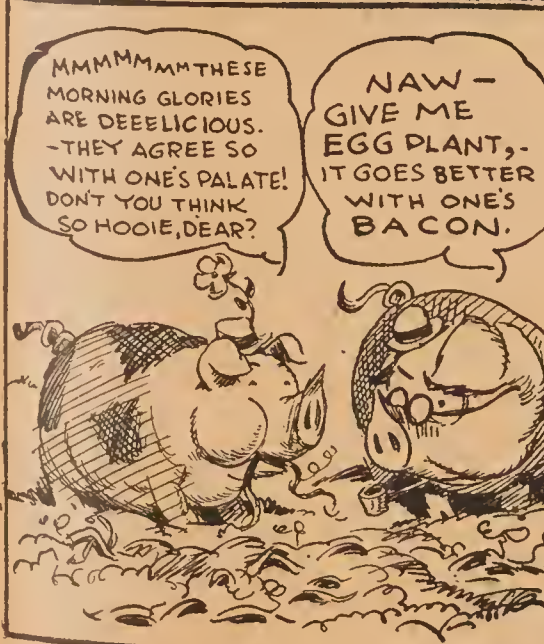
HANDY ANDY Says "Here's How"

To Get Rid of Morning Glories

By Ray Inman

THE CHEAPEST WAY TO
GET RID OF MORNING GLORIES
IS TO

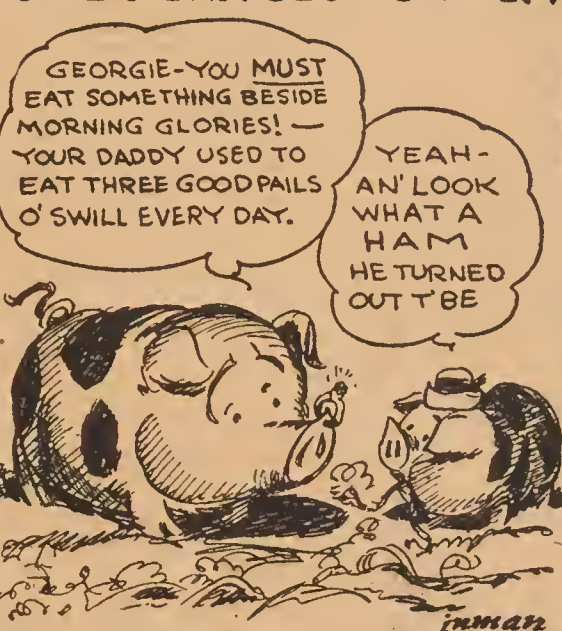
USE HOGS



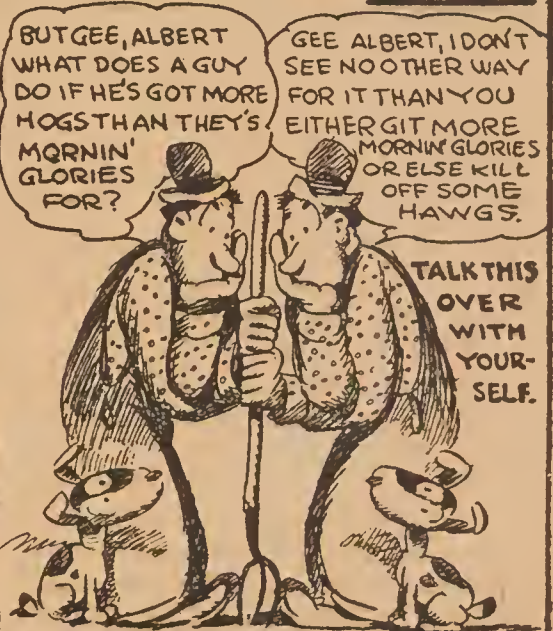
turn them into the
field after
plowing




THEY ARE VERY FOND
OF THE ROOTS AND EAT
THEM AS FAST AS
THEY CAN GET TO THEM

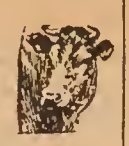


if this doesn't get
rid of the morning
glories,
YOU NEED MORE HOGS





Livestock Breeders



CATTLE

\$50⁰⁰/₁₀₀ OFF in the Chinese Auction

of FISHKILL DEMEER HENGERVELD

Born February 6, 1928

He is a son of a three-year old (by the noted Dutchland Colantha Sir Inka) that has made two good long time records first and second calf on twice a day milking. This young bull's sire, and also his dam are son and daughter of Winana Segis May 2d, who made 876.76 lbs. of butter and close to 20,000 lbs. of milk in ten months as a four year old. Also his sire is a son of Hengerveld Homestead De Kol 4th who has a splendid list of large producing daughters, he being a son of Jenny Linn Colantha, with a record of over 30 lbs. butter in 7 days.

His Price is Now \$250.

This price will be reduced \$50 the first of each month until sold.


Dairymen's League Certificates will be accepted at face value in payment for this animal.

FISHKILL FARMS HENRY MORGENTHAU, Jr., Owner
461 Fourth Avenue New York

CATTLE

HORSES

PERCHERON HORSES



GOOD WALKERS
They get there and back because they step lively

If you want a stallion or a pair of mares write us. We will help you find them. Send for the 1929 Percheron Review. Free. Address PERCHERON SOCIETY OF AMERICA Ellis McFarland, Secy. Union Stock Yards, Chicago

6 COWS,

11-2 year old heifers, 6 bulls 3 to 18 months old. 4 calves 3 months old, 2 registered guernsey calves 3 months old TB Tested.

SPOT FARM, TULLY, N. Y.

REGISTERED GUERNSEY HEIFER calves and Shetland ponies, STEPHEN KELLOG, Burdette, N. Y.

PUREBRED OR HIGH Grade Holstein Cattle. Heifers and Springers—all tuberculin tested. Springers on hand at all times. "Tell us what you want and we will have it." Carload or less than carload lots. STRUBLE & MARTIN, Milford, Pa., Newton, N. J.

FOR SALE—At all times Guernsey and Holstein cows and heifers in carload lots. FRED JENSEN, Waupaca, Wis.

MAPLE LAWN MILKING Shorthorns for sale, red bull calf sired by a son of the many times grand champion Duke of Glendale, his eight nearest dams average better than 10,000 pounds milk. Herd accredited. W. W. CURTIS, Hilton, N. Y.

Additional Classified Advertising

SEEDS—NURSERY STOCK

EARLY JUNE RED Raspberry sets for sale. The earliest, largest, heaviest bearing berry grown. Send for literature telling what the New York State Experiment Station says of the June. LESTER BENNETT, Victor, N. Y.

TIFTON'S RELIABLE PLANTS. Frostproof Cabbage, Bermuda Onion Plants. Wakefields, Dutch Ballhead, Copenhagen, Golden Acre, Postpaid, 500, \$1.50; 1,000, \$2.50. Express paid, 500, \$1.25; 1,000, \$2.15; 5,000, \$9.40. Early Tomato, Pepper, Cauliflower, Egg Plant later, write TIFTON PLANT CO., Tifton, Ga., Box 57.

COOK'S CERTIFIED POTATOES. Cobblers and Russets. Better than ever. Attractive prices. We pay freight. IRVING E. COOK, Munsville, N. Y.

PAY ON ARRIVAL—Frostproof Cabbage Plants immediate shipment. 75c-100c. EMPIRE PLANT CO., Albany, Ga.

FROSTPROOF CABBAGE PLANTS. Order today. Pay postman, 500-60c, 1000-\$1. POSTAL PLANT CO., Albany, Ga.

HARDY ALFALFA SEED 93% pure \$10.00 per bushel; Sweet Clover 95% pure \$3.00 per bushel. Return seed if not satisfied. GEO. BOWMAN, Concordia, Kansas.

STRAWBERRY, RASPBERRY, BLACKBERRY, Dewberry, Loganberry, Wineberry, Grape, Juneberry plants; Asparagus, Rhubarb, Horseradish roots; Hardy Perennial and Annual Flower plants; Roses, Vines, Shrubs, Hedge plants. Catalogue free. HARRY E. SQUIRES, Hampton Bays, N. Y.

VEGETABLE SEEDLINGS—Ready now for you to transplant into cold frames or greenhouse. \$3. per 1000. Postpaid. Peppers—Ruby King, Worldbeater, Bull Nose, Sunnybrook, Sweet Cheese, and Chinese Giant. Tomatoes—Langdon's Earliana, Penn State Earliana, Marglobe, Chalk's Early Jewel, Bonny Best, John Baer, Stone and Matchless. Send for list of other plants. PAUL F. ROCHELLE, Morristown, N. J.

CERTIFIED ITHACAN OATS and Alpha Barley seed. Our fields of these Cornell varieties College inspected. Also select Canada Field Peas. JONES & WILSON, Ithaca, N. Y.

OLD FASHIONED HARDY Flower Plants. Hollyhocks, Delphiniums, Bleeding Hearts, Anemones, Blue Bells, Canterbury Bells, Columbines, Monksheads, Hardy Carnations, Hardy Chrysanthemums, Hardy Lilies, Hardy Phloxes, Lupines, Hardy Pinks, Oriental Poppies, and 240 other Perennials that will bloom this summer; Pansies, Asters, Salvias, Petunias, Zinnias, Snapdragons and other annuals; Roses, Vines, Shrubs, Hedge Plants; Berry plants, Asparagus roots. Catalogue free. HARRY E. SQUIRES, Hampton Bays, N. Y.

COLORADO BLUE SPRUCE 50 seeds with planting instructions 10c. BOX 92, Greenlane, Pa.

CERTIFIED SEED POTATOES. Smooth white Rurals. Write for prices. H. L. HODNETT & SONS, Fillmore, N. Y.

PREMIER OR HOWARD 17 Strawberry Plants \$1.00 per 100, \$5.00 per 1000. BASIL A. PERRY, Georgetown, Delaware.

GLADIOLUS \$1.00 Blooming Bulbs \$1.00. 12 choice Dahlias \$1.00. Catalogue, 20 Evergreen Trees \$2.00. GLADALIA FARMS, Chicopee Falls, Mass.

SEEDS—NURSERY STOCK

FOR SALE: Number one Vermont Green Mountain Certified Seed potatoes from foundation stock \$1.00 per bushel. JOHN A. ALEXANDER, South Royalton, Vt.

FROSTPROOF CABBAGE and Onion Plants \$1 thousand. Prompt shipments. Good delivery guaranteed. OLD DOMINION PLANT COMPANY, Franklin, Va.

PURE STRAIN BRAND Certified and Near-Certified Seed Potatoes. Best proven varieties. Northern Grown. Ask for price list. A. G. ALDRIDGE SONS, Established 1889, Fishers, N. Y.

GLADOLI, CHOICE COLLECTION of new and standard kinds. Write for catalogue. Exceptionally choice mixture, large flowering kinds at \$2.50 per hundred. ECHO HEIGHTS FARM, Jordan, N. Y. R. 2.

MASTODON EVERBEARING STRAWBERRY Plants \$2.50 per 100, \$15.00 per 1000. Plants set out this Spring will bear quantities of large delicious berries this summer and fall. BASIL A. PERRY, Georgetown, Delaware.

CERTIFIED—COLLEGE INSPECTED Seed Potatoes. Green Mountain and Irish Cobblers. Write for our prices. WALTER L. CARPENTER INC., Chittenango Station, N. Y.

100 ONION PLANTS FREE with order for 1000 plants. Cabbage plants \$1.00 thousand, onion plants 75c, tomato plants \$1.50, mail or express collect. Guarantee safe delivery. Write for descriptive booklet. CARLISLE PLANT FARMS, Valdosta, Ga.

CERTIFIED SEED POTATOES. Smooth and Russet Rurals. Buy direct from one of New York's Premier growers, car lots or less. A. A. WEEKS, Locke, N. Y.

Set Our "FROSTPROOF" Cabbage and Onion plants, and mature crop three weeks earlier 300, \$1.00; 500, \$1.75; 1000, \$2.75; 10,000, \$20. All delivered prepaid. Prompt shipment, good plants delivered or money refunded. J. P. COUNCILL COMPANY, Franklin, Virginia.

CERTIFIED LATHAM AND HERBERT RASPBERRIES, Howard 17 and Mastodon Strawberries, Washington Asparagus. Other leading varieties Raspberries, Strawberries, Blackberries, Fruit trees, Shrubs, Evergreens, etc. Prices low. Everything guaranteed. Send for price list. BERT BAKER, Hoosick Falls, N. Y.

"FROSTPROOF" Cabbage and Onion Plants—Special wholesale Prices: 500, \$1.25; 1000, \$2.00; 5000, \$9.00; 10,000, \$17.50 all charges prepaid. Fine Plants, good delivery guaranteed or money refunded. WHOLESALE PLANT COMPANY, Thomasville, Ga.

MILLIONS, CABBAGE, ONIONS, and Tomato Plants \$1. 1000. Pepper and Potato Plants \$1.75 1000. Gladiolus Bulbs \$1. Hundred, CLARK PLANT CO., Thomasville, Ga.

FROST PROOF CABBAGE Plants. The kind that will stand a freeze. Six leading varieties. Prices: 500, \$1.25; 1,000, \$2.25 postpaid. By express: 1,000 to 5,000, \$1.00 per thousand; 10,000 and over at 75c. Bermuda Onion Plants same prices. Write for prices on Tomato, Pepper, Egg Plant, Cauliflower and Lettuce plants. BLUE RIDGE PLANT COMPANY, P. O. Box 583, Greenville, S. C.

DAHLIAS. ASSORTED not-labeled. \$1. a dozen prepaid. ANER L. SMITH, Sodus, N. Y.

SEEDS—NURSERY STOCK

CERTIFIED SEED POTATOES, Irish Cobblers and original strain Carman No. 3. Buy direct from grower. Write today for prices. N. A. BAKER & SONS, Fairport, N. Y.

SEED CORN. Germination 97%. Grow Oswego Ensilage for quality silage. Write HAYNES SNYDER, Fulton, N. Y.

APPLE TREES, 6c; peach, 4c; plum, cherry, pear reasonable, price list free. FARINA NURSERY, Farina, Ill. State Inspected.

DAHLIA TUBERS 25-\$2.00. Good large varieties, postpaid. Shrubs, Roses, price list. EDGEWOOD FARM, R. 2, Jamesburg, N. J.

PANSY PLANTS—12 for 25 cts., 30 for 50 cts. Bedding and Annuals for sale. F. VAN HOEVENBURG, Brainard Station, N. Y.

CERTIFIED RUSSET SEED Potatoes. College inspected. One year from Michigan. Special prices on large orders. J. W. HOPKINS & SON, Pittsford, N. Y.

CORNELL NO. 11 Seed Corn. From the original source of this dual purpose corn. \$3.50 a bushel delivered to your station. R. E. MOSIER, Aurora, N. Y.

BERMUDA ONION PLANTS—Grow bigger and better Onions. Frostproof. Postpaid: 200-55c; 500-\$1.00; 1,000-\$1.75. Transplanted Cabbage Plants: three dozen, 40c; 500-\$4.00. PORT MELLINGER, North Lima, Ohio.

A GREEN DAHLIA at last, this marvelous freak of nature and 10 Giant labeled Dahlias \$2.50. Regular value \$7.50. 12 beautiful labeled Dahlias all colors for \$1., worth \$3.50. BOLTS DAHLIA FARM, Stepney, Conn.

WANTED TO BUY

WANTED—HAY, GRAIN, Potatoes, Apples, Cabbage, Carloads. Pay highest market prices. THE HAMILTON CO., New Castle, Pa.

WANTED TO BUY old bags. We pay excellent prices. Write for prices. We pay freight. OWASCO BAG CO., Rochester, N. Y.

WOOL—HIDES—FURS

MUSKRAT FURS WANTED. Black—Large \$3.50. Medium \$2.50. Brown—Large \$2.50. Medium \$1.50. All furs wanted. EVERETTE SHERMAN, Whitman, Mass.

WOOL AND SHEEP Pelts Wanted. I specialize in Wool and Pelts. Hundreds of satisfied shippers. Write for prices. ALVA A. CONOVER, Lebanon, N. Y.

AGENTS WANTED

AGENTS: SELL TROUSERS, Overalls, Dry Goods. Etc. Some advertised brands. Write FREEMAN E. HUNTER CO., Riverton, N. J.

A PAYING POSITION OPEN to representative of character. Take orders shoes—hosiery direct to wearer. Good income. Permanent. Write now for free book "Getting Ahead." TANNERS SHOE MFG. CO., 2084 C St., Boston, Mass.

BIG OHIO CORPORATION wants county manager. \$50 weekly commission. Earnings start immediately. Good for \$5000 yearly. We furnish everything, deliver and collect. Capital or experience unnecessary. FRY-FYTER CO., 1880 Fry-Fyter Bldg., Dayton, Ohio.

AGENTS: \$16 day and New Buick Auto Free. Sell groceries. Over 400 items used daily every home. Steady all year job. Your own groceries about half price. Send for samples. HARLEY COMPANY, Dept. D-2265, Dayton, Ohio.

HELP WANTED

RELIABLE MEN WANTED to sell guaranteed trees, shrubs and roses. Steady work. Pay weekly. Start now for Spring business. Wholesale and retail. WEBB NURSERY CO., Rochester, N. Y.

\$50 WEEKLY. MEN wanted to demonstrate and take 10 orders daily direct from motorists. Amazing Magnetic Trouble Light. Sticks anywhere! More orders, bigger pay. Write for demonstrator and particulars. MAGNO, Beacon Bldg., Dept. 174, Boston, Mass.

FARMS FOR SALE

FOR SALE TO Close Estate. Two adjoining dairy farms of 100 and 200 acres respectively; 15 miles south of Syracuse, N. Y. Two sets buildings in best of repair and painted, including milkhouse, icehouse, chicken house and garage. Never failing spring, piped to barn and milkhouse. Enquire at farm, Pompey, N. Y. of Roy R. Partridge or Harry I. Partridge, Executor, 19 Woodlawn Ave., Buffalo, N. Y.

SIXTY ACRES—Fertile. Nearly new house. Twenty acres timber. Good barns, near school. J. I. PHILLIPS, Delmar, Delaware.

STOCK AND GRAIN Farm of 244 acres, laying beautiful, growing fine crops. Colonial brick residence splendid location, sacrifice price, including machinery, easy terms. C. H. REYNOLDS, Fredericksburg, Va. Box 234.

BUY YOUR FARM in famous Western New York dairy belt. 130 acres, midway between Buffalo and Jamestown, improved highway, healthful location, good water, fair buildings, very good productive soil. A. V. PERRIN, Eden, N. Y.

WANTED, RESPONSIBLE PARTY to live free of rent on 60 acre farm in New Jersey, not under cultivation, to take care of property. Situated on main roads, farm house in good condition. Large chicken coops, vegetable garden. Willing to make lease. Apply, giving all particulars to E. H. care of AMERICAN AGRICULTURIST.

DESIRABLE DAIRY FARMS for sale in Erie County, Penna., for a trifle more than the original first mortgages. From 80 to 260 acres in each. Good buildings. Near improved highways, good markets, churches and schools. These farms are bargains as they must be sold this spring. Terms: one-fifth cash, balance in long time mortgages with low interest. THOS. W. SPOFFORD, Agent, 512 Masonic Temple, Erie, Pa.

PRINTING—STATIONERY

250 BUSINESS ENVELOPES AND 250 Letter Heads only \$3.00, 500 of each \$5.00. Cuts used free. Write your wants. INDEPENDENT PRESS, Mexico, N. Y.

MISCELLANEOUS

WANTED USED BAGS any quantity and grade. Highest prices and freight paid. HOFFMAN BROS. BAG CO., 39 Gorham St., Rochester, N. Y.

LEARN AUCTIONEERING at home. Every student successful. SCHOOL, Box 707, Davenport, Iowa.

BARRELS OF SLIGHTLY damaged crockery—Hotel chinaware — Cookingware — Glassware — Pottery. E. SWASEY COMPANY, Portland, Maine.

SUPERIOR GRAFTING WAX for Successful grafting. 1 lb. 50c; 3 lbs. \$1.25 postpaid. D. VICTOR MFG. CO., So. Weymouth, Mass.

PATCHWORK: Rayon, Percale, Prints, 3 lbs. \$1. 100 assorted pieces 6x8, \$1. Special trial package, 50 cents, postpaid, NEW ENGLAND PATCHWORK CO., Hartford, Conn.

HONEY: 60 lbs. finest buckwheat \$5.40. Clover \$6.60 not prepaid. Satisfaction guaranteed. F. W. LESSER, Fayetteville, N. Y.

AVIATION—If you are interested in aviation instruction and earning while learning, write WEEKS AIRCRAFT CORPORATION, Dept. B11, for free information without obligation, Milwaukee, Wis.

USED CIVIL WAR ENVELOPES with flags, designs, etc., \$1 to \$15 paid. Other stamps on envelopes before 1871 bought. Three-face lamps and old glassware bought. W. RICHMOND, Cold Spring, N. Y.

FOR SALE: Hand power, invalid or freight elevator, 600-lb. capacity. SIDNEY CROUNSE, Altamont, N. Y.

BALSAM PILLOWS filled with fresh Adirondack Balsam \$1.25 postpaid. Makes an ideal gift. Fill your own pillow; enough balsam in bulk for two pillows, \$1.00 postpaid. WONDER GIFT SHOP, Box 24, Newcomb, N. Y.

PURE HONEY. Satisfaction guaranteed. 5 lbs. clover, \$1; 10, \$1.90; buckwheat \$1.65. Prepaid. C. N. BALDARD, Valois, N. Y.

FARMERS. End crow pests and replanting. Treat corn seed with guaranteed formula costing few cents per bushel. Same mailed on receipt of \$1. R. WHEELER, Marathon, N. Y., R. D. 1.

HAVE YOU EVER considered weaving rugs at home to make money? An enjoyable business, now more profitable than ever. Our new catalog will interest you. Write for it today. UNION LOOM WORKS, 332 Factory St., Boonville, N. Y.

SECOND HAND BEEHIVES wanted. Send lowest prices, your station. FRED EVANS, Maryland, Md.

CORTLAND APPLE WOOD for grafting; large supply excellent wood. MARTIN THEW, Arthursburg, N. Y.

FOR SALE: Five cars Clover, Mixed, and Timothy hay. Baled ready to ship. MARYDALE STOCK FARMS, New Berlin, N. Y.

MAPLE SYRUP \$2.50. Butter candy 75c lb., delivered in zone 4. Collie pups. LEON D. NEISH, De Lancey, N. Y.

FINE THIN SHELL pecans, grower direct to consumer. 28c lb., prepaid, by mail and express, 6 lbs. up. JOE P. WILSON, Gulfport, Miss.

CASH PAID for old pictures published by Currier & Ives or N. Currier or others. Send description, condition, size and price wanted. Write today. NOVAL STEWART, Binghamton, N. Y.

FOR SALE Complete Creamery Equipment, 25 H. P. engine and boiler. New double copper vat, Pump vats. Scales, Shafting, Refrigerator, Glass ware, Testing tools. \$3.00. W. W. HOTCHKISS, 131 Forest Ave., Jamestown, N. Y.

SITUATIONS WANTED

DO YOU NEED FARM HELP. We have Jewish young men, able-bodied, some with, but mostly without experience, who want farm work. If you need a good, steady man, write for an order blank. Ours is not a commercial agency. We make no charge. THE JEWISH AGRICULTURAL SOCIETY, Inc., Box 4, 301 E. 14th Street, New York City.

EXPERIENCED GARDNERS, FARMERS, Milkmen, laborers supplied immediately. INTERNATIONAL LABOR AGENCY, 153 Bowery, N. Y. C.

POSITION ON DAIRY Stock Produce farm. Experience fifteen years. J. W. LYERLY, 168 Prospect Pl., Brooklyn, N. Y.

TOBACCO

LEAF TOBACCO—Good sweet chewing, 3 lbs. 90c; 5, \$1.25; 10, \$2.00. Smoking, 3 lbs., 60c; 5, 90c; 10, \$1.50. UNITED FARMERS, Mayfield, Kentucky.

GUARANTEED CHEWING or Smoking five lbs. \$1.50; Ten \$2.50; Fifty Cigars \$1.85; pay when received. KENTUCKY TOBACCO CO., West Paducah, Kentucky.

HOMESPUN TOBACCO: Chewing, 5 lbs. \$1.50; Smoking, 5 lbs. \$1.25. Fifty cigars \$1.75. Pay when received. Pipe free. FARMERS UNION, Paducah, Ky.

GUARANTEED HOMESPUN TOBACCO. Chewing, 5 lbs. \$1.50; 10-\$2.50. Smoking, 10, \$1.75. Pipe Free. Pay Postman. UNITED FARMERS, Bardwell, Ky.

CIGARS FROM FACTORY—Trial 50 large Perfectos postpaid \$1.00. SNELL CO., Red Lion, Pa.

COD LIVER OIL

PURE GOLDEN COD LIVER OIL FOR POULTRY animal feeding. Richest known anti-rachitic and growth promoting food. Five gallons \$6.75, 10 gallons \$13., at New York. Special prices on barrels. CONE IMPORT COMPANY, 624 Kent Avenue, Brooklyn, New York.

WOMEN'S WANTS

TWELVE ARTISTIC BIRTHDAY Cards, no two alike, fancy lined envelopes, postpaid \$1.00. SOUTH WORTH'S, Milford, Conn.

20 YARDS DRESS GOODS. Percales, Gingham, Voiles, etc., \$1.90. 3 lbs. Silks \$1. Pay postman plus postage. Large package Silks or Velvets 25c postpaid. NATIONAL TEXTILE CO., 661 Main St., Cambridge, Mass.

PATCHWORK 7 pounds Percales, Gingham \$1.4 lbs. creton samples \$1. 3 lbs. woollens \$1., suitable for Boy's Knee Pants, 3 lbs. White Flannel \$1. 3 lbs. Chamber Remnants \$1. 3 lbs. Corduroy Remnants \$1. Nile Green only. Pay postman plus postage. NATIONAL TEXTILE CO., 661 Main St., Cambridge, Mass.



The Service Bureau

A Department Devoted to the Interests, Welfare
and Protection of A. A. Readers



Sold Liberty Bonds--Money Lost

In 1919 I sold some Liberty Bonds, and invested the money in stock of the Lincoln Highway Tire Company, of Fulton, Illinois. I have never had a cent of interest, and for some time have heard nothing from the company. Will you please write them, and get my money for me?

WE would be very glad to secure the return of our subscriber's money were it possible, but our investigation shows that the company is bankrupt, and no dividends were ever paid to stockholders. We do not know what prompted our subscriber to sell his Liberty Bonds, which have back of them the entire resources of the United States Government, and invest

We Are Glad to Help

"It is with pleasure that I inform you that my brother received a check from — in full payment of his claim, and the case is now settled.

"We have you to thank for this, and wish to extend our heartiest thanks for your help, and cooperation, in the matter. I will be pleased to recommend your magazine at every opportunity."

* * *

I have received a check from — for the sum of \$62.30 for the posts. I am glad to receive that amount, and if it had not been for your efforts, I do not believe I would have received one cent of the bill.

I wish to thank you for your much appreciated services.

in stock of a comparatively unknown company.

Those who buy stock should fully understand that what they are really doing is loaning money. A man would have very little success in going through the country, asking for loans, and giving only a promissory note as security. Apparently, all he needs to do, however, is to change the wording of his request, and say he is selling stock, and promise big returns, in order to gain the confidence and money of a large number of those he talks with. Our definite suggestion to our subscribers is to invest no money in any stock which is not listed on the New York Stock Exchange. Even then it is wise to get your banker's advice before you invest.

Another "Tipster Sheet"

For some time we have been doing business with a broker house, Harry H. Phillips Company, 25 Broad Street, New York City. While we have nothing definite on which to base our judgment, we have a feeling that everything is not quite right with this firm.

UPON investigation we are informed that Harry Phillips was one of the defendants early last December, in an indictment returned by a Federal Grand Jury, charging use of the mails in the furtherance of a scheme to defraud. The charge was based on the operations of Phillips, as well as several others, in unloading on the public a large amount of stock of the Utah Lead Company, through the medium of a tipster sheet known as the Stock Market Reporter.

There seems to be an unusual number of these tipster sheets which claim to give financial advice. Any of our subscribers who receive copies of these

tipster sheets can well ask themselves, "Why, if the advice is so good, do not those who give it follow it themselves and gain a fortune?"

Promises—But No Action

On May 1, last, I ordered from the Radio Specialty Company, a "subantenna" which is an antenna to be buried in the ground supposedly to give better reception. This subantenna is manufactured by the Cloverleaf Manufacturing Company, 2714 South Canal Street, Chicago, and was shipped direct from the factory to me.

On June 8 I received the subantenna and installed according to directions, but got no results at all. On June 11 I wrote to the Cloverleaf Mfg. Co. about it. On June 21, I received a reply stating that they thought the subantenna was defective, to return it to them, and if found so, they would replace it.

I shipped the subantenna back to them on June 28, and sent a letter giving more details. They wrote that they were sending a new one, but I did not get it. I wrote them two letters in August, one in September, and two in November, and got a different reply every time. They were always going to send it, but at last offered to refund my money if I was not satisfied. So far I have received neither money nor the goods. Up to date this has cost me \$9.04, besides all the postage and bother, writing letters.

THOUGH we have written a number of letters to the Cloverleaf Manufacturing Company, they have not, up to date, favored us with a reply. In view of their failure to state their side of the case, we feel it is only fair to assume that the rather severe indictment of our subscriber is correct. We are publishing this letter for the information of our readers.

Agents' Verbal Promises Not Always Fulfilled

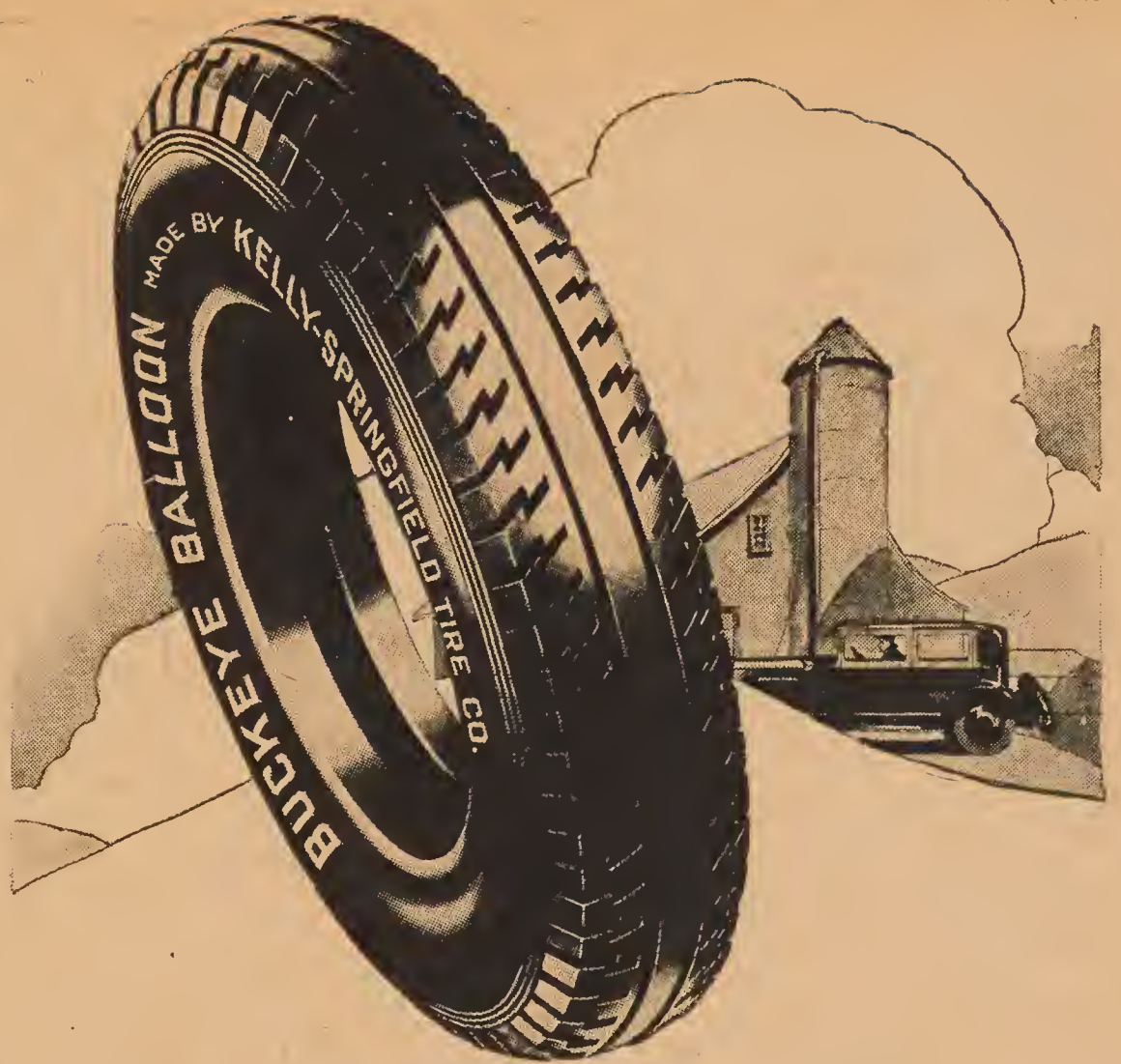
"A number of agents have been in this section (Long Island) selling gas stoves using a compressed gas. We signed a contract for one of these stoves. Now we find the matter was misrepresented to us. The stove works all right but it uses about twice as much gas as the agent told us it would. I used the stove for two weeks and liked it all right, but while the agent said it would not cost as much as our kerosene stove, we find that while the kerosene costs about \$6.50 for three months, the gas for this stove has cost us \$9.00 for five weeks."

THIS seems to be another case of selling methods by agents that might be classed as "strong-arm." We have investigated the company itself and find that they are thoroughly reliable. There are similar instances where subscribers have bought these stoves and found that they had signed an iron-bound contract and that the company felt themselves bound only by their guarantee and not for what the agent says. Consequently, there is little we can do to help, except to remind our readers to go by the printed contract rather than by what the agent may verbally tell you and to be very sure that you not only want the article he is selling, but that you will be able to pay for it when the obligation arises.

Government Wins Fraud Case Against Chichester Pills

AFTER a seven-year court battle Against Chichester's pills, a product marketed by the Chichester Chemical Company of Philadelphia, Pa., the Government has been upheld in its contention that the claims made for this product are "false and fraudulent and a misbranding under the Federal Food and Drugs Act." On February 13, after a retrial lasting eleven days, a jury in the Supreme Court of the District of Columbia rendered its verdict sustaining the government.

The so-called "diseases of women"



Built and guaranteed by Kelly-Springfield

In every great industry there are two outstanding manufacturers—one famous for the quantity of his output, the other for the quality.

When the statement is made about a tire "it's built by Kelly-Springfield" nothing more need be said about its quality. Kelly never has built anything but good tires.

Buckeye Tires are the sturdiest, most dependable tires in the low-priced field. They are sold by most Kelly dealers.

"Kelly dealers everywhere—there must be one in your town"

KELLY-SPRINGFIELD TIRE COMPANY
1775 Broadway, New York, N. Y.

BUCKEYE TIRES

Built by Kelly-Springfield

described in a booklet enclosed with the package, it was shown to the court, were in reality symptoms of seventy diseases, including such as cancer, tuberculosis, and typhoid and scarlet fevers. Chichester's pills were shown by analysis to contain aloes, sulphate of iron, cotton root bark, and extract of hellebore, and it was proved by the Government that they could not accomplish the cures claimed for them in the manufacturer's booklet.

The case emphasizes the advice we have so frequently given through the Service Bureau columns, "When you are ill, consult a reliable physician." American Agriculturist has, for years, refused to accept patent medicine advertisements.

A subscriber has called our attention to an error in a recent issue, in which a statement was made that radio station WBAL was operated by the Pennsylvania State Police. We are informed that Station WBAL is a Baltimore station, and that the station operated by the Pennsylvania State Police is WBAK. This station broadcasts daily at 10:30 A. M., 1:30 P. M., 4:00 P. M., and on Monday and Wednesday evenings at 7:00 P. M.

The Little Shepherd of Kingdom Come

(Continued from Page 28)

bearer of dispatches to the great Confederate General in Virginia, rode out of abandoned Richmond with the cav-

alry of young Fitzhugh Lee. They had threaded their way amid troops, trains, and artillery across the bridge. The city was on fire. By its light, the stream of humanity was pouring out of town—Davis and his cabinet, citizens, soldiers, down to the mechanics in the armories and workshops. The chief concern with all was the same, a little to eat for a few days; for, with the morning, the enemy would come and Confederate money would be as mist. At daybreak the last retreating gun rumbled past and, at sunrise, Dan looked back from the hills on the smoking and deserted city and Grant's blue lines sweeping into it.

Once only he saw his great chief—the next morning before day, when he rode through the chill mist and darkness to find the head-quarters of the commanding General—two little fires of rubbish and two ambulances—with Lee lying on a blanket under the open sky. He rose, as Dan drew near, and the firelight fell on his bronzed and mournful face. He looked so sad and so noble that the boy's heart was wrenched, and as Dan turned away, he said, brokenly:

"General, I am General Dean's son, and I want to thank you—" He could get no farther. Lee laid one hand on his shoulder.

(To be continued next week)



The Sign of Protection

WHAT TO FEED— HOW TO FEED— Both are Important to Chicks!

GROWING chicks turn an average of 32 per cent of their feed into gain in live weight during the first eight weeks. From 9 to 12 weeks, 17.5% of their feed goes into growth, and from then on till maturity, only 10.5% is thus utilized. These figures are based on the generally accepted standards for chick growth and food consumption recorded in Bulletin 96 of the Connecticut Agricultural Experiment Station.

Such figures form the basis for formulas *and feeding directions* worked out by the College Poultry Feed Conference Board. Your own farmer-owned organization, the Cooperative G. L. F. Exchange, Inc., mixes the formulas and distributes the feeding directions. But to get the greatest benefit, poultrymen must depend on themselves to put the feeds and feeding directions *into practice together*.



The **G.L.F.**
COOPERATIVE G. L. F. EXCHANGE, INC.
ITHACA, NEW YORK

These feeding directions of the College Poultry Feed Conference Board will actually simplify your methods:

1. Feed Starting and Growing Mash (G. L. F. formula) *alone*, from the first feeding, when chicks are 36-48 hours old, until they are six or eight weeks of age.

This is the time when chicks grow at the fastest rate, and so need as large a proportion of growth giving protein as the 17 per cent obtained from eating mash *alone*. In order that each chick will get full opportunity to eat, provide 3 square feet of flat hopper space to each 50 chicks.

2. At six or eight weeks begin to feed intermediate or coarse scratch, increasing gradually till the pullets are eating equal weights of grain and mash at twelve weeks of age.

During this period, rate of chick growth is lower, but energy requirements, which can be supplied from scratch grains, are on the increase. Allow more hopper space as the chicks grow.

3. From twelve weeks till maturity, continue to feed equal weights of mash and scratch.

The well developed pullets which result from this method of feeding need not be "held back" from inherited early production, for their bodies will be large enough and strong enough to stand the strain of laying.

COOPERATIVE G. L. F. EXCHANGE, INC.
ITHACA, NEW YORK

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COLLEGE OF AGRICULTURE
ITHACA N.Y.
A96C413-F CWR

AMERICAN AGRICULTURIST



\$1.00 Per Year

April 13, 1929

Published Weekly

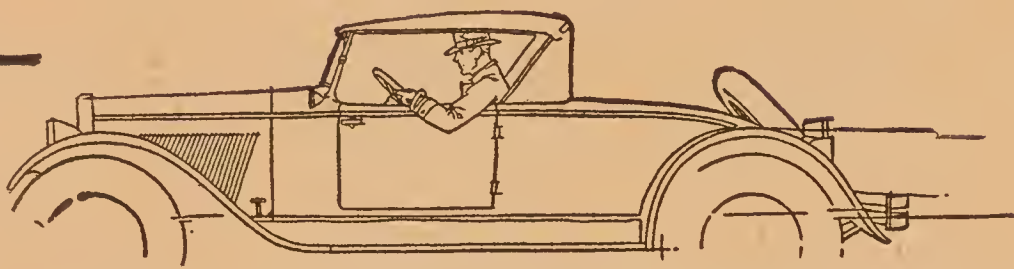


A Pig's Idea of Twins

—Courtesy, Better Crops with Plant Food.

"Meet These New York Master Farmers"--Page 5

Suppose someone offered to—
add 10% to 30% more power to
your engine—



lower oil consumption 15% to 50%—
reduce your repair bills 25%

You'd want to know how and why
The "how" is the amazing New Mobiloil
The "why" is told below

In spite of our scientific prejudice against superlative language, we are prepared to make some very strong statements about the New Mobiloil. We assure you that, compared with the actual test facts, they are conservative.

For example: We are willing to assure you that use of the New Mobiloil in your car, truck or tractor engine, provided you use the correct grade as specified on the Mobiloil Chart, will help it develop 10% to 30% more power than other oils generally supplied for the same purpose. Our road and laboratory tests have bettered the higher figure.

Thousands of miles of rigid speed tests on the Atlantic City Speedway have shown that the New Mobiloil consumes more slowly than other high-grade oils of equal body. And it is an established engineering fact that the oil which lasts longest at high speed also lubricates best at any speed. This amazing wearing quality of the New Mobiloil means a saving of 15% to 50% in oil consumption, fewer repair bills, and less time lost through costly breakdowns.

Substantial quantity discount

For a season's supply we recommend the 55-gallon and 30-gallon drums with convenient faucets. On these large containers your Mobiloil dealer will give you a substantial discount. His complete Mobiloil Chart tells the correct grade for your car, tractor and truck.

VACUUM OIL COMPANY

Makers of high-quality lubricants for all types of machinery

the New



Mobiloil

Make this chart your guide

It shows the correct grades of Gargoyle Mobiloil for certain prominent cars. If your car is not listed here, see at your dealer's the complete Mobiloil Chart, which recommends the correct grades for all cars, trucks, tractors, etc.

NAMES OF PASSENGER CARS	1929		1928		1927		1926	
	Engine		Engine		Engine		Engine	
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
Auburn, 6-66.....	BB	Arc.	BB	Arc.	BB	Arc.	A	Arc.
" 8-cyl.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" other models	BB	Arc.	BB	Arc.	BB	Arc.	A	Arc.
Buick.....	BB	Arc.	BB	Arc.	BB	Arc.	A	Arc.
Cadillac.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Chandler Special Six	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Chevrolet.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Chrysler, 4-cyl.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" Imperial.....	BB	Arc.	BB	Arc.	A	Arc.	A	Arc.
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
De Soto.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Dodge Brothers.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Durant.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Erskine.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Essex.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Ford, Model A.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" Model T.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Franklin.....	BB	Arc.	BB	Arc.	BB	Arc.	A	Arc.
Gardner, 8-cyl.....	BB	Arc.	BB	Arc.	BB	Arc.	A	Arc.
" other models	BB	Arc.	BB	Arc.	BB	Arc.	A	Arc.
Graham-Paige.....	BB	Arc.	BB	Arc.	A	Arc.	A	Arc.
Hudson.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Hupmobile.....	BB	Arc.	BB	Arc.	A	Arc.	A	Arc.
La Salle.....	BB	Arc.	BB	Arc.	BB	Arc.	A	Arc.
Marmion, 8-cyl.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" other models	A	Arc.	BB	A	A	Arc.	A	Arc.
Moon.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Nash, Adv. & Sp. 6.	BB	Arc.	BB	Arc.	BB	Arc.	A	Arc.
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Oakland.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Packard.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Peerless, 72, 90, 91...	BB	A	BB	A	BB	A	BB	A
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Plymouth.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Pontiac.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Reo.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Stearns Knight, 6-80.	BB	A	BB	A	BB	A	BB	A
" other models	BB	A	BB	A	BB	A	BB	A
Studebaker.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Vette, 8-cyl.....	BB	Arc.	BB	Arc.	A	Arc.	A	Arc.
" 6-cyl.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.

A New York Farmer Visits the Mediterranean

EDITOR'S NOTE: The following letter comes from Mr. and Mrs. Thomas Freestone of Interlaken, N. Y., who are enjoying an extended trip to England and countries bordering the Mediterranean Sea. Mr. Freestone says, "If you feel that this letter would be of interest to your readers, we will be glad to have you print it." The letter was written February 26 from aboard ship on the Adriatic Sea.

I AM sure you folks have wondered a good many times how we got along on our sea voyage and if we fed the fishes or were fed to the fishes. It is neither; we are both as well as when we left you in New York City. Our trip across was really a very good one. Tuesday night we ran into a storm that rocked us around considerably and there were a good many vacant chairs next morning at breakfast but not ours. The third day out we ran into the Gulf Stream and it was much warmer with several thunder showers. Most of the time we could be on deck. In fact, that is the best place to be if one does not want to be sick.

Time on Shipboard Passes Pleasantly

There was plenty of entertainment on board. We had a travel club which met after every stop and held a round table talk on the things we had seen or heard. There was also a Masonic club which met about once a week with talks from members from many parts of the world. With movies, lectures and musicals and several kinds of games the week soon passed by and about 2 P. M. Monday, the eleventh we sighted land and from that time until six o'clock when we anchored, everybody was on deck. The land was the Island of Madeira and a more beautiful spot I never expect to see. The houses are all painted white with red roofs and with the mountainside for a background, it is pleasant to look at.

We Walk Up the Hills

At some of the ports we are taken to shore in tenders and at others we walk off as the ship is anchored alongside the pier. There are always conveyances waiting to show us around the city. Some of the conveyances are autos, some are sleighs drawn by yokes of oxen or a team of mules. The driver walks. Sometimes a buggy carries four people, two facing the other two. This is drawn by one horse and in Gibraltar the men of the party had to walk or trot up the very steep places. I found my wind wasn't as good as it used to be. We are divided into parties a, b, c, and d, each party leaving about one-half hour after the other. Guides are furnished, each one being numbered so each party can keep with their guide. The conveyances are also numbered so we always keep with the party we start with that day.

At Madeira we rode to the railroad station in a sleigh drawn by a yoke of oxen. It is a cog railroad and is very steep. We were taken up about three thousand feet where luncheon was served. We had a wonderful view of the city of Funchal, the harbor full of ships and the ocean beyond. We were taken down the mountain in a sleigh managed by two men and it was an exciting ride sometimes for it looked as though we would be dashed over the mountain-side. They always swerved us around the curves which were very sharp, at times by the means of ropes which were fastened to the sides of the sleigh. We wandered around there and took a few snapshots and went on board at 6 P. M.

The Old City of Cadiz

We sailed for Cadiz, arriving about six next morning. While three hundred years ago Cadiz was next in importance to Rome it is today just a dirty city and a real disappointment after seeing Funchal. At six P. M. February 15, we pulled anchor and sailed for Gibraltar. We arrived at Gibraltar at six P. M. on February 16.

(Continued on Page 9)

It Takes More Than Size to Make a Farm

Some Suggestions for Buyers to Consider Before Closing the Deal

By H. L. COSLINE
Associate Editor, American Agriculturist

FROM past experience we have come to expect at rather frequent intervals, letters from our subscribers telling of tragic experiences in buying a farm. They tell of investing their life savings, made by sacrifice and self-denial, and of their high hopes that at last they are on the road to independence. They also tell of the discouragement and disappointment coming from their inability to keep up the payments, and the interest. Finally in many cases it becomes necessary to sell or to let the farm go back to the original owner. As a rule, those who write of such experiences are bitter against the man who sold them the farm, and we can well understand this feeling.

Men who are engaged in selling farm real estate are probably as honest as any other group of business men yet it seems to us that the old rule of "let the buyer beware" is still the rule in far too many cases when it comes to the sale of real estate. Once the farm is purchased, there is no opportunity of taking the product back to the seller and having the money returned in case it proves unsatisfactory, neither is an opportunity given for exchanging it for something more suitable, except, of course, at a price.

Some Land Best Suited for Forests

As a matter of fact, there is a lot of land in AMERICAN AGRICULTURIST territory that should be taken out of farming. The land is not fertile enough to maintain, for its owner what we like to call the American standard of living. In the

long run it would be better for all concerned if this land could be planted with forest trees, either by the state or some other agency. The land was cleared when labor was cheap and the standard of living relatively low. Its owners eked out a meager living when most farm work was done by hand, but now small, irregular, hilly, infertile fields make it impossible to use farm machinery and produce a crop which can be sold at a reasonable profit in competition with that raised on better land.

It is impossible on many farms of this type for anyone to make a living, let alone pay for the farm. Yet such farms are placed in the hands of a real estate agent for sale, and he sells them if he can. The agent must often realize the impossible task the new owner is shouldering. Under such conditions, is any man justified by enthusiasm and optimistic talk in unloading such property on the man who thinks he is buying a farm?

A Good Time to Buy a Good Farm

A number of authorities who have their fingers on the pulse of the farm situation, maintain that now is an excellent time to buy a good farm. This does not necessarily mean that prices may not be even more favorable next year than they are at the present, but there is much evidence that good farms in New York, Pennsylvania, New Jersey, and New England can be purchased now at prices which are very reasonable, based upon their earning power over a period of years.

At the same time it seems to us that now is an especially unfavorable time to buy a poor farm. There is always a tendency for the best farms to

sell at a price somewhat below that justified by their earning capacity, and for the poor farms to sell at a price higher than their real earning power would justify. This condition has applied for years, but now, due in part to the increased use of machinery, the poor farm is an especially unfavorable place to make a living.

Optimism Sometimes Leads to Trouble

In a general way, mistakes in buying farm property seem to be made most frequently by two classes. First, we have the man who has worked practically all his life in a village or city, and who now wishes to retire. For some unaccountable reason, these men frequently feel that they know more about farming than the man who has been at it all his life. They are optimistic to an extent that they believe they can succeed where others have failed. Usually their savings are relatively small, and they are naturally drawn to cheaper farms where they can make a substantial payment on the purchase price, rather than to a more expensive farm where the initial payment would necessarily be small. Other buyers come from western states, where they have become accustomed to high land values, and therefore feel that prices asked for many eastern farms are ridiculously low. In states where many of them formerly farmed; one piece of land is about as good as another, and they do not realize the vast difference in the producing power of two different farms here.

Although many of the mistakes in buying are made by people belonging to these two classes, it is entirely possible for a person who has lived in a particular county for years to buy the wrong farm. Whoever the buyer may be, his attempts

(Continued on Page 11)

Better Service from Fewer Milk Plants

How to Lower the Cost of Handling Milk Fifty Dollars per Farm per Year

By LELAND SPENCER
Professor of Marketing, New York State
College of Agriculture

IN a study made recently by this college, it was found that the cost of handling milk and cream in country plants depended very largely upon the volume of milk handled. In most of the plants which handled less than 4,000,000 pounds of milk a year, the cost was more than 30 cents per 100 pounds, the average cost exclusive of central office expense and cans being 32.9 cents. In most of the plants which handled more than 8,000,000 pounds of milk a year, the cost was less than 25 cents, averaging 19.6 cents per hundredweight. This difference of 13.3 cents in the average costs for large and small plants is equivalent to about \$120 a year on the milk from a 15-cow dairy—a very significant sum of money to the average New York dairyman.

Although the inefficiency of plants handling a small volume of milk is easily demonstrated, and generally recognized by the proprietors of the plants, a large number of such plants continue to be operated. About one-half of the plants which ship milk to the New York market handle less than 4,000,000 pounds of milk a year and the average volume for all plants is only about 5,000,000 pounds. The operation of so many small plants and the low average volume for all is a matter of serious concern to both producers and consumers of milk, since the costs of distribution are thereby increased, retail prices enhanced, and farm prices depressed.

Obviously, it would be very much in the public interest to increase the volume of milk in the country plants. The only practicable way of doing

this is to assemble the milk at fewer plants, or in other words, to eliminate some of those now being operated. This suggestion prompts an inquiry as to how many plants, and which ones, should be eliminated and what would be the net effect of this procedure, considering the costs of handling milk from the farms and shipping it to market, as well as the cost of handling the milk in the plants.

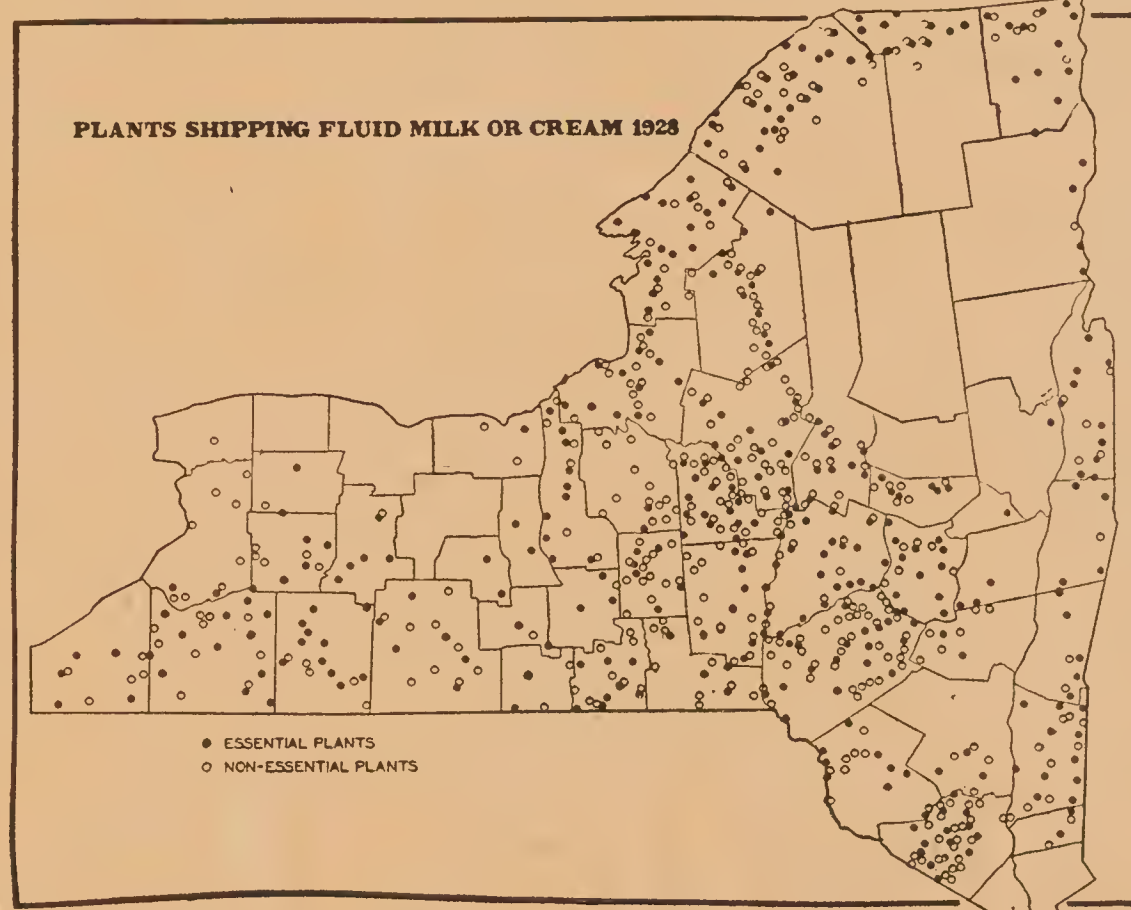
These questions have been answered, in part at

least, by a study which has just been completed. In this study, the 2838 farms supplying milk to 36 plants were located on maps showing the hills, valleys, lakes and streams, and the improved and unimproved roads. Five of these plants were butter and cheese factories, two were condenseries and 29 were fluid milk plants. The butter and cheese factories were left out of the calculations because they were located in communities back from the railroads and handled a lower grade of milk than the other plants.

A careful study of these maps and of the facts ascertained as to hauling distances and costs led to the conclusion that 17 of the 29 fluid milk plants could be eliminated without causing serious inconvenience to the dairymen in delivering their milk.

A new set of maps was prepared showing only the 14 essential plants and the farms from which each plant would obtain its supply, assuming that the milk from each farm were delivered to the nearest plant. The hauling distance for each farm according to this arrangement was computed, and compared with the actual hauling distance. It was found that 56 per cent of the farms would have the same hauling distance as before; 14 per cent a shorter haul; and 30 per cent a longer haul, averaging 2.8 miles. Considering all farms there would be an average increase of 0.5 mile in the distance from the farms to the milk plants. Only 0.1 mile of this increased haul would be on unim-

(Continued on Page 13)



Locations of essential and non-essential plants shipping milk and cream in New York State.

Editorial Page of the American Agriculturist

AMERICAN AGRICULTURIST

Founded 1842

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Vol. 123 April 13, 1929 No. 15

Price Cutting in the Milk Market Again

THERE is trouble in the milk market again. More than in the marketing of any other crop, selling milk is a business of extremes. In spite of the fact that there was a greater shortage this year than ever before, there is now a surplus. Enough is too much; that is, in order to have enough at certain times, there must be a surplus at other times.

We are entering the surplus period. It is not as bad here in the New York market as it was a year ago, but there is enough surplus to be exceedingly troublesome, and enough to start the old game of cutting prices. We reported the beginning of the trouble last week. Certain dealers have been selling milk as low as one dollar a can under the regular market.

Here is what happens. Some dealers during the surplus period will have more milk than their regular market will absorb, so they think this is a good time to steal some of the other fellow's market. They go around and offer the other fellow's customers milk at low enough prices so that it is a real inducement for the consumer to buy it. Then the regular dealer must either cut prices also or lose his market for fluid milk.

In justice to the larger dealers like Borden and Sheffield, we must state that they have been doing their best to hold the market firm during the past few weeks, and there are many smaller independent dealers also who refuse to cut prices. But it only takes a few bad actors to demoralize the market, and a little extra milk.

We are informed that all of the dealers are expecting that they will soon have to reduce prices. Some reduction may be expected before long, but the pity of it is that price-cutting always forces prices down farther than they need to go and sooner than is necessary. A reduction of one cent a quart means a loss of a million dollars a month to the dairymen of this section.

Some time ago we promised to place responsibility on those who began the price-cutting game this year. This is a difficult thing to do, but much of the trouble this year can be placed on the small, independent dealers and some of the independent cooperatives. We understand that one of the worst offenders is the Morris Dairy Company. But there are several others, and sad to relate, among these are some of the independent cooperatives.

Now AMERICAN AGRICULTURIST is for the independent milk cooperative. Some of these far-

mer plants have done much to serve their own community and the whole industry. Many of them will take losses rather than disrupt all the dairy industry by cutting prices. But there are a few on the wrong side.

Of course, final responsibility for a disrupted market rests largely with farmers themselves, for we take the position that no matter what organization a dairyman belongs to, or if he does not belong to any, he owes a responsibility to himself and to others to see to it that the cooperative or independent dealer or the large organization does not use his milk to ruin the market and reduce the prices of every dairyman in the milk shed.

The Governor's Problem

WITH the close of the New York State legislature, Governor Roosevelt is now faced with this problem: The legislature passed farm relief legislation requiring appropriations of \$32,000,000. It passed the gasoline tax providing a revenue of \$24,000,000. In some way the Governor must make the two balance, for it is impossible for him to sign legislation calling for appropriations when there is no money in the State treasury to cover. What can he do? He cannot change any of the legislation. He must either veto it or sign it, or call the legislature back and endeavor to get the legislators to change it.

From the farmer's standpoint, the farm relief legislation is the best set of laws that has ever been passed by any legislature. It is the result of long years of work of many farm organizations, including AMERICAN AGRICULTURIST, and many individuals. Much credit is due also to the Governor's Agricultural Advisory Commission. In our opinion, the farm legislation was about the only big job which the legislature did this year that was really worth while. If the Governor can only find some way to sign these bills, we will have made more progress toward real assistance to the agriculture of the State than has ever been made before.

Just to refresh your memory, here briefly are the farm relief bills that were passed, but at this writing not yet signed by the Governor:

I. SCHOOL BILLS

1. \$1,000,000 more State aid for two, three, and four teacher schools.
2. \$3,050,000 in State aid for the one-room school.

II. ROADS

1. \$5,400,000 in State aid for State highways to take the place of 35 per cent of the cost of building these roads now paid by the counties.
2. \$1,000,000 more State aid for building bridges on State highways now built by the counties.
3. 25 per cent of the gas tax, estimated at \$6,000,000, to be paid to the localities and to New York City on a mileage basis (one-fifth of the \$6,000,000 or \$1,200,000 to go to New York City, the remainder to the localities).
4. \$550,000 more State aid to the towns to relieve them of their contributions towards maintenance of State highways.

III. DIRECT TAX

1. Elimination of the direct State tax on real estate, an estimated saving of \$13,000,000.

IV. INCOME TAX

1. Increased exemptions to small income tax payers, estimated at \$2,000,000.

Let's Go To St. Louis

ONE of the troubles in the dairy business is the difficulty the farmer and his wife have getting away from their cows for even a short vacation. But this year some way, somehow, hundreds of dairymen in the AMERICAN AGRICULTURIST family are going to pry themselves loose for a few days from October 12 to 19 and travel together on the big AMERICAN AGRICULTURIST special train to St. Louis to attend the National Dairy Show, with special ex-

cursion rates. In fact, by traveling in a group, it will be possible to keep expenses at a minimum.

In cooperation with the New York Central, we have already begun to make arrangements and to work out the details for one of the finest vacation trips farmers have ever had. Aside from all of the fun and the relaxation and recreation that you will have, there will be plenty of chance to learn something about the business. You know, the South and the Southwest are becoming greatly interested in the dairy cow. The National Dairy Show has become much more successful since it has been held in or near Dixie than it was even in our northern dairy country. The reason is that the farmers of the South are increasing their dairy business.

All right, let us go down and see what they are planning, and how they are carrying out their plans. Incidentally, let us have a good time doing it. Farmers have too few good times.

If interested, write us for further information, with the understanding, of course, that you are not obligated in any way to go.

For Little Girls and Their Mothers

ON the second page of the March 30th issue, we announced the beginning of a new service called "Little Recipes for Little Cooks". It provides for publishing once a month in AMERICAN AGRICULTURIST a full page of helps and recipes for little girl cooks.

We also furnish for ten cents a copy, which is the cost to us, a scrapbook where the little girls of the A. A. family can keep their recipes and their other material in this course.

When The Farmer, the Standard Farm Paper which first started this service, published the announcement, the editors received over three thousand letters during the first week or so after it was started. These letters came from little girls and their mothers asking for the scrapbooks and for more details. As this is written, it is only two or three days since our folks received our first announcement, and how the letters are pouring in!

If you are a little girl, or if you are the mother of a little girl, we urge you to turn back to our March 30th issue and read about this new service; or if you cannot find it, write us. Better still, take our word that this is one of the best things that has been done for girls in a long time, and send ten cents for the scrapbook and the beginning instructions for getting your girl interested in the great art of cooking.

Who Gets This Ten Dollar Bill?

WE frequently get letters from subscribers asking about some article of equipment which was advertised in AMERICAN AGRICULTURIST in a recent issue.

On page 19 of the April 6th issue we announced a contest to determine how carefully our subscribers read the advertisements which appear in the paper. We offer a ten dollar bill for first prize in this contest as well as a number of other prizes. If you missed the announcement last week, we suggest that you find the April 6th issue and turn to page 19 for full details.

Eastman's Chestnut

A SPINSTER friend of mine recently told this story:

She was out for a walk when she encountered some young boys in the old swimming hole minus everything but Nature's garb, and she was quite horrified.

"Isn't it against the law to bathe without suits on, little boys?"

"Yes'm," announced freckled Johnny, "but Jimmy's father is a policeman, so you can come on in!"

Meet These New York Master Farmers

Through Them New York State Agriculture Is Honored

LAST fall a Board of Judges conferred the title "Master Farmer" on twenty New York State farmers. The purpose back of this award is to honor agriculture. Although some degree of financial success is a requirement for the title, the emphasis in choosing "Master Farmers" is placed on a man's success as a father, citizen and community builder. There is no desire to set one farmer above another but rather a sincere

production of potatoes was 200 bushels per acre.

The outside activities of this Master Farmer include membership in the Farm Bureau where he was a director for nine years, as well as membership in the local Grange and church. He is a director of the Allegany-Steuben Ayrshire Club, and the National Ayrshire Breeders' Association, and a member of the New York State Co-operative Seed Association and the Empire State Potato Club.

* * *

M. C. BURRITT,
Hilton, Monroe County.

MR. BURRITT owns and operates the fruit farm in Monroe County on which he was born. He was still a boy when his father died, but in spite of this, he entered the New York State College of Agriculture and graduated from it. Later he was identified with the State College as county agent leader and then as Director of Extension of the State College of Agriculture.

During this time, Mr. Burritt kept the farm and maintained an active interest in its management. Several years ago Mr. Burritt had the courage of his convictions and, in order to give his children the advantages of farm life and rural environment, resigned from his position with the college and went back to the farm. Mr. Burritt keeps complete cost account records, and in fact has records on the farm dating back for over seventy-five years.

In addition to his farm work, he has maintained a wide interest in a number of outside activities. At one time a leader in the state Farm Bureau work, he is at present a strong believer in the benefits to be derived from Farm Bureau membership. For several years Mr. Burritt was actively interested in the management of the G.L.F., a farmers' cooperative buying organization. He has also been very active in the New York State Horticultural Society, and recently served a term as president of that organization. In his spare moments, Mr. Burritt finds time to act as appraiser for the Federal Land Bank, to write authoritatively on farm questions, particularly those applying to fruit growing and to take an active interest in local affairs such as the traveling county library and the Boys' and Girls' 4-H club work.

Mr. and Mrs. Burritt have three children: Helen, sixteen years of age, and Stephen, fourteen years, both attending high school; and Maurice, Jr., eight years old.

* * *

J. J. YOUNG,
Randolph, Cattaraugus County.

MR. YOUNG is located on a rather hilly farm, just off an improved road. His success from a financial point of view may be traced to an excellent producing herd, which is fed to a very large degree from products raised on the farm. This herd of purebred Holsteins averaged better than 9,000 pounds of milk last year. Mr. Young was one of the first men in his county to grow alfalfa, and also believes in raising a variety of silage corn which will grow ears of good size by the usual cutting time.

There is a wonderful view from the porch of this Master Farmer's home. One looks across a broad, fertile valley toward a range of hills in the distance. The house itself is convenient and homey. Mr. Young's pride in his family

is well justified. His oldest son, Russell, is at present teaching agriculture in Randolph High School. There are four other children; Edith, the twins, Brace and Grace, and Clayton. Mr. Young is a director of the local farm bureau, a member of the Grange and a director of the local Dairymen's League.

* * *

THOMAS MCKEARY,
Marilla, Erie County.

AMONG the New York State Master Farmers are men with college degrees, men who have had the advantage of high school training and others like Thomas McKeary, who realize the advantages of training for one's business, but who were unfortunately unable, because of circumstances beyond their control, to obtain these advantages. Mr. McKeary attended grade school, and through hard work was able to attend high school for three winters. This, however, did not complete his education, as it is evident to anyone who visits with him that he is still, and always will be, a student.

He worked as a hired man for 17 years, was a tenant for 9 years and has been a farm owner for 19 years. The farm is relatively small in area but big in influence. In visiting with the owner of it, the writer was impressed by the fact that he is apparently far more interested in living than in merely making money.

Mr. McKeary specializes in growing certified seed potatoes and is a director

of lambs are fed during the winter. The farm has been in the family for some time and Mr. Wellman worked with his father until his death. At the present time one of Mr. Wellman's sons-in-law is with him on the farm and is taking an active part in its management.

It would be difficult to find a more pleasant and well-equipped home either in the country or in the city. It is not only comfortable and convenient, but the planting of flowers and shrubs has added greatly to its attractiveness. Across the drive is a fine lawn and tennis court and it is a custom of the entire Wellman family to have an informal get-together there one evening a week during the summer.

* * *

HENRY S. NICHOLS,
Curriers, Wyoming County.

IT is an inspiring experience to walk with a Master Farmer over his fields and to visit with him concerning his experiences. After talking with a number of them it becomes evident that one of the outstanding characteristics of this group is their ability to study the situation and develop a plan best suited to conditions as they are on their own farms.

The principal source of income on Mr. Nichols' farm is a herd of purebred Jerseys. The rule here seems to have been to "put the eggs all in one basket, and then watch the basket." In addition to the fact that this herd has an average production of 8,000 pounds of milk, Mr. Nichols has added to his income by working up a special market for the milk. Some years ago an agreement was made with the Fairmont Creamery of Buffalo whereby Mr. Nichols' milk was used for making starter. The fact that Mr. Nichols has been able to hold this market indicates

(Continued on Page 30)



Mr. Karr and Elton Hanks

wish to show that real success is attainable for the man who tills the soil.

Many of our readers are personally acquainted with one or more of those who were given this honor; others heard a few of them speak from radio station WJZ on December 19 when Governor Franklin D. Roosevelt formally made the awards to them.

Now through a very short account of their work and a few pictures, we hope to make you better acquainted with these men. Space will not allow us to include the entire list in this issue, but it is our plan in an early issue of AMERICAN AGRICULTURIST to tell you about others of this group.

* * *

ISAIAH D. KARR,
Almond, Allegany County.

THE one fact that most impressed the writer following a visit to Mr. Karr's farm was that two young men were helped through high school and college by him and that one of them, Elton Hanks is now married and back on the home farm. What finer recom-



The Burritt Home

mendation could he have than the fact that one of his several nominations for the honor of Master Farmer was sent to us by Elton Hanks.

Mr. Karr's business is well-balanced. There is a fine, purebred Ayrshire herd, in addition to a good flock of white Leghorn hens and a number of cash crops. This combination which includes the sale of a considerable number of cattle, gives an unusual variety of source of income. The average milk production of this herd for last year was 7,488 pounds of milk, the flock of over a thousand hens produced better than 145 eggs per hen and the average



Mr. and Mrs. J. J. Young and family

of the New York State Seed Potato Association.

This Master Farmer has a fine record of service to his community and county and is known as a man who is always ready and willing to lend his efforts to any worthy cause. He was president of the Erie County Farm Bureau for several years and is at present a director of the State Federation and chairman of the Federation Marketing Committee.

* * *

HARRY E. WELLMAN,
Kendall, Orleans County.

THE day the writer called at the Wellman farm the owner was found working across the road in an orchard recently acquired by him. The orchard



Mr. Henry Nichols (at the left) with a fine string of purebred Jerseys.

Think of Your Harvest Now

The Fight is on

From calyx or petal-fall spray time on, you growers are fighting for a quality harvest. Even beyond the picking cost, remember it costs more to grade a 60% crop than it does one that rates 90%.

On apples you'll profit by making your calyx application the most thorough you know how. A double-strength dose now will prevent the second and third brood codling moths.

Start early, using ASP Dust or "Orchard Brand" Arsenate of Lead with "Dritomic" Sulphur. The fungicidal value of sulphur makes it an essential of every growing season application. There is no extra labor cost and no trouble in mixing.

In a season of over-production, QUALITY alone finds a ready market and pays a profit.

USE "ORCHARD BRAND" MATERIALS

ARSENATE OF LEAD CALCIUM ARSENATE ASP DUST
ARSENITE OF ZINC DITOMIC SULPHUR 85-15 DUST
BORDEAUX MIXTURE FUNGI DUST 90-10 DUST
LIME SULPHUR SOLUTION OIL EMULSION

GENERAL CHEMICAL COMPANY
40 Rector Street, New York
St. Louis Los Angeles San Francisco

If you have overlooked asking for "Cash Crops" send us a card right now.

ORCHARD BRAND SPRAY & DUST MATERIALS

Even if you cannot control market prices— you can still control your own profit

A farmer in Marinette County, Wisconsin, sprayed repeatedly in the face of certain low market price. His yield was 350 bushels per acre—200 bushels more than any of his neighbors who did not spray. He received top market price for his potatoes—32c—and realized a net profit of \$95 per acre while his neighbors took losses, averaging \$10 per acre, because fearing a low market they refused to invest in spray materials.

Insure YOUR profit by using **Nichols Triangle Brand Copper Sulphate** (Bluestone)

Mix your Bordeaux Mixture fresh and spray early and late

Nichols Copper Co.

25 Broad Street

New York

LIVERMORE'S PEDIGREED SEEDS

Potatoes - Oats - Barley - Silage Corn
Husking Corn - Cabbage

From HIGH YIELDING, TESTED
STRAINS. Inspected for disease-
freedom and purity.

K. C. LIVERMORE, Box A, HONEOYE FALLS, N. Y.



Write for catalog
and prices.

Luscious Strawberries

From Your Own Garden

Set plants NOW. We Will Send You

50 Premier best early

50 Big Joe best midseason

50 Chesapeake best late

50 Champion best everbearer

All for \$2.50 postpaid. 25 plants
of each \$1.50 or 100 of each \$4.00,
all postpaid. Berry-Book Free.

THE W. F. ALLEN CO.

170 So. Market St. Salisbury, Md.



STRAWBERRIES

BIG HEALTHY, TRUE - TO - NAME
PLANTS fresh dug for your order.
Satisfaction guaranteed.

Premier (per)	50	200	500	1,000	5,000
Sen. Dunlap (per)	.50	1.20	2.00	3.75	17.85
Ford (per)	.60	1.30	2.25	4.50	21.35
Big Joe (per)	.60	1.30	2.25	4.50	21.35
Chesapeake (per)	.85	1.40	2.50	5.00	24.25
Lupton (per)	.50	1.25	2.00	4.00	19.00
Mastodon E. B.	1.10	3.00	5.00	10.00	47.50
Champion E. B.	.60	1.75	3.00	6.00	28.50
Progressive E. B.	.60	1.75	3.00	6.00	28.50

Order direct or send for free catalog.
RAYNER BROS., SALISBURY, MD.

"Plants that Please"

Mention American Agriculturist
When Writing Advertisers, Be Sure to



A.A.'s Western New York Farm and Home Talk

National Farm Relief Progress

MY last notes were written

By M. C. BURRITT

make a poor farmer on a poor farm

about farm affairs while en route to Washington. These notes are written at home, after the first full week of outdoor work of the season, about matters in Washington which may affect farm affairs. The coming special session of Congress called primarily for "farm relief" is the all absorbing topic of interest in Washington. It has three phases: (1) the tariff, especially as it affects agriculture; (2) temporary or emergency so-called "relief", and (3) permanent aid to agriculture. Upon the first



M. C. Burritt

there is quite general agreement and a good prospect that farmers will be measurably well satisfied with what they will get. The second is and will continue to be highly controversial. The third and last involves certain continuing aid along lines already established with some revision and expansion. There is comparatively little interest in it.

What the Tariff Will Be

Farmers have presented by far the best case to Congress they have ever put together on the tariff. They have been well organized, on the job and of one accord, all of which is unusual. They have based their argument, not on the principle of the tariff, which has long been established and recently overwhelmingly reaffirmed, but on the necessity and fairness of equality of application of tariff. Their arguments have tended to show that the present level of tariff on industrial products is approximately 42 per cent ad valorem, while the level of tariffs on agricultural products is only 22 per cent ad valorem. The tariffs asked for will in general level up the agricultural tariff wall to approximately the industrial level. Farmers are not opposing other tariffs but have served notice that if a general attempt is made to raise the industrial level, they will oppose it. While no statements have been given out, as the Ways and Means Committee is still working on the schedules, there is no reason to believe that their report will be unfavorable to farmers' requests, although it probably will not go the whole way and grant everything asked.

Emergency "Relief"

Upon this phase of "farm relief" there is much difference of opinion and little agreement. It includes the question of the disposal of the surplus. Even the administration leaders are not agreed. Many—one might almost say most—members of Congress are still thinking in terms of the old McNary-Haugen bills. But Congress is deferring to the President and waiting for his plan. He has declined to give it at present. His Secretary of Agriculture left town when he was asked to testify before the House Committee on Agriculture. Leaders are "passing the buck". The fact is that the best thinkers among them know that there is little that they can do to relieve farmers. They do not know what to do. They have made political promises upon which they do not know how they can deliver.

There are many who feel that any program based on proposals to dispose of constantly recurring surpluses—which it would probably tend to increase—is foredoomed to failure. Rather must a program be based on preventing surpluses in the first place. This means fewer farmers and better quality products. It is not possible nor would it be desirable if possible, to

successful by legislation. Rather should he be encouraged to migrate to the cities.

Permanent Relief

There are, then, comparatively few things that legislation can do to help farmers. These are chiefly clearing away obstructions to their free action to protect themselves and promote their own interests, performing certain tasks chiefly of a research character, which they cannot well perform for themselves and providing certain facilities adapted to their use. Some of these things have already been done. Others need to be done.

Tariffs should be equitably applied. Taxes should be levied and paid in proportion to services rendered and according to ability to pay. Legislative provision has already been made for cooperative action particularly suited to agriculture, as the corporation is to business. There is need for credit legislation to provide them with funds suited to their conditions. The underlying farm mortgage credit also needs revision. There is always need for research into the fundamental problems of land utilization, production, economic organization, marketing, consumption and distribution.

None of these is spectacular. No political capital can be made out of them. They probably would not satisfy either the politician or his political constituency. Will anything be done about them?—M. C. Burritt, Hilton, N. Y., March 31, 1929.

More Pay for Nearby Milk

THE Dairymen's League Cooperative Association has taken interesting action on the matter of extra differentials for milk produced in Orange County, New York, and in the state of New Jersey. The League will now pay twenty-five cents a hundred extra for milk testing 3.4 per cent produced in either Orange County or New Jersey.

The reason for giving these producers this better price is due to their location near the New York market. For some time it has been possible with the use of tank trucks to put nearby milk on the market at a considerable saving over what it costs in handling it on the railroads. It is evident that more and more milk will be transported from nearby points by truck. The League recognizes this situation and has taken action accordingly.



"Thank goodness! There's a money-back guarantee with this parachute; th' darn thing didn't open."—JUDGE.

Increase Your Potato Profits

—by Cutting Growing Costs

Treat seed with **SEMESAN BEL** *instantaneous* dip to save time and labor..control seed-borne diseases and increase crop yields!

Stop wasting time and risking seed by using old-fashioned soak treatments. Protect your white and sweet potatoes against seed-borne diseases and increase your yield with SEMESAN BEL, the *instantaneous* dip. Easy to use—just *dip* and *plant*! One man can treat 200 to 400 bushels of seed a day, at a very low cost. Harmless even to sprouted seed, which other treatments so often injure. Get your can of SEMESAN BEL from your dealer *now*. Ask him also for FREE pamphlets on Du Bay Seed Disinfectants for other crops—Semesan Jr., for seed corn; Ceresan, for seed grains; and Semesan, for vegetable and flower seeds and bulbs.



Most dealers handle SEMESAN BEL. Those listed below carry a large stock and can quickly supply your needs.

NEW YORK

COUNTY	DEALER	TOWN
Albany	George H. Price	Albany
Allegany	Rowe & Kennedy	Canaserago
	Kohn's Drug Store	Wellsville
	W. E. Robbins Hardware	Wellsville
	Wellsville Milling Co.	Wellsville
	Hazlett & Chase	Whitesville
Cattaraugus	Economy Drug Store	Salamanca
Cayuga	D. S. Ramsey	Auburn
Chemung	Banfield-Jennings Co-op.	Elmira
	Geo. W. Peck Co.	Elmira
Chenango	Harold L. Keeler	Norwich
Clinton	J. D. Bowen	Saranac
Cortland	McGraw & Elliott	Cortland
Erie	W. H. Geib & Son	East Aurora
	R. F. Knoehe & Son	Hamburg
	W. G. Arthur	Orchard Park
Franklin	Cooks Pharmacy	Chateaugay
	D. Dickinson & Co.	Malone
Herkimer	The Sauer Drug Corporation	Herkimer
Jefferson	Walter N. Bisnett	Watertown
Lewis	F. C. Snyder's Pharmacy	Lowville
Livingston	Geo. W. Peck Co.	Dansville
	Genesee Hardware Co.	Genesee
Monroe	Joseph Harris Co., Inc.	Coldwater
	Burr & Starkweather Co.	Rochester
	Hart & Vick	Rochester
	James Vick's Sons	Rochester
Nassau	Hempstead Seed Co.	Hempstead
	William Kroemer	Hicksville
New York	Max Schling Seedmen, Inc.	New York
Niagara	The John T. Darrison Co.	Lockport
	James O. Rignel Co. Inc.	Lockport
Oneida	Utica Seed Co.	Utica
Onondaga	Frederick H. Ebeling	Syracuse
	Onondaga Farmers Supply Co., Inc.	Syracuse
Ontario	Peck Hardware Co.	Canandaigua
	Dorchester & Rose	Geneva
Otsego	Kenneth W. Root	Cooperstown
St. Lawrence	The Barr Pharmacy	Canton

NEW YORK

COUNTY	DEALER	TOWN
Schenectady	Empire Seed Co.	Schenectady
Schoharie	Hoagland's Pharmacy	Cobleskill
Schuyler	W. M. Pellett	Watkins Glen
Seneca	J. F. Farrell	Seneca Falls
Steuben	Hawkins & Hill	Addison
	B. C. McKay	Atlanta
	Geo. W. Peck Co.	Bath
	Kinkaid Produce Co.	Cohocton
	Peck-Lookup Co.	Cohocton
	Geo. W. Peck Co.	Corning
	Geo. W. Peck Co.	Prattsburg
	C. J. Tierney	Wallace
Suffolk	Long Island Produce & Fertilizer Co., Inc.	Riverhead
Tioga	The Beach Drug Co.	Owego
Washington	Harry W. Baker Ph. G.	Hudson Falls
Wayne	W. G. Carpenter & Co.	Lyons
Wyoming	E. K. Lucas	Gainesville
Yates	Geo. W. Peck Co.	Penn Yan

NEW JERSEY

COUNTY	DEALER	TOWN
Burlington	Fenimore Brothers	Mt. Holly
	J. S. Collins & Son	Moorestown
Camden	Gardner Cheeseman	Grenloch
Cumberland	Minches Seed Store	Bridgeton
	I. Serata & Sons	Bridgeton
	S. V. Davis	Shiloh
	Vineland Farmers Exchange, Inc.	Vineland
Gloucester	Reed & Estelow	Mullica Hill
	Ed. Hann	Swedesboro
Mercer	Farmers Co-operative Assn. of Mercer County	Trenton
	M. C. Ribsam & Son's Co.	Trenton
	Jos. H. Courtney & Co., Inc.	Windsor
Monmouth	W. T. Pierce	Allentown
	Rooney & Ely Co.	Englishtown
	Monmouth County Farmers Exchange	Freehold

NEW JERSEY

COUNTY	DEALER	TOWN
Monmouth	C. H. Roberson	Freehold
	H. B. Kemp	Long Branch
	Reed & Perrine	Tennent
Salem	Andrews and Avis	Elmer
	Garrison's Rexall Pharmacy	Elmer
	G. M. Andrews & Son	Woodstown
Salem	The South Jersey Farmers Exchange	Woodstown

DELAWARE

COUNTY	DEALER	TOWN
Kent	James B. Bice Co.	Dover
	W. M. Hinkle	Dover
	J. A. Frear & Sons	Dover
	Clarence Voshell & Son	Felton
	W. W. Wilson	Frederica
	Harrington Hardware Co.	Harrington
New Castle	Ellwood A. Pierson	Wilmington
	The Philips-Thompson Co.	Wilmington
Sussex	George E. Swain	Georgetown
	Chipman & Penuel	Laurel
	Collins and Ryan	Millsboro
	Burton Brothers	Seaford

MARYLAND

COUNTY	DEALER	TOWN
Anne Arundel	Arundel Supply Co.	Annapolis
Baltimore	The Meyer Seed Co.	Baltimore
	Wiseman-Downs Co.	Baltimore
Carroll	King's Pharmacy	Westminster
Cecil	G. A. Allender	Elkton
	C. W. Ashby	Rising Sun
Frederick	P. L. Hargett & Co. Inc.	Frederick
Harford	McComas Bros.	Bel Air
Howard	Patapsco Pharmacy	Elicott City
Kent	Massey & Wilmer	Chestertown
Queen Annes	Queen Annes County FB.	Centerville
Washington	Ernest Miller	Hagerstown
Wicomico	White & Leonard	Salisbury
Worcester	D. H. Bradford & Son	Snowhill

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Gibson-Snow Co. Inc.	Albany
E. C. McKallor Drug Co.	Binghamton
Ellicott Drug Co.	Buffalo
Gibson-Snow Co. Inc.	Buffalo
Harvey Seed Co.	Buffalo
Plimpton-Cowan Co. Inc.	Buffalo

NEW YORK

Joseph Harris Co.	Cold Water
The Geo. W. Peck Co.	Elmira
Hempstead Seed Co., Inc.	Hempstead
Long Island Drug Co.	Jamaica
McMonagle & Rogers	Middletown
Alexander Drug Co.	New York
Peter Henderson Co.	New York
Schieffelin & Co.	New York
Stumpp & Walter Co.	New York
York Drug Co.	New York
Doty & Humphrey Drug Co.	Poughkeepsie
Gibson-Snow Co. Inc.	Rochester
Hart & Vick, Inc.	Rochester
Vick & Dildine Co.	Rochester
Gibson-Snow Co. Inc.	Syracuse
Charles Hubbard Son & Co.	Syracuse
John L. Thompson Sons & Co. Inc.	Troy
A. H. Williams Co. Inc.	Utica
W. W. Conde Hardware Co.	Watertown
Litchard, Schultheis & Johnson, Inc.	Wellsville

DELAWARE

O. A. Newton & Son	Bridgeville
N. B. Danforth, Inc.	Wilmington

NEW JERSEY

Chamberlain & Barclay	Cranbury
Doughten Seed Co.	Newark
New Jersey Wholesale Drug Co.	Newark
Roeber & Kuebler Co.	Newark
Bennett, Denison, Clayton & Co.	Prospect Plains
American Chemical Specialties Co.	Springfield
Swedesboro Supply Co.	Swedesboro
Weatherby & Stewart	Swedesboro

MARYLAND

James Baily & Son	Baltimore
J. Bolgiano Seed Co.	Baltimore
Gilbert Bros. & Co. Inc.	Baltimore
Henry B. Gilpin Co.	Baltimore
Griffith & Turner Co.	Baltimore
Loewy Drug Co.	Baltimore
The Meyer Seed Co.	Baltimore
Muth Brothers & Co.	Baltimore



SEMESAN BEL

REG. U. S. PAT. OFF.

Instantaneous Seed Potato Dip

BAYER-SEMESAN COMPANY, Inc., 105 Hudson Street, New York, N. Y.

Successors to Seed Disinfectants Divisions of The Bayer Co., Inc., and E. I. du Pont de Nemours & Co., Inc.

Look for the brown can with the red Du Bay Diamond when you buy SEMESAN BEL.

Now . . . time to think about TOP DRESSING small grains

YOU can decide right now—while you are reading this paper—whether or not you want to make extra money this year from your small grain crop.

This advertisement is a friendly suggestion. Follow its recommendation. Top dress oats, wheat, barley, with Chilean Nitrate of Soda, as soon as spring growth begins. This amazing nitrogen fertilizer will give an increased yield per acre that will pay you back its cost many times over.



HERE'S ACTUAL PROOF!

An increase of 23½ bushels of wheat per acre due entirely to Chilean Nitrate. Bags on left represent acre yield (16.7 bushels) using 200 lbs. mixed fertilizer and 150 lbs. basic slag per acre. Bags on right show acre yield (40.2 bushels) using same fertilizer plus 200 lbs. Chilean Nitrate per acre. Farm of E. F. Pickel.

Chilean Nitrate is the only natural nitrate fertilizer. 800,000 farmers used it last year to increase their yields and profits.

Now is the time to buy Chilean Nitrate for top dressing. If you don't know how or where to get it a letter from you will have prompt attention.

FREE—Fertilizer Book.

Our new 44-page illustrated book, "How to Use Chilean Nitrate of Soda," tells how to top dress small grain and how to fertilize all other crops too. Free. Ask for Book No. 1 or tear out this ad and mail it with your name and address written in the margin.

Chilean Nitrate of Soda EDUCATIONAL BUREAU



57 WILLIAM STREET, NEW YORK, N. Y.

In writing please refer to ad No. 1-18

1/3 of a silo of Corn for \$1.50



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With the A.A. Crop Grower



Soy Beans for Hay

Under what condition will soy beans make a good substitute hay crop?—E. W., New York.

SOY beans make an excellent crop where a shortage in the hay crop is not realized until late in the season. The crop should be planted about corn planting time. The soil should be fitted as for corn, and 60 to 120 pounds of seed per acre used. It is advisable to inoculate unless soy beans have been grown on the soil recently. The beans should be cut down in the early fall, allowed to lie in the swath until they wilt, and they can then be raked into windrows for a while and put into cocks until thoroughly cured. Good varieties for New York State are Black Eyebrow and Wilson. The trouble with this crop for hay is that the seed is relatively costly.

This does not seem possible but the authority was reliable so we cannot do other than accept it. Not only is there no profit in growing corn for grain but the situation is getting worse. It would seem that producers in certain sections have formed a habit of growing this crop and continue to do so in spite of losses. There is plenty of chance for growing corn for silage at a profit and possibly for growing seed corn, but no chance in growing it for grain, at least if the producer values his time at what it should be worth.

Spring Wheat Seed Sources

Is it advisable to buy spring wheat seed from other sections, or is it just as satisfactory to use seed grown on my own farm?—D. B., New York.

THERE is no objection to using home grown seed if it is fully matured, disease free and well grown. Scab is often troublesome, and for this reason it is frequently advisable to get spring wheat seed from other sections.

Cereal Mixtures Not Advised

Is it advisable at any time to sow a mixture of cereal grains such as oats, barley, buckwheat and spring wheat?—C. L., New York.

THERE is no evidence to show that a better yield can be secured by planting a mixture, except in the case of barley and oats. This combination works well where Alpha barley is used, which will ripen about the same time as oats.

Fertilizer in 2-8-10 Ratio Not Advised for Upland Soil

It is generally known that a 2-8-10 is a popular fertilizer formula. At the same time, the State College does not recommend it. Is there any explanation as to why it is used so much?—G. F., New York.

IN the first place, a 2-8-10 is a relatively cheap fertilizer on the ton basis for the total amount of plant food (20%) which it carries. This, of course, is due to the relatively low cost of potash per unit as compared with nitrogen. It is also believed that some local fertilizer dealers encourage the use of this grade, due to the fact that they can sell at a price which allows them to compete favorably with other grades carrying the same amount of plant food. The college does not recommend 2-8-10 because there is no experimental evidence to indicate that a fertilizer of this ratio is well balanced for any upland soil. They do recommend this proportion for muck soil but here again muck soil fertilizer should be made especially for muck soil.

Adding Lime for Clover

How much lime is it necessary to add in order to grow clover and how often should it be added?—B. D., New York.

THERE is no set rule for the amount of lime to apply. It depends to a large extent on the condition of the soil and the type of crop that is grown. The one satisfactory way is to have your soil tested either by your Farm Bureau Agent or State College of Agriculture in order to determine how much lime is necessary. Ordinarily, lime, where needed, is added once in the rotation and if enough is added, it is probable that this will be sufficient. The common amount to add is a ton per acre of ground limestone, or a comparable amount of other forms. However, under certain conditions this may be more than necessary and in other fields it may not be enough to grow clover or alfalfa.

Inoculating for Alsike Clover

Is it possible to get a good growth of alsike clover on wet soil, and should inoculation be used under this condition?

ALSIKE clover will grow in a wet soil, or a soil so low in lime that red clover will not produce a crop. It will also grow on lands that are less fertile than soils that are favorable for red clover. If alsike clover has not been grown recently on the soil you mention, we certainly advise you to inoculate, as the cost will be very low.

Where Mammoth Red Clover Is Advisable

How does Mammoth red clover differ from Medium red clover, and what are the conditions where it will be advisable to use the mammoth rather than the medium?

MAMMOTH red clover grows a little ranker than medium, and it is advised in sandy, dry, hill land where the fertility is relatively low. On fertile land the mammoth makes a growth that is too rank. Under favorable conditions mammoth can be made to live from four to seven years, but in New York State the crop is rather small after the second year. Mammoth clover will also grow in soil that has a lime content too low to grow medium red clover. Ordinarily mammoth red does not make a second growth, but once in a while it does.

Heavy Clay Soil Not Suited To Alfalfa

Will it be possible to tile drain heavy clay soil so that it will be suitable for growing alfalfa?

THIS will depend largely on just how heavy the clay is. Poorly drained clay can be recognized where there is a mottled color in the soil just above the hard pan. This mottling is an indication that the soil is not well enough drained to grow alfalfa, and it is doubtful whether tile drainage would help this condition due to the fact that it will be necessary to put the ditches so close to each other. In our opinion, better results would be secured, on soil not suitable for alfalfa, by growing other crops, such as red clover, or alsike, rather than by attempting to put the soil in condition for growing alfalfa. Alfalfa is a good crop, but there are conditions where it is not advisable to attempt to grow it.

No Profit in Growing Corn For Grain

Is it possible to make any profit from growing corn for grain?—B. W., New York.

WE were surprised recently to hear the statement made that the acreage of corn for grain in New York State is greater than the combined acreage of potatoes, beans and cab-



Cranberry Root Worm Beetle On Apples

Can you tell us something about the insect that eats the surface of our apples? The insects seem to leave a trail behind them and it looks as though someone had written on the apple.—J. T., New York.

THIS injury is probably caused by the Cranberry Root Worm Beetle which has caused quite a bit of damage last year in Wayne County. No very satisfactory method has been worked out yet for controlling it but it is stated that one grower secured fairly good control by spraying with a lime wash, containing arsenate of lead just as these beetles appeared. It is believed that these beetles must have some other host plant as there are few cranberries in Wayne County, however, this has not been definitely proven.

A New York Farmer Visits the Mediterranean

(Continued from Page 2)

The harbor was full of war vessels and the town was full of cars. It was a very lively scene on the streets that evening. The next day we were shown through the lower parts of the fortress and around the rock they claim to have the finest botanical garden in all Europe. We spent considerable time in that.

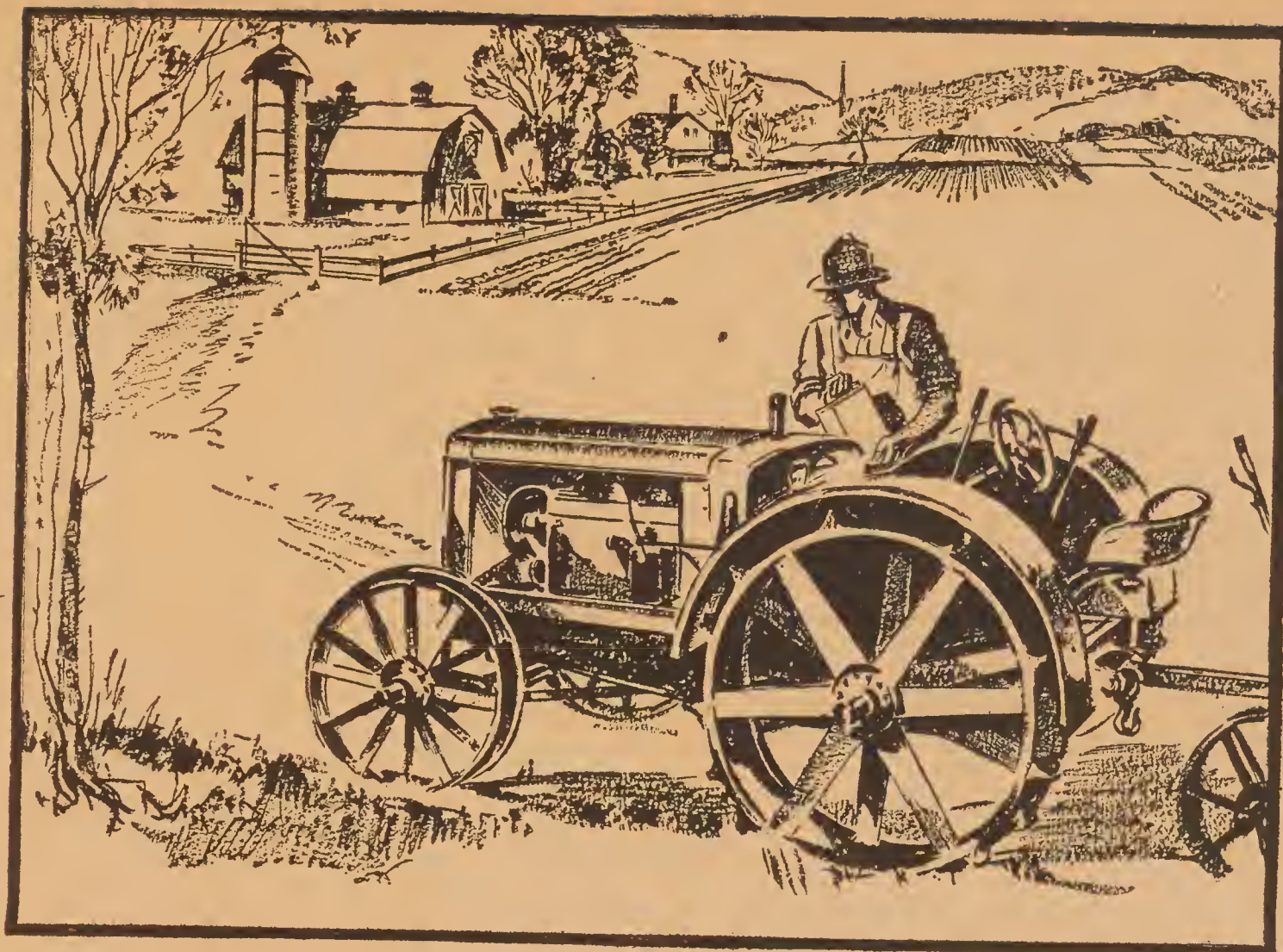
I don't think anyone will question the strength of Gibraltar after seeing it.

At six P. M. we sailed for Algiers arriving next afternoon at five. Algiers is where the east and west meet, and it is some mixing! I have never seen so many different races at one time. There are the Arab quarters and the French. Everybody was warned not to take any valuables with them and to watch all the time, but even then pickpockets got some hand bags and pocketbooks, while we were being conducted through the Arab quarters. Of all the filthy places this certainly has first place.

Where Christianity and Mohammedanism Met

We in the United States can hardly conceive of human beings living in such filth. The French quarters are clean and good but we were all glad when we sailed for the Island of Malta. We lost one of our anchors in Algiers harbor and it took all day to find it and mend the chain. The next morning we anchored at Malta which is a much cleaner city. A great deal of history centers around this island. Here the Knights of Malta and later St. John were the buffers between Mohammedanism and the Christian religion. There are many things of great interest here and we had a most pleasant and profitable day. The Cathedral of St. John the Baptist is a wonderful building and is like unto Westminster Abbey in that it contains the remains of so many of the Knights of Malta and of all the Grand Masters. We were in the rooms where the lodge held its meetings. The armory contains every kind of implement of war ever used in ancient times. All good things come to an end, so we had to leave Malta.

Our next stop was to have been at Palermo, but it was so rough the tender could not come out so we had to continue on to Naples. "Sunny Naples" and it was sunny both days we were there with old Vesuvius belching smoke all the time. Here we visited the oldest cathedral we have been in and the museum with so many relics taken from Pompeii. We don't see much of the agriculture of the country. Of course, Madeira grows grapes and is famous for its wine. The part of Spain we visited seemed to be prosperous, growing many things which we do as well as many olives.



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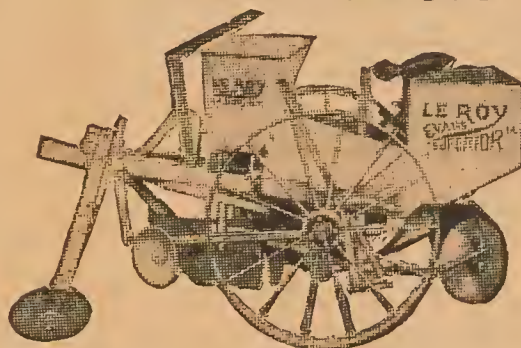
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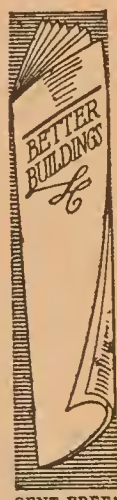
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With the A. A.
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What Does A Fence Cost?

WHAT are the factors which make up the cost of a fence? How can we estimate the cost of a substantially-built fence as compared with a light and cheaply built one, and which is really the cheaper? These are some of the questions which must be answered by the farmer who tried to solve his fencing problems in a rational and accurate manner.

Fencing makes up a very considerable part of the cost of farm operation. Several years' detailed cost accounts kept by Illinois farmers in cooperation with the Illinois College of Agriculture showed that the cost of fence upkeep on the average farm was about 10 cents per rod per year. This includes interest on the investment, depreciation, materials for repairs, labor for repairs and maintenance, and so on.

The average size of the farms was 235 acres with an average of 1150 rods of fencing, or an average of 5.1 rods per acre. This means an average cost of 51 cents per acre, or \$115 per farm. This does not include the whole cost which should be charged up to fences, such as crops lost from ground occupied by the fence, losses from turning on growing crops at fences, labor of cutting weeds along fences, damage done by weeds and insects harboring along fence rows, loss of time from too small or wrong shaped fields, and so on. It is usually estimated that these indirect costs are at least equal to the direct costs, or that the total fencing costs will approximate one dollar per acre. At this rate, it can easily be seen what a tremendous sum this annual fencing bill runs into and that any improvement by which it can be materially reduced becomes of vital importance.

Evidently one of the first methods of cutting the cost of farm fencing is to build better fences, of such a type that they will give a lifetime of efficient service at the minimum expense. Why should any sane farmer year after year pay this heavy toll for poor fences, when the first cost for the right kind of material and for permanent construction is but little more, when the labor cost is no greater, and when the yearly cost of interest, depreciation, and repairs and upkeep of a poor fence is out of all proportion to its initial cost? Even the best of materials will not give a good fence unless properly planned and constructed.—I. W. D.

Why Auto Lights Burn Out Suddenly

"I am having considerable trouble with the lights burning out on my 1926 Ford car, I use standard 6-volt battery and 21 c.p. 6-8 volt bulbs. I have put on a new switch and new light wires, but the trouble continues. The lights do not flicker or flare up, but go out all of a sudden either while I am driving or just as I turn the switch on. Can you advise me what is the cause of the trouble and how to remedy it?"—E. B.

THIS is a very common trouble where the lights are taken off the battery charging circuit, as is the standard practice with most cars, and is usually due to a poor connection some place in the battery circuit. The battery floating on the charging circuit acts to hold down the voltage of the generator; but if a poor connection at the ammeter, the battery, or the ground cuts down very much the amount of current which goes into the battery, the third-brush voltage reduction is stopped and the generator voltage rises several volts above normal, and the bulbs are burned out. Sometimes much the same effect is produced if the third brush gets worn out or does not touch properly, also causing the generator voltage to rise to some extent, but not as in the other case.

The burning out of the bulbs is a danger signal, and the trouble should be located and remedied, otherwise there is danger that the generator coils may be burned out.—I. W. D.

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CHAMPION Spark Plugs Promote Efficiency on the Farm

PRESENT day, advanced farming methods involve a speeding up of all work through mechanical aids. Trucks, tractors, and a great variety of engine-driven farm equipment, together with the farmer's personal car, give the farm a new and revolutionary efficiency.

And efficiency on the farm is a vital factor to the successful farmer.

Wherever and whenever there is a hard task to be done by engine-driven farm equipment these new improved Champions meet every need for sustained power and dependability.

The exclusive sillimanite insulator with a remarkable new glaze is practically impervious to carbon and oily deposits. Special analysis electrodes have been greatly improved to resist pitting and burning and through intrinsic design insure a maximum spark and a fixed spark gap under all operating conditions.

You can be sure of superior performance and service with the new improved Champions. But to secure the best results from your engine be sure it is equipped with the proper type. There is a correctly designed Champion for every type and kind of engine, and for every operating condition. Consult your dealer's chart which shows which Champion should be installed in your engine for best results.

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Champion SPARK PLUGS

TOLEDO, OHIO WINDSOR, ONTARIO

It Takes More Than Size to Make a Farm

(Continued from Page 3)

to make a living on a farm that was purchased at two or three times its real value, are tragic. In many cases it is not too much to say that the farm would be of doubtful value as a gift, on condition that the new owner must operate it.

Most farmers buy but one farm in a life time, and for this reason it is important to take all the time necessary before making a final decision, and signing the papers. What type of farm, in the first place, should a buyer look for? In general the answer is, "The kind of a farm that has been profitable for its former owner." Before buying any farm, it is an excellent plan to ask yourself the question, "Why is the present owner willing to sell?" If he is selling because he is unable to make a living, the chances are exceedingly small that you will be able to succeed where he has failed.

It is interesting to go into the history of some farms, and note that they have changed hands about every three or four years. A man buys a poor farm with high hopes of success, and it takes about three years to thoroughly convince him that he has made a mistake. He then puts the farm up for sale, and takes his loss. There are many farms where the dealer in real estate has been the only man who has profited from it. It is sold at fairly frequent intervals, and a good commission is the harvest of each sale. If the farm is for sale to settle an estate, or because the owner has saved enough to retire, it is good evidence that the farm can be operated on a paying basis.

Poor Farming, Or Poor Soil?

We are all inclined to be optimistic by nature, and where the crop yields are low the prospective buyer is all too likely to feel that it is due to the poor farming methods followed by the owner, rather than to the naturally poor soil. In rare cases this may be true, but in such cases, the neighboring farms should be inspected to see whether they have a prosperous appearance. Where crop yields in a section are uniformly poor, and the buildings are noticeably in need of repair, it is almost conclusive evidence that the farms in that section are lacking in fertility.

Many men feel that it is worthwhile to rent a farm for a year, or two, before buying. In this way it is possible to gain an intimate knowledge of the farm which cannot be gained in any other way. It is at least important to visit the farm several times during the growing season, in order to get a clear idea of the crop yields, soil fertility, drainage conditions, and so forth.

The size of the buildings, and the way in which they have been kept up, tell a valuable story to the man who will heed it. Many prospective purchasers figure that they can easily repair old buildings, or build new ones. This, of course, is fine, but if the present owner is not able to maintain the buildings, it is fairly good proof that he does not earn enough to make these repairs. At any rate, it is far cheaper to buy buildings already in good repair than it is to build new ones. At the same time, it is important to know whether or not the buildings are more than adequate for the needs of the farm. The upkeep of buildings is a big item of expense.

Study the Probable Income

It is a good plan before buying a farm to estimate the probable income and expense. This should be done realizing again that we are likely to be optimistic, and that the real income will probably be lower than the estimate. At the same time, there must be some source of income, before there can be an income. What can be expected of a hill dairy farm of one hundred acres that grows only enough roughage for five or six cows? Under such conditions, where can any man possibly figure an income that will enable his family to live, and have any surplus with which to make payments on the farm? It will be worth any man's time before he buys a farm to talk

with the county farm bureau agent, who, if he has been in the county for a length of time, will be thoroughly familiar with land values.

We have discussed at some length the kind of a farm that should not be bought, at the same time it is evident that certain conditions are necessary before a success can be made on a good farm. If ability is placed first, certainly capital should be placed second. The day is past when a man can start out with a good wife and a team of horses and pay for a farm. It takes up-to-date equipment to make it go in these days. It is, in fact, rather common for a farm buyer to use too much of his capital for his first payment, and to save too little for working capital. It is worth while to be able to buy for cash, at a discount, and to be able to buy supplies when they are needed.

About Borrowed Capital

We have received numerous letters from subscribers who wish to own a farm, objecting to the difficulty of getting a loan from the Federal Land Bank. We mention this for several reasons. In the first place, if it is impossible to get a loan from the Federal Land Bank, it is extremely doubtful, in our opinion, whether conditions are at all favorable for final success. In spite of the fact that the Federal Land Bank has found it necessary to be rather careful in the matter of loans, they have been forced to foreclose in a limited number of cases. There are a number of advantages in getting a loan through the Land Bank, when it can be done. Its advantages are briefly, that this bank cannot foreclose so long as the interest is kept up, that the mortgage is for a long period of time, and consequently need not be renewed, and that the payments are made by an amortization plan, whereby set yearly payments take care of the interest, and at the same time pay off the principal in a certain number of years.

There is one condition under which it may be proper to buy if it is impossible to get such a loan. Sometimes the owner is willing to sell the farm on contract, even though the purchaser may have practically no money to pay down on the purchase price. This indicates that the owner believes that the purchaser can make a success, otherwise there would be little or no object in selling him the farm. At the same time the purchaser has invested little or nothing, and so stands less chance of losing, than when he pays in 50 per cent of the purchase price.

Improvements Become Real Estate

Recent correspondence points out another important angle which should receive consideration by anyone buying a farm. In one such case, the purchaser has paid a considerable part of the cost in cash, and has given a mortgage for the remainder. He then proceeded to improve the farm by installing water systems, and electric lights, and by building new buildings. Later it became evident that he could not keep up payments on the farm, and the mortgage was foreclosed. The sad part of this, in addition to the fact that a large part of the cash invested in the farm will probably be lost, is the fact that there is absolutely no chance of receiving pay for the improvements. The general rule which has been established is that anything attached to the land becomes real estate. By this rule, water systems, tile drains, and many other improvements become a part of the farm, and as such go back to the holder of the mortgage when the mortgage is foreclosed. The only way to realize anything on this investment in improvements is to sell the farm for a sum greater than the amount due on the mortgage. In many cases, at a forced sale, it is impossible to do this.

Buying a farm is a serious proposition. There is little we can do to help our subscribers once they have made the mistake, but as a result of the many letters we received we are giving you the situation as we see it in the hope that it may prevent some mistakes in the future.

Here's how Delco-Light builds profits and cuts expense

HOW would you like to save two to three hours a day on your farm? How would you like to make \$300, \$500, \$1000 extra profit from your work? Other farmers, with problems exactly like yours, are doing it. And so can you.

Read what Henry Zumbahl writes: "Delco-Light makes possible three extra hours' work a day in the barn. Two of my brothers work with me, so that's nine additional working hours a day." At only 30 cents an hour, that one item alone makes the Delco-Light Plant pay \$985.50 extra profit a year! . . . Unusual? Not at all. W. E. Miller says Delco-Light enables two men to do the work of four. And in the house, Mrs. C. E. Schmidt finds that electricity and running water save the time of a hired girl. Figure that saving by the year!



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The new 4-cyl., 1500-watt Delco-Light Power Plant provides ample power and light for the bigger jobs.

Lights in his hen-house bring him an extra dollar per hen per year. . . . No matter what kind of farming you do, Delco-Light will help you do it better and more profitably.

Earns its cost twice over

Yes, Delco-Light does save time and work—in a hundred ways. And look at the other ways it pays profits. Here's W. C. Stuart, of South Dakota, who says lights in the farrowing pens save him better than one pig per sow. . . . Then there's Frank Saukup, a poultryman.



Zumbahl Brothers of Missouri. Henry Zumbahl says, "We use Delco-Light for lights in the house, two barns, hogshed, hen-house, garage, smoke-house and silos. The safety from fire means a great deal."

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Call your local Delco-Light dealer. Arrange for a home demonstration. But before you do another thing, mail the coupon for our new, handsomely illustrated book. It will tell you about a Delco-Light Plant that exactly fits your needs. It will prove how Delco-Light pays for itself in savings and extra profits. Get your copy of this big, new book now. Mail the coupon today.

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
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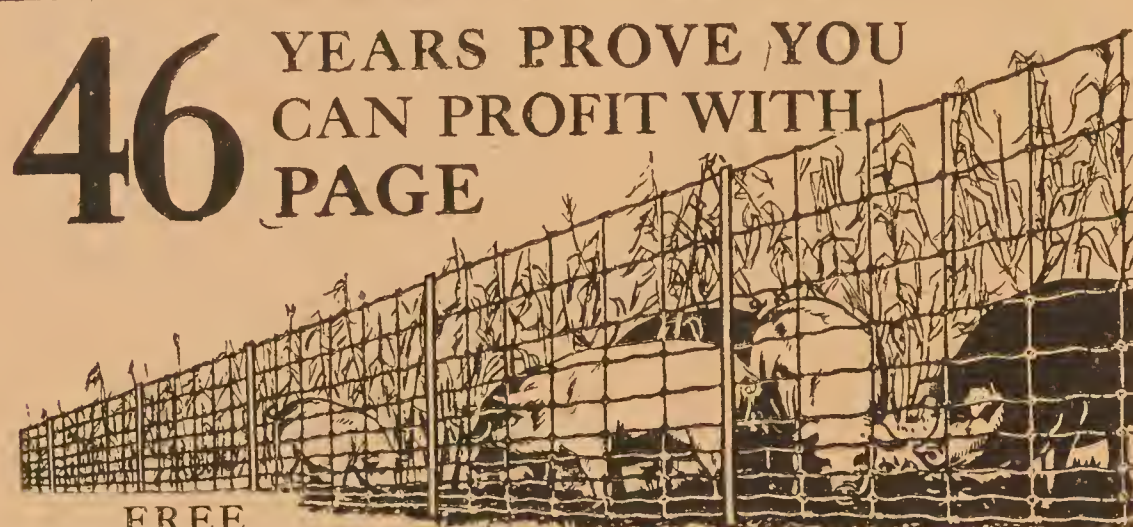
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With the A. A. Dairyman

Equipping the Farm for Business

I PURCHASED and moved to my farm seventeen years ago. The farm contains 87 acres of good, fertile land, and will carry 25 head of cattle. The barn which was on the place was old and not very warm, so naturally my first thought was for a new barn. The silo was an old rickety affair and not much good so before building a barn, I erected a 12x30 foot tile silo.

Although the first cost of this silo was more than many other makes, it has proven more economical, considering that it needs no repairs and keeps the ensilage in as perfect condition as it is possible for it to be kept. I erected this silo where it would be at one end of the new barn.

I then turned my attention to the new barn. All through the previous winter I had been planning it, and had the services of the engineering department of a company selling barn equipment. They furnished me with blue prints so when spring came in 1915, I was ready to build. I built a building 40x70 feet, with basement. I then installed steel stanchions which were the last word in cow comfort.

At the time of building my barn I bought individual drinking cups for the cows, but did not install them until the next fall. It was surprising to notice the increase in the milk yield, owing to the fact that water of the right temperature was within the reach of the cows at all times. This one improvement has been a money maker, increasing the milk yield, and economizing on labor. A cow can do her best only when she is comfortable.

Saving Steps at Chore Time

The water is pumped into a large tank at the barn by a power-pump, which is run by a one horse-power gasoline engine. The cost of running this engine is very small, being about two cents a day to keep the barn supplied with water for all the stock. I also use a feed-truck for feeding ensilage, which saves many steps in a day, making one trip at feeding time instead of eight or ten. Another labor-saver is a litter carrier, which makes the task of cleaning the barn much easier and agreeable. Any twelve year old boy can handle the carrier.

When the ground is not too soft, I often use the manure spreader, going direct to the field from the barn, which saves one handling of the manure. No one piece of machinery yields greater returns for the money invested than

a manure spreader, which allows even spreading over a field, and makes the manure cover more ground than when spread by hand.

Milking Machine Proves Worth

I have a herd of 18 cows and only myself to do the milking, so I purchased a single unit milking machine of standard make, and can do the milking in about one half the time it took by hand. I operate two units and strip the cows after taking the milker from them. This is very satisfactory, the cows seem to like this method of milking, and there are no ill results.

I use a half ton truck to haul my milk to a milk plant four miles away. I count my truck as part of my farm equipment as it saves me much time, which is an important factor in the busy season. I use the truck in getting repairs, feed, etc., saving much time. My wife also drives the truck, often helping me out in this way.

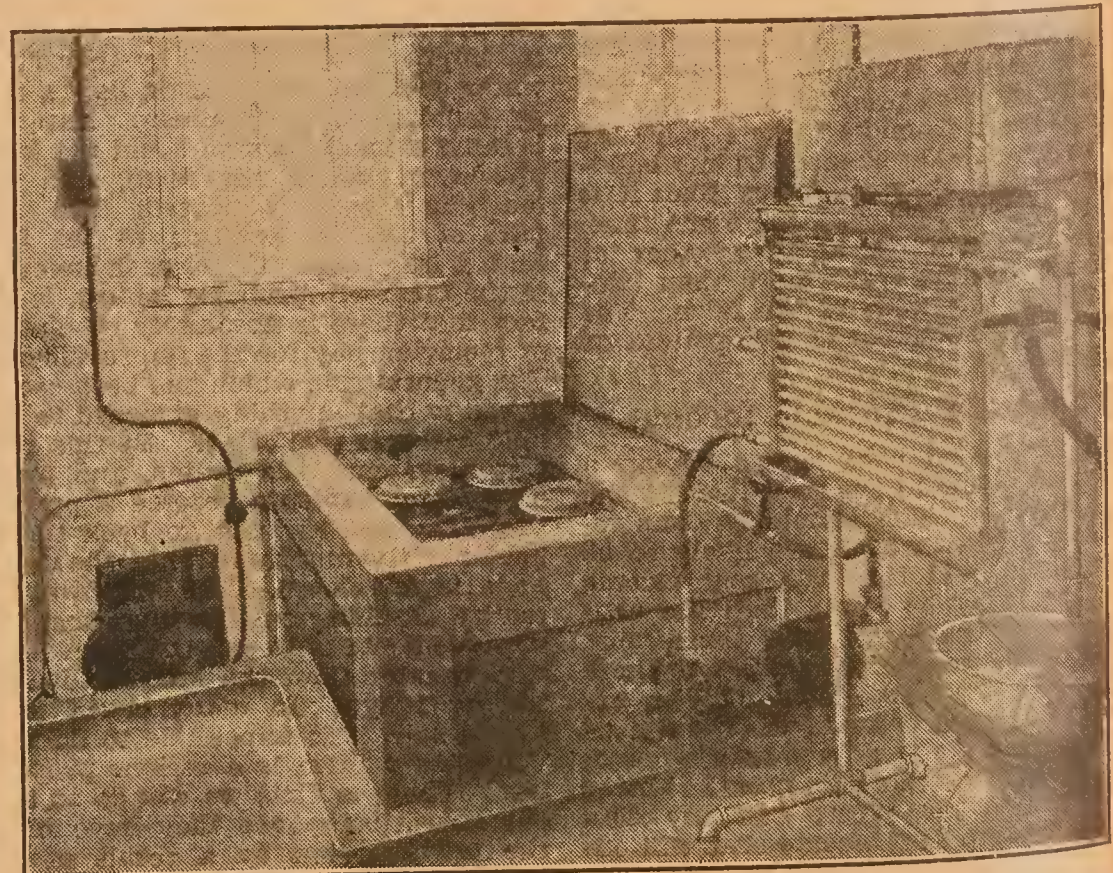
At corn cutting time labor is hard to get, so I purchased an ensilage cutter and gasoline engine to operate it. By this means I am able to care for my corn crop at the proper time, and am assured of good ensilage which goes a long way in cutting down the cost of feed. My neighbors help in filling my silo, and then I take my cutter and engine and help them. In this way we solve the labor problem.

In raising stock, I believe it pays to have the best. My herd is headed by a pure bred sire from a milch strain of cattle. A pure bred sire requires no more care or feed than a scrub.

I do my own work which would be impossible without labor saving equipment. This is much more satisfactory than trying to get reliable help as good farm laborers are scarce, and what few there are, are high priced. The time has come when the farmer must operate his farm by business methods, employing labor saving equipment, thus making shorter hours of labor and better working conditions. He must also keep accurate accounts of his business, if he would benefit by his experience and know how and where he stands.—P. W., Pennsylvania.

Cow Testing Increases and Dairy Profits Grow

COW testing association work in Pennsylvania has expanded 250 per cent since 1924, says I. O. Sidemann of the Pennsylvania State College dairy extension.



An electrically cooled milk tank not only does away with the work of putting up ice but also makes it possible to cool milk to a lower temperature than is possible with ice.
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sion service. In that year there were \$224 cows tested while last year the number was 20,212.

During the past five years the average milk production per cow in the associations has increased from 7309 pounds in 1924 to 7776 pounds last year. Twenty-five associations averaged more than 8000 pounds last year. 6 over 9000, and 3 more than 10,000 pounds in 1928.

Value of product also shows a substantial increase under this plan of knowing what each cow is doing. The 1924 figure was \$217.59 per cow while last year the individual return was \$246.87. Feed costs have fluctuated slightly above or below \$100 per cow for the 5-year period. For each dollar expended for feed in 1924, dairymen in association work received \$2.20. Last year the returns amounted to \$2.41.

Better Service from Fewer Milk Plants

(Continued from Page 3)

proved road. Considering the fact that more than half the plants were assumed to be eliminated, the increase in average hauling distance was much less than one might expect.

The average costs of hauling milk various distances, as determined in this same investigation, indicate an additional cost of 2.7 cents per 100 pounds for hauling the milk the extra 0.5 mile. However, if account be taken of the probable changes in methods of hauling, due to the reduced competition between plants, a much more favorable conclusion seems warranted. With less competition between plants, it is very probable that more of the milk would be hauled on commercial routes, that the commercial haulers would have larger loads, and that more of the dairymen would exchange hauling. All of these are effective ways of reducing hauling costs. They would offset to a large extent, if not entirely, the tendency to higher costs caused by the longer average haul.

By eliminating 17 plants in this area, the volume of milk per plant would be increased from 208 cans a day to 460 cans. Average costs for groups of plants of corresponding output indicate that such an increase in volume per plant would effect a saving in handling costs of about 5.5 cents per 100 pounds of milk, or about \$39 a year per farm.

Of the 14 essential plants in this area, 10 had adequate capacity for all the milk that they would receive under the proposed plan of rearrangement. The proprietors of the other four plants estimated that it would cost about \$29,000 for additions to plant and equipment to provide for the increased volume of milk they would receive. This amount was equivalent to 8 per cent of the present value of these plants and their equipment. The annual cost of maintaining these additional facilities would be very small in comparison with the cost of maintaining the 17 non-essential plants. Additional savings in labor, coal and other expenses would easily bring the total up to the 5.5 cents per hundred-weight of milk, as estimated above.

Shipping costs would be lower, because more of the milk could be shipped at carload rates. Five of the plants in this area are off-rail and their milk is shipped with that of other plants making a total of 26 separate shipments daily. Of the 14 essential plants, only one is off-rail, so there would be a total of 13 separate shipments daily. Under the existing conditions, not more than 61 per cent of the milk can be shipped in carload lots. Under the proposed plan as much as 88 per cent could be shipped in carloads for which the freight rate is 1/4 less. Although the shipper has additional expense for loading and icing carload shipments, careful estimates of all these costs, indicate a net saving of at least one cent per hundredweight, if the milk were shipped from 13 plants, instead of 26. This is equivalent to about \$7 a year per farm.

These calculations are based on shipments of milk in 40-quart cans. If tank cars were used, the advantage of assembling the milk at fewer plants would be much greater. When the shipments are made from 26 plants, only 582 full tank carloads a year can be shipped. If the milk were shipped from 13 plants, 1219 full tank carloads

(Continued on Page 14)

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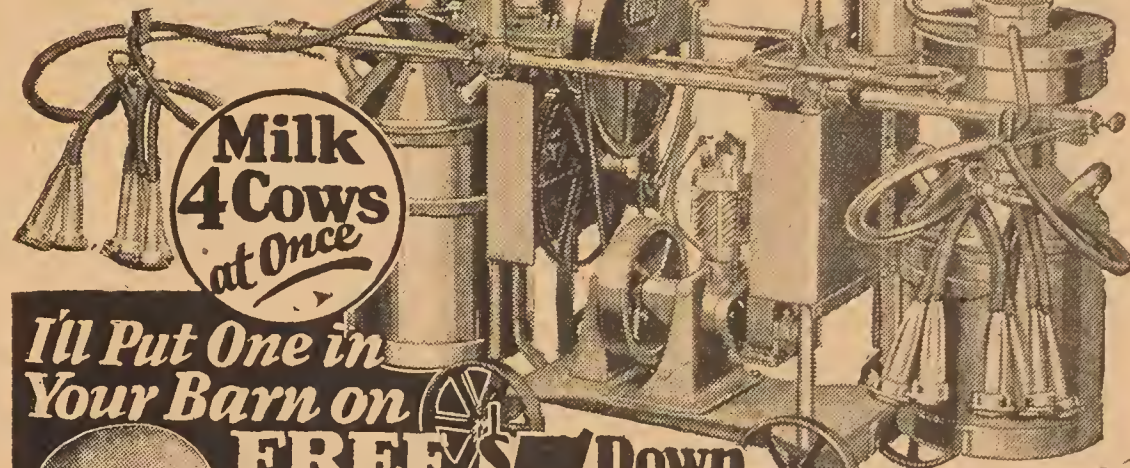
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Costs and Gives Maximum Production Per Cow.

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large herd of "just cows." Low producing cows drag down the average of your herd. They increase the cost of feed and narrow the profit over the cost of production. Then why keep slackers on your pay roll? Cull the boarder cow now.

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PUREBRED OR HIGH Grade Holstein Cattle. Heifers and Springers—all tuberculin tested. Springers on hand at all times. "Tell us what you want and we will have it." Carload or less than carload lots. STRUBLE & MARTIN, Milford, Pa., Newton, N. J.

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NOW POSSIBLE TO PREVENT "LAMB STIFFNESS" Cost 10c a lamb, for entire season. Results guaranteed, or your money back plus 10%. Dr. R. H. Scott, Veterinarian, Perry, N. Y. This ad will not appear again this season.

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REGISTERED OHIO IMPROVED CHESTER PIGS. The mortgage lifters. When buying, why not buy the best. Seventeen years careful breeding. We ship C.O.D. GEORGE N. RUPRACHT, MALLORY, N. Y.

Better Service from Fewer Milk Plants

(Continued from Page 13)

could be shipped. In the case of tank car shipments, the shipper can save almost the entire difference between carload and l. c. l. rates, since no ice is required, and there is very little expense for loading or unloading. Where conditions are favorable for their use, tank cars afford an opportunity for important savings in the cost of transportation and labor at both the shipping and receiving ends. The small size of our country plants is the chief factor preventing more general use of tank cars for milk in this territory.

This detailed study indicated clearly that a large proportion of the milk plants could be eliminated without causing serious inconvenience to the dairymen in delivering their milk and that a considerable reduction in costs might be effected thereby.

The results of this study prompted an effort to compile a list of the best locations for essential milk plants to ship milk or cream from each county of New York State, including the plants needed to convert the seasonal surplus into condensed or evaporated milk, milk powder and the like. County agricultural agents and representatives of various milk companies assisted in making these selections. The volume of milk produced in the various communities and road conditions, were given chief consideration. The locations recommended for the 303 essential plants and the locations of the 304 non-essential plants that were operated in 1928 are shown in figure 1.

The elimination of the 304 non-essential plants would mean a saving, conservatively estimated at \$50 a year per farm. If the business of assembling milk from the farms and shipping it to market were delegated to one organization, it is probable that little time would be lost in closing such plants. Under the competitive system, however, only slow progress along these lines can be expected. Perhaps 20 per cent of the plants operated ten years ago have been eliminated, chiefly by the consolidation of smaller firms with the larger dealers and the Dairymen's League Cooperative Association. Some further progress may be expected from the same cause, but there is need for the adoption of a definite policy by the proprietors of the milk plants, to refrain from the erection of new plants, and to gradually eliminate old plants, in situations where an economic need for such facilities does not exist.

It is hoped that such information as has been given in this article may serve to impress upon both the dairymen and the proprietors of the milk plants, the possibility of reducing costs by eliminating non-essential milk plants, and stimulate both groups to give more serious consideration to this problem. At present the shortage of milk available for New York is causing both the dealers and the League to place their emphasis on supply, and to ignore to a large extent, the cost of obtaining that supply. When the shortage becomes less acute, it is likely that more attention will be given to costs and that many of the plants which have been improperly located, or which have outlived their usefulness, will be abandoned.

What About Pastures?

It appears that dairymen are giving more and more attention to the problem of better pastures. At one time the use of lime and superphosphate was advocated but as more work has been done on this problem it appears that the colleges are less confident as to the treatment which will get the best results.

It has been rather thoroughly demonstrated that treatments which work in one section may not be at all suited to other localities. We suggest that our readers who are interested get in touch with their county Farm Bureau manager or write to American Agriculturist and ask for the latest recommendations for pasture improvement in your county.

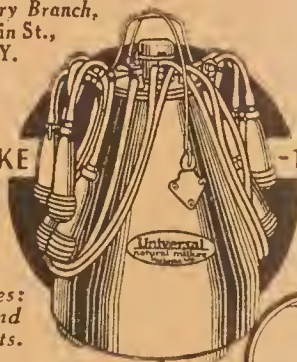
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With the A. A. Livestock Man



The Cost of Producing Pork in Ton Litters

FOR the past several years there has been much interest in hog producing states in ton litter clubs. Records recently kept in Ohio show that the cost of producing pork in ton litters is less than it is in the smaller litters. It was found that the cost of producing 100 pounds of pork in litters weighing from 2,000 to 2,300 pounds at the age of six months was \$6.57. For the same age the cost of 100 pounds for litters weighing 1,200 to 1,500 pounds was \$8.29. These figures are interesting since they show that the ton litters have not been produced for mere effect with no consideration for cost of production.

What to Do for a "Cribbing" Horse

Is there any method of curing a horse that has contracted the habit of cribbing?

WHEN cribbing is fully developed there is no cure that will work in every case. Many means have been suggested for overcoming the habit as:

1. Smearing the stall fittings, manger, hay racks, sides of stall with aloes or other bitters.
2. Covering the stall fittings with sheep skin, wool side out. Of course covering the fittings with iron strips will protect the fittings.
3. Removing stall fittings and giving feed on the floor.
4. Providing a muzzle except at feeding time.
5. A strap tightly drawn about lower jaw.
6. Supplying rock salt for horse to lick.

All of these methods will often fail with the confirmed cribber.

There are various sorts of unscrupulous methods practised that may cause the horse to forget to crib but the "cure" is worse than the habit itself. Often idleness with confinement to the stable seems to be a cause of cribbing and thus the habit may be avoided by providing regular work or giving the idle horse the run of a paddock.—M. W. Harper.

Sheep Have Paralysis

I have been losing my sheep; they seem all right up to the last two or three days before they die. They eat good but seem to lose control of their hind quarters.

I did not lose any until after I sheared them. I have been feeding clover hay until the last two weeks. I have fed timothy hay. I have been feeding grain since I fed the timothy hay. I feed oats to the sheep once a day.

I called a veterinary but he stated the sheep were not sick. They all have had their lambs and seemed good after it.—W. J. S., New York.

YOUR sheep have been afflicted with a trouble that is very unusual—ewes often suffer from paralysis before they lamb and these are often the best ewes carrying twin lambs but a type of paralysis after the ewes have lambed and have been shorn is not often seen.

Now, in view of the fact that this is not any of the pre-parturient troubles, my opinion would be that the condition must be caused by some infection of the brain or spinal cord. In lambs this can be caused by infection through the blood stream from wounds that have not healed in a healthy manner—such as castration or docking.

Inflammation of the brain or spinal cord is really Meningitis and we are told that this condition is usually caused by the presence of micro-organisms or by the poisons produced by their action on organic matter. I wonder if the ewes were cut to any great extent at shearing time. Quite serious wounds are frequently made at that time.

Whenever sheep lose control of their

limbs or bodily movements there must be some condition that is affecting the brain or nervous system. We find this in the case of grub in the head when serious enough to exert a pressure on the brain—also in the case of gid which is the cystic stage of the tape worm in the dog and where one phase of the life cycle is passed in the brain of a sheep in the form of a cyst—the sheep being the intermediate host. The sheep suffers from gid because of the existence of the cyst of the tapeworm (dog) in the sheep's brain. Infection secured by sheep from pasture infected by dogs passing segments of the tapeworm. From these statements you may be able to figure out something in the way of cause for your situation. Prevention would be the only recourse, sanitation, antiseptics on wounds, etc. We trust that you will have no more trouble of this kind.—MARK J. SMITH.

State Will Pay for Retest

ONE of the best bills passed by the recent session of the New York legislature and now signed by the Governor is the Kirkland Accredited Herd Bill. Heretofore, after a herd had been accredited, it was necessary for the herd owner to pay the cost of veterinary service for retesting.

Under the new law just passed the State will pay for the retesting, thus removing the expense from the dairymen. The law is based on right principle, for it is even more important to keep a herd clean than it is to clean it up in the first place.

General Unsoundness of Horses

Chorea, or St. Vitus's dance, is involuntary contraction of voluntary muscles.

Stringhalt is manifested by a sudden, high jerking up of one or both of the back legs when the horse walks.

Heaves are indicated by a double bellowslike motion of the abdominal muscles when the horse breathes. A cough is present.

Roaring is characterized by noisy breathing when the horse is exercised.

Vices, such as wind sucking, cribbing, or weaving, can best be detected in the stall, and for this reason it is generally well to examine a horse in the stall and to note the conditions of the stall.—Cornell Bulletin 166.

Suggests Cure for Rabbit-Running Coon Dog

ISAW in your paper that you wanted information in regards to breaking a coon dog from running rabbits. Here is a method that works for me.

Take your dog out, let him run a rabbit, then shoot the rabbit if it is in season. Then take the rabbit and fasten it tightly round the dog's neck. Wire it up tight but not so tight as to choke him. When he sees that he has to carry the game he runs he will soon quit chasing rabbits. The same applies to a dog killing chickens. Tie the hen or chickens by the hind legs tightly up around the dog's neck. Wire it so he cannot get it off and let him wear it out.—E. B.

Rupture in Pigs is Inherited

SOME experiments recently done at the Ohio Experiment Station indicate that rupture in pigs is inherited. They also found that this trouble could be eliminated from a herd by careful breeding to eliminate this condition from the breeding stock.

A message to Brood Sows who farrow in April



DON'T be the kind of a brood sow who wastes all summer raising three or four pigs, when the right kind of feed will give you the bone, muscle and blood to grow a big litter of strong, healthy pigs.

Some folks think that anything is good enough for a pig to eat, but when they skimp on cheap or improperly mixed feed they only fool themselves in the end by getting less pork and taking a longer time to get it.

We learned through years of experience and experiments on the Larro Research Farm just what hogs need and in the big Larro mill we follow that formula exactly, using only the highest grade of ingredients that can be bought.

Larro Hog Feed will not only condition you for farrowing time, but after your pigs are weaned Larro Hog Feed and corn, fed according to directions in each sack will grow them cheaper and better than any other feed you can get.

You know what Larro Dairy Feed and Larro Poultry Feed have done for your barnyard neighbors. Give your litter a chance, too.

Larro

HOG FEED

THE LARROWE
MILLING CO.
Detroit, Mich.

Manufacturers of
Dairy, Hog and
Poultry Feeds



Reviewing the Latest Eastern Markets

Milk Prices

The following are the April prices for milk in the basic zone of 201-210 miles from New York City.

Dairymen's League prices are based on milk testing 3.5%. Sheffield on the basis of 3%.

Class	Dairymen's League	Sheffield Producers
1 Fluid Milk....	3.37	3.17
2 Fluid Cream		2.30
2A Fluid Cream	2.46	
2B Cond. Milk..		
Soft Cheese..	2.71	
3 Evap. Cond. Milk Powder		2.15
Hard Cheese	2.35	
4 Butter and American cheese. Based on New York City Market quotations on butter and American cheese.		

The Class 1 League price for April 1928 was \$2.90 for 3.5% milk and Sheffield's \$2.80 for 3%.

The above prices in each class are not the final prices the farmer receives. The final price received from the dealer is the result of the weighted average.

Butter Prices Break Following Heavy Receipts

CREAMERY	Apr. 3	Mar. 27	Apr. 4, 1928
SALTED			
Higher than extra....	45 1/2-46	47 1/4-48	46 -46 1/2
Extra (92sc).....	45 -	46 3/4-47	45 1/2 -
84-91 score.....	43 1/2-44 3/4	45 1/2-46 1/2	43 1/2-45 1/4
Lower Grades.....	43 -43 3/4	44 1/2-45	42 -43

Heavy receipts of creamery butter, far in excess of those expected by the trade, resulted in a rather sharp break in the butter prices on April 3. Since our last report the market has been holding very close to 46c for 92 score butter. On the first day of April, somebody played an April Fool joke on the trade and shoved the price up to 46 1/2 c. It was quite obvious to the bulk of the trade that this was straining the situation in spite of the brisk trade that existed. The following day the market began to crumble and by the 3rd it had reached the level quoted above. At existing values the market is not what one could call settled. Some houses report very satisfactory trading, while others reported slow business, expressing the opinion that the market is not at all safe. In general, the trade as a whole looked upon the situation as wholly seasonal. These rapid fluctuations are bound to take place at this time of year especially when we are blessed with such wonderful spring-like weather. Balmy conditions are reported from most of the producing territories. Production, especially in the Southern districts, is reported on the increase.

On March 29, the four largest cities

SHIP YOUR EGGS

WHITE AND BROWN

To R. BRENNER & SONS

Bonded Commission Merchants

358 Greenwich St., New York City

Live Broilers and Poultry Wanted

HIGHEST PRICES CHECKS SENT DAILY
Oldest Live Poultry house in New York City. Established 1883, offers you an unlimited outlet for your live poultry. Write for shipping tags and free holiday calendar folder K 27
Krakaur Poultry Co. Inc.
West Washington Market, N. Y. City

Bonded Commission Merchant

Ship BROILERS

MARKET GOOD

Live and Dressed Poultry, Calves, Lambs and Eggs

Write or wire for quotations, tags, market conditions, etc. Prompt returns—Top prices—Take advantage of 25 years experience. Try us.

JOSEPH C. BERMAN, Inc.,
West Washington Market, New York City

POULTRY SHIPPERS

SHIP APRIL 16th to 24th INCLUSIVE, for the Jewish Easter trading. All kinds of live poultry wanted. Write for information, coops, tags, etc.

Baedecker & Williams, Inc.,
West Washington Mkt., New York City

EGG CASES

Wholesale dealer and shipper of second hand egg cases. Car lots a specialty.

LOUIS OLOFSKY, 685 Greene Av., BROOKLYN, N. Y.

reported 3,102,514 pounds of butter on hand, compared with 3,314,305 pounds on the same day a year ago.

Cheese Market Unchanged

STATE	Apr. 3	Mar. 27	Apr. 4, 1928
FLATS			
Fresh Fancy.....	27 1/2-29 1/2	23 1/2-25	22 3/4-23
Fresh Average.....			
Held Fancy.....	23 1/2-25	27 1/2-29 1/2	29 -30
Held Average.....			

There has been no change in the cheese market since our last report. There is an excellent demand for fancy quality well cured cheese, which is supporting the market very nicely. Well cured cheese is in very few hands and held very firmly. The market is also without new feature as far as fresh makes are concerned.

Reports indicate that the production of cheese has been running lighter than last year, both in Wisconsin and New York State. It is said that production in the Southwest is running a little ahead of last year but very little of the product from that district comes this way.

Nearby Eggs a Shade Lower

NEARBY WHITE	Apr. 3	Mar. 27	Apr. 4, 1928
Hen's Sel. Extras....	33 -34	34-35	34 -36
Hen's Av'ge Extras..	31 -32	33 -	33 -
Extra Firsts.....	30 1/2 -	32-32 1/2	31 1/2-32
Firsts.....	30 -	31-31 1/2	30 1/2-31
Undergrades.....			27 -29
Pullets.....			
Pewees.....			
NEARBY BROWNS			
Hennery.....	32 -33	32-34	33 -35
Gathered.....	28 1/2-31	29-31	28 1/2-32 1/2

The nearby egg market has worked to a slightly lower level following full receipts that are showing some accumulation. The New York egg market is very sensitive these days. Members of the trade are showing extreme caution. Speculators are less in evidence this week although some eggs are moving into storage. Most receivers are not inclined to store the bulk, or better perhaps, the rank and file of the nearbys due to the fact that they are uncertain as to the keeping qualities of said product. Of course, there are some nearby eggs that are highly desirable for storage purposes, but they are not of the rank and file.

When it comes to the egg storage deal the New York trade has been very conservative. Up to the first of April the strength has been chiefly in the West. New York operators have not been anxious to put eggs away at recent costs, entertaining much fear that the early shortage in accumulations will be made up by a heavier lay later on. Furthermore, many of the eastern operators are not strong enough financially to speculate heavily, due to the unsatisfactory outcome of the storage deal in recent years. The West, on the other hand, has been holding values above par with New York City. However, at this writing western advices do not seem as strong and the selling pressure is growing.

Reports from the Southwest indicate that the flush in that section has reached its peak. Recent arrivals from the Southwest show considerable shrinkage and a diminishing proportion of Grade A eggs.

The nearby producer may well ponder over the situation. In the first place, nearby producers have got to show greater care in the grading of eggs that they send to market. It is true that this is an old story and many immediately think of the story of "Wolf, Wolf" when talk of grading is brought up. However, every year the bulk of the nearbys of "unknown mark" appear to get less attention unless they are rehandled in the terminal market. Naturally the producer does not get any benefit from this rehandling.

If reports from the Southwest are an indication of what we may expect from other heavy producing sections, the egg crop will not be a burdensome one this year. There is much speculation as to the 1929 crop, and there are some who freely predict that it will be light. Others report just the opposite. If it does develop that the early shortage will be continued, then the nearby

producers who use care are going to benefit this year.

On March 29, the ten cities making daily reports had on hand 116,000 cases of eggs, compared with 363,000 on the same day in 1928. From March 22 to March 29 holdings increased this year 93,000 cases, which are 101,000 cases short of the increase during the same period a year ago.

Live Poultry Market Fairly Firm

	Apr. 3	Mar. 27	Apr. 4, 1928
FOWLS			
Colored.....	-35	-37	-29
Leghorn.....	-36	-37	25-26
CHICKENS			
Colored.....		32-36	
Leghorn.....		32-36	
BROILERS			
Colored.....	40-55	47-55	47-52
Leghorn.....	45-52	50-52	40-45
CAPONS	45-50	50-55	-50
TURKEYS	40-45	30-45	30-50
DUCKS, Nearby.....	27-30	28-32	25-26
GEES	20-22	20-22	

Although prices of live fowls are not quite up to last week's level, the market as a whole appears fully as strong. On April 3, all indications pointed to a recovery of prices. Leghorn fowls, as is usually the case this time of year, had

Market Reports Daily by Radio

Up-to-the minute market information and prices are broadcast daily for your benefit by American Agriculturist co-operating with the New York State and Federal Departments of Agriculture, through station WEA. The reports are broadcast at 12:30 standard time.

a slight edge on the market. Fowls arriving by express have been scarce, with the exception of a few heavy colored stock. Express broilers have been in light supply and the trend is in favor of the shippers. A few small sales of fancy Rocks have been at a premium. Long Island ducks are a shade easier.

No Change in Old Potatoes

STATE	Apr. 3	Mar. 27	Apr. 4, 1928
150 lb. sack.....			3.50-3.75
Bulk, 180 lbs.....			
MAINE			
150 lb. sack.....	1.75-2.00	1.75-2.00	3.25-4.00
Bulk, 180 lbs.....	2.00-2.25	2.00-2.25	4.25-4.85
PENNA.			
150 lb. sack			
No. 1.....			
Bulk, 180 lbs.....			
LONG ISLAND			
150 lb. sack			
No. 1.....	2.00-2.25	2.00-2.25	4.50-4.75
Bulk, 180 lbs.....	2.35-2.60	2.35-2.90	5.40-5.75

There has been no change in the old potato market since last week. Prices are, at this writing, substantially the same. However, the tone of the market is such that we would not be surprised to see a slight reduction.

Southern potatoes are a shade lower, the best Florida Spaulding Rose being quoted at \$6.75. Trade is said to be taking hold of these Southern goods a little better.

Meats and Live Stock

Nearby veals are about \$2 a hundred lower than they were a few week's ago. On April 3 the best brought \$17.50 with the bulk selling from \$14 to \$16.50. At this writing, they are showing improvement and the trend is upward, the demand being very active.

Steers are meeting an active demand and a steady market. Good stock brings \$13.25 with common to medium at \$12.75.

The bull market is irregular. A few choice head have been sold at \$9.85 with mediums anywhere from \$8.75 to \$9.75. Poorer stock lower.

Cows are meeting a steady market. A few good ones are bringing \$8.25 but most of the desirable stock is from \$7 to \$8. Poor stock is down to \$4 with reactors bringing anything from \$5 to \$8.

Lambs are meeting a good demand and a steady market. Choice stock is selling up to \$17.50 with a few sales recorded at \$18.

Hogs are meeting a steady market. Weights ranging from 185 lb. to 130 lb.

are quoted at \$11.25 to \$11.50; 130 to 160 pounds, \$11.75 to \$12.25 with heavier weights up to \$12.50.

Rabbits are quiet and about steady at 24c to 28c.

Fancy Hay Scarce

Fancy timothy hay is meeting an active demand. No. 1 grade is actually scarce and if it were here, in large bales, it could easily bring \$27. Mixed hay, medium and lower grades, are not as active and selling lower and more slowly.

Feeds and Grains

FUTURES	Apr. 3	Mar. 27	Apr. 4, 1928
(At Chicago)			
Wheat, (May).....	1.18 1/2	1.20 3/8	1.43 3/4
Corn (Mar.).....	.90 3/4	.93 3/8	.99 3/8
Oats (Mar.).....	.45 3/8	.45 7/8	.57 1/2
CASH GRAINS			
(At New York)			
Wheat, No. 2 Red..	1.46 1/2	1.48 7/8	1.85 3/4
Corn, No. 2 Yel....	1.08 3/8	1.10 7/8	1.19 3/8
Oats, No. 2.....	.57 3/4	.58 1/2	.70 3/4
FEEDS			
(At Buffalo)	Mar. 30	Mar. 23	Mar. 31, 1928
Grade Oats.....	33.00	33.50	40.00
Spring Bran.....	29.00	30.00	40.00
Hard Bran.....	31.00	32.25	42.00
Standard Mids.....	28.50	29.00	39.50
Soft W. Mids.....	36.00	38.00	46.00
Flour Mids.....	33.50	35.00	40.50
Red Dog.....	36.50	37.50	41.50
Wh. Hominy.....	37.00	37.00	41.50
Yel. Hominy.....	37.00	37.00	
Corn Meal.....	39.00	39.50	42.50
Gluten Feed.....	45.50	48.50	44.75
Gluten Meal.....	52.50	60.00	56.00
36% C. S. Meal.....	41.00	43.00	53.00
41% C. S. Meal.....	46.50	48.25	58.00
43% C. S. Meal.....	49.00	50.75	60.00
34% O. P. Linseed Meal.....	53.50	55.50	56.50

Muslin curtains, if used in ventilating poultry houses, should be clean and in good condition. The old muslin area which is clogged with dust is not an effective medium for the diffusion of the air. In order to avoid this possible sluggish movement of air through dusty muslin curtains it may be advisable to use burlap on the open front area of the house.

WATER PUMPS WATER

night and day with Rife's Hydraulic Ram. No attention, no expense. Write for free catalog.
H. T. OLSEN, 13 PARK ROW, NEW YORK

SWINE

FARMERS BUY FROM FARMERS

Let us suggest to you as breeders the best kind of a pig to start to raise is a good one. You save time and money. We sell all pigs with a trial of two weeks, and then if dissatisfied, return pigs and we will return your money.

7-8 wks. old, \$4.50 ea.; 8-10 wks. old, \$5.00 ea.
Breeds—Chester and Yorkshire cross, and Berkshire and Chester cross. Crating free. These prices F.O.B. our depot. Will ship any number C.O.D. or send check or money order.

MISHAWUN STOCK FARM,
MISHAWUN ROAD, WOBURN, MASS.
P. S. No pigs sold at the farm; only by appointment.

SPRING PIGS FOR SALE

Buy where quality is never sacrificed for quantity. We sell only high grade stock from large type Boars and Sows, thrifty and rugged, having size and breeding. Will ship any amount C.O.D.

Chester & Yorkshire — Berkshire & Chester
7 TO 8 WEEKS OLD.....\$5.00
8 TO 10 WEEKS OLD.....\$5.50

Also a few Chester barrows 8 wks. old, \$6.50 each
Satisfaction guaranteed or money refunded. 10 days trial allowed. Crates supplied free. A. M. LUX, 206 Washington St., Woburn, Mass. Tel. Wob. 1415.

PIGS FOR SALE OLD RELIABLE STOCK

Heavy legged, square backed, Chester and Yorkshire crossed, Poland China and Chester crossed, Barrow, boars or sows 6-8 weeks old \$5.00—8 to 10 weeks old \$5.50 each. Fancy Berkshires, also Chester Whites, 2 months old Sows and unrelated Boars, \$6.50 each. 10 days trial or your money back. Shipped C. O. D. Crating free of charge. Yours for quality hogs.

ED. COLLINS, 35 Waltham Street, LEXINGTON, MASS.

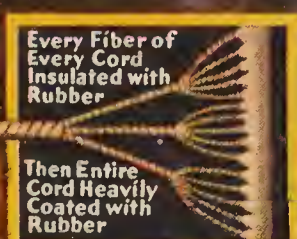
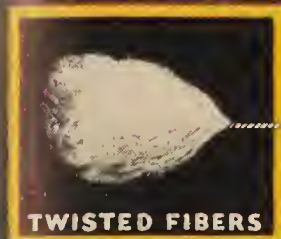
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OLD ADDRESS

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This insures prompt change.

Why Firestone Tires Hold All Records



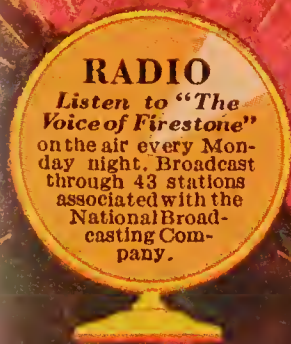
Cords Twisted for Greatest Strength and Elasticity!

Firestone owns and operates the world's largest exclusive cord fabric mills. In these great mills, the choicest of long staple cotton is first twisted into threads. These threads are next tightly twisted into ply yarns—and these ply yarns are then twisted into super-strength cords. In each operation exactly the right number of twists is scientifically determined to secure the greatest strength and elasticity.

Gum-Dipped for Greatest Endurance and Mileage!

Before these cords are built into Firestone Tires they are Gum-Dipped—the extra Firestone patented process, which saturates and insulates every fiber of the cord with pure rubber. Thus Firestone Gum-Dipped Tires have double reasons for their toughness, ruggedness, and unequalled mileage... the result—these tires hold all world records for speed, safety and endurance.

M O S T M I L E S P E R D O L L A R



Firestone

The Destructive Months ~



PAINT is needed every day in the year. Each month is a destructive month for buildings not protected with paint. The pores of the wood are open. Decay starts. Nails rust and loosen. Cracks develop. The wind creeps in and boards begin to rattle. Gradually, quietly, yet as surely as if in a conflagration, unpainted buildings are weakened and destroyed. A small expenditure for paint, promptly applied, gives protection.

Not only protection, but beauty, attractiveness, newness are added to the whole place. People driving by will say, "How well the old place looks!" And the family will

feel the stimulus that always comes from bright new surroundings.

Remember, when you

buy paint, that cheap paint is expensive, and quality paint is economical. A difference of a few dollars in price may add many times that amount in durability. Buy paint that is made to serve, not to sell at a cheap price. Our advertisers compound paints that give long service and honest value. Depend on them when you are buying paint.

A paint advertised in these columns must be good or it wouldn't be here. You're safe when you buy from our advertisers.

Money spent
for paint is
well invested.
It protects
and beautifies.

BUY GOOD PAINT FROM OUR ADVERTISERS



The Vanishing Ice House

Soon the winter task of cutting ice will be a thing of the past—and with it the unnecessary spoilage of food. For now, electricity fills every refrigeration need on the electrified farm.

¶ The General Electric refrigerator is entirely automatic. It requires no attention, no oiling, and its constant, correct temperature safeguards food and keeps it fresh and wholesome. This is the

latest electrical boon, which, with G-E MAZDA lamps, G-E motors, and other General Electric products, releases men and women on the farm from age-old burdens and drudgery. ¶ If you are located on or near an electric power line, ask your power company for complete information concerning the possible uses of electricity on your farm.

Tune in on the General Electric special Weekly Farm Program over G-E Stations WGY (Schenectady), KOA (Denver), KGO (Oakland). Also listen every Saturday evening at 9 P.M. Eastern Standard Time to the "General Electric Hour" broadcast over a nation-wide chain.



The G-E cleaner saves time and cleans better



Your coffee, made at the table in a Hotpoint percolator, saves footsteps



This portable Hotpoint heater warms a room quickly



The G-E fan makes a hot kitchen liveable summer or winter

GENERAL ELECTRIC

for Economical Transportation



This Great New **Six Cylinder Truck**

only
\$545

(Chassis only) f. o. b. factory
Flint, Michigan



Illustration shows Grain Body
mounted on Chevrolet 1½ Ton
Chassis with Cab

1½ Ton	\$	545
Chassis		
1½ Ton Chassis \$		650
(with Cab).		
Light Delivery \$		400
Chassis		
Sedan	\$	595
Delivery		

All prices f. o. b. factory
Flint, Michigan

AT A PRICE of only \$545, the new six-cylinder 1½ Ton Chevrolet Truck offers a dollar-for-dollar value that has never been equaled.

Its new six-cylinder motor provides a power increase of 32%. It accelerates faster in every gear. It operates smoothly and quietly—with unusual freedom from “lugging” at slow speeds. And its operating economy is outstanding—for in addition to providing gasoline mileage equal to that of its famous 4-cylinder predecessor, it is unusually sturdy—and its cost of maintenance is as low as, if not lower than, that of any truck you can buy.

Combined with this great economy, increased power and finer performance is a wheelbase of 131 inches and a rug-

ged 189-inch frame. This provides a carrying capacity of 1½ tons, and permits the mounting of all types of bodies with a load space up to 9 feet.

A perfected 4-speed transmission provides increased pulling power for heavy roads, deep sand and steep hills. A new and completely lubricated ball bearing steering mechanism makes steering easy over any road. The newly-designed 4-wheel brakes are powerful, quiet and easy of operation—with emergency brakes operating entirely independently. And while this new truck has an unusually low loading height, it has a road clearance that is ample for all requirements of farm service.

Investigate this remarkable truck at your Chevrolet dealer's today.

CHEVROLET MOTOR COMPANY, DETROIT, MICHIGAN; Division of General Motors Corporation

—a Six in the price range of the four!

32% More Power—7 Inches More Wheelbase

Greater Speed—50% More Capacity

4 Speeds Forward—4-Wheel Brakes

Economy Equal to Its 4-Cylinder Predecessor

Q U A L I T Y A T L O W C O S T

Farm News from New York

A Poor Season for Maple Syrup--County Notes

THE season, although it commenced early, has thus far been rather of a discouraging one for the sugar makers, with an abundance of rain and much cloudy weather during the latter half of March, resulting in rather a low grade product and some producers have already gathered their buckets and called it off for this year.

There does not seem to be much of a market locally for maple syrup and farmers are having a hard time to dispose of their product at prices ranging from \$1.75 to \$2 per gallon. Much of the product is being put into 40-gallon barrels and sold to a local dealer, who in turn ships it to a large manufacturer of chewing tobacco.

Good, young cows that are in milk, are in demand and bring a fancy figure, an occasional sale being made at \$125 to \$150 per head; the latter figure being obtained recently for two-year old heifers.

Wages for farm labor seem to be unusually high this spring and good men are getting \$65 to \$80 per month, with board. Direct competition with State road work, with its eight-hour day and no Sunday work, is a prominent factor in bringing this situation about, as it offers far more opportunities for leisure.

State Nursery Shipping Trees

About sixty men are employed at the present time, at the State nursery farm, about two miles east of the village, and are engaged in pulling up the two and three-year old transplants, which are tied into bundles of 25 to 100. They are placed in large hampers and shipped by express to different localities, where various reforestation projects are under way.

With the exception of the nursery at Saratoga, the one near Lowville is the largest and most completely equipped in the State and during the busy season last spring about 175 men and women were busily engaged there for a period of several weeks.

But very little baled hay is being shipped this spring. Somehow it seems to be a drug on the market and it is only on rare occasions that one glimpses a load of loose hay or straw being hauled into town. Old Dobbin

has apparently almost completely dropped out of the picture.

A carload of western horses was recently shipped into town. These are mostly farm chunks and of the heavy draft type, but seem to be meeting with rather a slow sale, as the increased use of tractors on many of the large dairy farms has caused a resultant decrease in the demand for horses, the light driving type having almost entirely disappeared.

Farmers are busily engaged these days in hauling home quantities of mill feed, fertilizer, lime, etc., over roads that are nearly hub-deep. For the most part, they seem quite optimistic as to future prospects and are looking forward to a prosperous and profitable season for the year of 1929.—C. L. S.

Cooperatives Will Cooperate

REPRESENTATIVES of cooperative associations that collectively do over a billion dollars worth of business annually met recently at Washington to consider the formation of a National Chamber of Agricultural Cooperatives. It is planned that this new organization will represent cooperatives in national matters wherein all cooperatives have a common interest. Those in attendance at the conference in AMERICAN AGRICULTURIST territory were: M. C. Burritt, representing the Cooperative Grange League Federation; Fred H. Sexauer, George W. Slocum and Chester Young, representing the Dairymen's League Cooperative Association; John D. Zink, representing the Eastern States Farmers Exchange; H. D. Allebach and F. P. Willits, represent-

ing the Inter-State Milk Producers' Association; Robert C. Mitchell of the Connecticut Milk Producers Association; W. P. Davis of the New England Milk Producers Association; and R. Smith Snader of the Maryland State Dairymen's Association.

Agricultural Program from Station WGY

MANY of our readers plan to listen in on the agricultural program from WGY each week. This program is given from 7:30 to 8 P. M. on Thursdays. First comes a 10-minute talk on some subject of interest to farmers. Speakers are invited from various sources including the State College of Agriculture and the State Department. At 7:40 there is a five-minute talk on electricity for the farm followed by a farm question box at 7:45 and news notes furnished by the American Agriculturist at 7:55.

Each day, except Saturday and Sunday, WGY presents a program of special interest to farm listeners from 12 to 12:30. First comes the weather reports, second market prices and third a talk on some agricultural subject.

Safety Contest Announced

THE Highway Education Board recently announced their eighth annual safety essay contest open to elementary school pupils and elementary school teachers. Successful pupils in this contest will receive a gold medal and a check for \$15, and a gold watch, while the suc-

cessful teacher upon her arrival in Washington, D. C., will be presented with a check for \$500. The prizes offered total \$6,500. State contests will be conducted with appropriate prizes and the winner of these will compete for the national award.

Controlling the Corn Borer

What is going to happen when the one-generation strain of the European corn borer spreading from the west, meets the two-generation strain spreading from the east, in eastern Vermont and western New Hampshire, and the breeds mix, as the boys used to say when they exchanged hats? This was one of the questions under discussion at the meeting of officials in charge of corn borer work in the New England States held at Boston, March 21st, under the auspices of Mr. L. H. Worthley, in charge of the federal corn borer work. In one place there is but a single town between the two areas and all along the line there is only a narrow intervening strip. Originally it was supposed that the two-generation borers would be much more destructive than the single brood strain. This has not proved to be the case in northern New England and the one-generation strain seems now to be the more dangerous of the two. There is no knowing what the two together or a possible hybrid may do. Types of corn harvesting machinery especially designed for the better control of corn borer, were illustrated and explained and it is planned to have some of these machines demonstrated in Vermont in connection with the joint educational control program which is being carried out by the Vermont Department of Agriculture and the Agricultural Extension Service.

New York County Notes

Allegany County—For the past three weeks beautiful spring-like weather has prevailed. The first wild geese were seen on March 12. Crocuses have been in bloom. Tulips and daffodils are pushing through. Arbutus and other spring flowers are blooming. Winter wheat looks well. Dirt roads are in very bad condition and many rural deliverers have found it difficult to deliver the mail. A representative of the Niagara Power Company gave an illustrated lecture before the last meeting of the Canaseraga

Grange. Bert Perry, the notorious farmer-burglar of this section, was captured at his farm in the Ossian Road near Canaseraga, March 29 by Deputy Sheriff J. Gaswood and E. A. Atherton and two state troopers. Authorities have been searching for him since last fall. He is also wanted in Ontario, Canada, and Niagara Falls for car burglaries and in Tonawanda for a silk robbery. Sheriff E. A. Brigham has him safely lodged in the County Jail at Belmont.—Mrs. O. H.

Genesee County—Charles Bowman will become the manager of the Genesee County Farm Bureau on April 1. Gerald Brett, former manager, resigned and will go in partnership with R. V. Call on a farm at Stafford. They will raise a hundred acres of potatoes, using certified seed with scientific methods. Rural schools are closed for Easter vacation. Robins and starlings have arrived in large flocks. The Genesee County Fair will be held September 10, 11, 12, 13 and 14 this year.—Mrs. R. E. G.

Ontario County—March has been a wonderful month for nice weather. We have very little snow but have had two or three heavy thunder storms with plenty of lightning. The ground seems to be settled. Dirt roads are in a very bad condition and many autos have to be pulled out of the mud. Wheat is looking very fine and has come through the winter in excellent shape. Farm wages are very high. Nobody wants to work on farms. Not much plowing has been done yet. Some are pressing hay at \$12 a ton. Eggs have dropped to 25c a dozen.—E. T. B.

Oswego County—Spring has come with a rush. March came in like a lamb and has been quite warm although there was a blizzard on the 13th. Robins came on the 20th and the frogs were croaking on the 23rd. Mercury touched 65. This has been a poor maple syrup year. It is selling at \$2.25 a gallon. Muck land owners are drawing truck loads of crates from cars. There is some hay moving. It is selling at \$12 a ton, mostly baled. No real estate to speak of has been changing hands. The Barge Canal opens up on April 5 if we do not get a cold April. Eggs are selling at 30c per dozen, potatoes at 50c to 55c a bushel, cabbage 90c a dozen, poultry 35c a pound and butter 55c. Roads have heaved some. Road stands are getting ready to open.—J. S. M.

In the Hudson Valley

Rensselaer County—The dirt roads have been in a deplorable condition but are improving. The weather has been very spring-like. Lightning struck and destroyed Joseph Casey's barn and its

contents last week. The market for potatoes is dull. Farmers are still holding much of their last year's crop. Butter is bringing 50c a pound, eggs 30c. Prices of milch cows are still trending upward. Cows have wintered well. The leading cows show excellent tests.—E. S. R.

Columbia County—A week of spring weather! Birds of many kinds have arrived. Men are busy hauling fertilizer. One man plowed his family garden Saturday. Autos get stalled in the mud on town roads. County improved roads are to be repaired soon by patching. There is an epidemic of scarlet fever in Chatham. The mail carrier of the Red Rock section who had a snow-mobile in winter, is using it now for a mud-mobile. A man in Gallatin keeps his Fordson and many strong chains ready to pull cars out of the mud in the road near his house. Electricity is being installed in a number of Claverack homes. Four bridges in the county have been condemned, one in Gallatin, one in Ancram, one in Ghent, and one on the road to Chatham. A large barn and contents near Chatham Village were recently burned. Easter services were held in all the churches throughout the county. Farm Bureau Manager Buckholz is on a program at Annual N. Y. S. Extension conference at Ithaca. Eggs are 35c a dozen.—Mrs. C. V. H.

Saratoga County—Dirt roads are not in good condition as the frost is going out in places making it impossible for automobiles to run on all roads. Many are sawing fire wood, drawing manure, and getting ready for spring's work. Not many auctions in this section and very little moving. Some getting ready to sow grass seed. Not many lambs yet. There are lots of illness, very little sunshine, much rain and cloudy weather. Two severe thunder showers. Dairy cows bring high prices, eggs going down. Some baby chicks hatched and many incubators running.—Mrs. L. W. P.

New York Juniors to Attend 4-H Club Camp

YOUR New York State 4-H Club workers have been selected to represent their state at the third national 4-H Club Camp at Washington, D. C., in June. Those selected are: Virginia Phillips, East Bloomfield, Ontario County; Maude Hilliard, Rochester, Monroe County; Francis Oley, Manlius, Onondaga County; and Ralph Johnson, Caledonia, Livingston County. Needless to say, any boy or girl who takes this trip has an experience which will never be forgotten.

Pennsylvania Farm Notes

REFRIGERATED cars loaded to their full capacity with potatoes for planting were an interesting scene at the freight stations during the past week. The stock was marked as certified and commanded prices far in excess of home-grown potatoes. Maine, Michigan, New York, and Ohio shipments were in evidence.

Last year Lehigh County's total production amounted to 2,525,310 bushels; Lancaster, Berks, Chester, Northampton, Schuylkill and Somerset Counties boasted of over one million bushels each, unprecedentedly large yields. An unusually large number of cases of sickness was prevalent in the farming districts this spring due to numerous radical climatic changes. It is a fact that the average physician catering to county homes very frequently cannot respond to the multitude of calls which demand his services.

Farmers' Mutual Fire Insurance Companies report a largely increased demand for protective policies against fire losses. The reports filed indicate that the assessments made by the leading county mutual companies were very seldom in excess of \$1.50 per thousand dollars in insurance, a comparatively nominal amount. The use of lightning rods on barns is especially enjoined by some companies. Dairy cows sold in connection with regular farm stock and so-called "dispersal sales", bring the highest prices known within recent years. Tuberculin tested animals are in strong demand, while registered animals bring the highest prices ever recorded. It is regretted that farm values remain at a low and unsatisfactory status, contrary to earlier more favorable prospects.—O. D. S.

* * *

PENNSYLVANIA stands fifth among the states in the number of silos, according to statistics collected and compiled by A. L. Haecker, emeritus professor of dairy and animal hus-

bandry at the University of Minnesota. There are 37,340 of the silage store-houses in the Keystone state.

Of the total number, 535,229, reported to Haecker, 113,300 are located in Wisconsin, New York has 56,682, Michigan 50,520, and Ohio 40,340. Other states having more than 10,000 silos are: Minnesota with 36,294, Indiana 32,040, Iowa 32,000, Illinois 28,240, Kansas 14,540, and Missouri 12,024.

* * *

Cumberland County—Having very pleasant weather for this time of the year. Vegetation is beginning to grow. Wheat fields are looking nice since the snow. Grass fields are beginning to show green. People throughout the county are plowing for oats and hauling manure. Public sales are about over. Stock of all kinds is selling high. Quite a few are changing residences although not so many farms are changing hands. Seed oats are being treated for smut. Gardening is being moved along quite lively. Light rains occur quite frequently. Markets are about the same although eggs have taken a drop.—J. B. K.

Potter County—The first thunder storm of spring came last week and the weather now is like Maytime. South of us deer are reported dying by scores. It is believed they lacked the proper variety of food or that killing does left many young deer unable to take care of themselves. R. R. Lewis, flower enthusiast (grower of prize-winning gladiolas) is urging organization of garden club meeting in the High School on March 22. Lack of beauty in many farmsteads would indicate that garden clubs are needed in the country also. Maple sugar makers will have a very short season unless the ground freezes again. Falling prices in butter and egg markets. Farmers are feeding potatoes to stock.—M. C. S.



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Model 24 Remington .22 Caliber Autoloading Rifle. Standard grade. Price \$25.45.

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YOU'VE all seen it — a whole flock of chickens wiped out in a night. Stop that marauder with a Model 24 Remington .22 Caliber Autoloading Rifle. It shoots as fast as you pull the trigger—loads and cocks itself after each shot. Accurate, action never jams—just the gun for all farm pests. Your dealer should have it. Write for circular.

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BABY



CHICKS

Pennsylvania Co-Operative Leghorn Farms

Breeding COCKERELS with RECORDS to 303 EGGS. PURE TANCRED-HOLLYWOOD-BARRON STRAINS White Leghorns—Brown and Buff Leghorns—QUALITY EXTRAORDINARY—PRICE WAY DOWN—SHIP C. O. D. Get our prices quick.

Pennsylvania Co-Operative Leghorn Farms, Box 314 Grampian, Pa.

No Bluff Chicks Just Real Standard Quality
Thousands of customers know. Order year after year. A satisfied customer my best advertisement. Join the old reliable plant. 16 years satisfactory service cuts down expensive advertising. My customer reaps the benefit by ordering from this small advertisement. S. C. White and Brown Leghorn SPECIALIST. 200 to 250 Egg Strain CHICKS \$13.00 per 100; 500 or more, \$11.00 per 100. Assorted chicks, \$8.00 per 100. FREE & 100% LIVE DELIVERY GUARANTEED. HOUSEWORTH'S LEGHORN FARMS, Port Trevorton, Penna.

BABY CHICKS

	25	50	100	500
White Leghorns.....	\$2.75	\$5.25	\$10.00	\$47.50
Barred Rocks.....	3.25	6.25	12.00	57.50
Rhode Island Reds.....	3.25	6.25	12.00	57.50
Heavy Mixed.....	2.75	5.25	10.00	47.50
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Mixed Ducklings.....	6.50	13.00	25.00	

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WYCKOFF & BARRON CHICKS FOR MAY

	100	500	1000
United strain Leghorns.....	\$8.00	\$37.50	\$70.00
Wyckoff or Barron Leghorns.....	9.00	42.50	80.00
Barred Rocks.....	10.00	47.50	90.00
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BABY CHICKS

From Heavy Laying Free Range Flocks

	25	50	100	500	1000
S.C.W. & Br. Leghorns.....	\$3.50	\$6.00	\$12	\$57.50	\$110
S.C.B. and Wh. Rocks.....	4.00	7.50	14	67.50	130
Buff Orpingtons & Reds.....	4.00	7.50	14	67.50	130
White Wyandottes.....	4.00	7.50	14	67.50	130
Assorted Chicks.....	3.00	5.00	9	42.50	80

100% prepaid safe delivery guaranteed.
Order from this ad. or write for circular
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J. N. Nace Poultry Farm RICHFIELD, Pa.

Chick Bargain

FREE IMMEDIATE DELIVERY
of 50-ME CHICKS if desired. Direct from Missouri's Great \$100,000 Hatchery. World's Lowest Prices for quality offered. —low as 7 1/2c each, \$1.00 per 100 books order. Guaranteed, vigorous chicks from big-type, heavyweight flocks. Same strains that win at famous egg laying contests. 100% alive, prepaid. Poultry course, 10 lessons, filled with secrets of poultry raising. FREE to customers. Write now for FREE CATALOG & BARGAIN PRICES. SMITH BROS. HATCHERIES, Box 410, MEXICO, MO.

BARRED ROCK CHICKS

A large modern Breeding Farm and Hatchery devoted exclusively to the production of BARRED PLYMOUTH ROCKS.
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KERLIN BARGAINS in Wh Leghorn Chicks

"Kerlin-Quality" Money-Making Leghorns. Beautiful, Great Winter Layers, White Diarrhoea Free, Egg Contest Winners. Over 50,000 Delighted Customers. BIG DISCOUNT on Chicks ordered Now, Delivery When Wanted. Free Starting Feed! Big Catalog FREE! Kerlin's Grand View Poultry Farm, Box 35, Centre Hall, Pa.



With the A. A. Poultry Farmer



A Long Island Duck Farm

LAST year four million ducks were raised on Long Island, and a large percentage of them were marketed in New York City. Duck ranches are scattered all over Long Island, but the largest establishments are found on the South Shore, east of Patchogue, and through the middle of the island, around Riverhead. Most ranches raise from 15,000 to 20,000 ducks during the year.

During the last few years, the duck industry has grown to such an extent that there has been some danger of over-supplying the market. At least, there has been an over-supply of poor quality ducks, and many growers have begun to realize that the volume of business does not always mean success. It is equally important to study strict economy, and efficiency from the time the ducks are hatched until they are sold, if the producer expects to realize a profit.

A White Landscape

I recently visited the ranch of F. W. Worm and Sons, who are located about a half mile from the Aquebogue station. I was greatly impressed by the way in which they are handling their problems. As I came in sight of the place I wondered whether there had been a snow storm or whether there could really be as many ducks in the world as I appeared to see. We were met by Henry Worm, who manages this part of the ranch, and he showed us through a number of long buildings 30 feet wide, and from one to two hundred feet in length. Pens about a foot high, and six feet long ran across the building, and every pen was filled with ducklings. A hatch comes off every three days, and the difference between newly hatched ducklings and those three days old is remarkable.

In every pen there is a card which tells how many were put in the pen and when they were hatched. This card goes with the ducks until they are killed, and this system enables them to know exactly how many there are at all times. A small track runs the length of this house, as well as all other houses on the place, and these connect with tracks outside the pens, so that feed can be easily taken in, and litter cleaned out. This trucking is done by 16 small cars that will hold about 1600 pounds of feed.

Experiments in Duck Feeding

Mr. Worm told us that it takes from 25 to 32 pounds of feed to grow a duck to market age. Several large feed

manufacturers are conducting feeding experiments on the farm, and the owners are also continually experimenting in order to increase the efficiency of the business.

The ranch is lighted by electricity and there are so many lights that it looks much like Coney Island. There are probably more quacks on the ranch than there are at Coney Island, although even this might be doubtful.

The morning we visited the ranch, they had just killed about 400 that were ten weeks and two days old, and they averaged to weigh 5.9 pounds each. It takes an expert to kill the duck properly, as one who does not know the business can easily spoil it. From 36 to 40 ducks are packed in a barrel with ice all around them. Last year was a bad year for many duck growers. The number of inferior ducks was so large that it had a tendency to lower the market on all ducks.

We next went to look at the breeding pens. Another brother handles this part of the work. They keep about 2,000 breeding ducks that averaged to produce, last year, about 142 eggs per duck.

Ducks in a Two-Story House

One point that interested us was a three-story building, 214 feet long and 36 feet wide. This is one of the first houses, on the island in which ducks have been successfully kept on the second floor of the building. The third floor of this house is used to store and dry feathers. I was told that last year over \$14,000 worth of feathers were sold from this farm.

Next we went in the incubator house, and met the man in charge there. He has had twenty years experience, and is the only man so far as we know that has incubated a million duck eggs. Ducks are hatched ten months out of the twelve, and the records show that, last year, 288,249 eggs were produced, 258,828 eggs were incubated, and 156,720 ducklings were hatched. The incubators have a capacity of 42,000 eggs in a single hatch.

Keeps Complete Accounts

We next went to the house and talked with Mr. F. W. Worm the father of the boys. His part of the business is to keep accounts. He knows just how many ducks there are, how much feed is used, the total expense, and knows to a penny just where the business stands all the time. He can tell you

(Continued on Page 23)



A round brooder house prevents crowding of chicks in the corners and can be more uniformly heated than a square house.

Wonderful Success In Raising Baby Chicks

Mrs. Rhoades' letter will no doubt be of utmost interest to poultry raisers who have had serious losses in raising baby chicks. We will let Mrs. Rhoades tell her experience in her own words:

"Dear Sir: I see reports of so many losing their little chicks, so thought I would tell my experience. My first incubator chicks, when but a few days old, began to die by the dozens. I tried different remedies and was about discouraged with the chicken business. Finally I sent to the Walker Remedy Co., Waterloo, Iowa, for a box of their Walko Tablets to be used in the drinking water for baby chicks. It's just the only thing to keep the chicks free from disease. We raised 700 thrifty, healthy chicks and neved lost a single chick after the first dose."—Mrs. Ethel Rhoades, Shenandoah, Iowa.

Danger of Infection Among Baby Chicks

Readers are warned to exercise every sanitary precaution and beware of contaminated drinking water. Baby chicks must have a generous supply of pure water. Drinking vessels harbour germs and ordinary drinking water often becomes contaminated and may spread disease through your entire flock and can cause the loss of half or two-thirds your hatch before you are aware. Don't wait until you lose your chicks. Take the "stitch in time that saves nine." Remember, that in every hatch there is the danger of some infected chicks. Don't let these few infect your entire flock. Give Walko Tablets in all drinking water for the first two weeks and you won't lose one chick where you lost dozens before. These letters prove it:

Never Lost a Single Chick

Mrs. L. L. Tam, Burnettsville, Ind., writes: "I have lost my share of little chicks from the usual baby chick troubles. Finally I sent for two 50c packages of Walko Tablets, used it in all drinking water, raised over 500 chicks and I never lost a single chick. Walko Tablets not only tend to prevent baby chick troubles, but also tend to give chicks increased strength and vigor. They develop quicker and feather earlier."

Never Lost One After First Dose

Mrs. C. M. Bradshaw writes: "I used to lose a great many of the little downy fellows, tried many remedies and was about discouraged. As a last resort I sent to the Walker Remedy Co., Dept. 428, Waterloo, Iowa, for their Walko Tablets for use in the drinking water of baby chicks. I used two 50c packages, raised 300 White Wyandottes and never lost one or had one sick after using the Tablets and my chickens are larger and healthier than ever before. I have found this Company thoroughly reliable and always get the remedy by return mail."—Mrs. C. M. Bradshaw, Beaconsfield, Iowa.

You Run No Risk

We will send Walko Tablets entirely at our risk—postage prepaid—so you can see for yourself what a wonder-working remedy it is when used in the drinking water for baby chicks. So you can prove—as thousands have proven—that it will stop your losses and double, treble, even quadruple your profits. Send 50c for a package of Walko Tablets (or \$1.00 for extra large box)—give it in all drinking water and watch results. You'll find you won't lose one chick where you lost dozens before. It's a positive fact. You run no risk. We guarantee to refund your money promptly if you don't find it the greatest little chick saver you ever used. The Pioneer National Bank, the oldest and strongest bank in Waterloo, Iowa, stands back of our guarantee.

WALKER REMEDY CO., Dept. 428,
Waterloo, Iowa.

Send me the [] 50c regular-size (or [] \$1 economical large size) package of Walko Tablets to try at your risk. Send it on your positive guarantee to promptly refund my money if not satisfied in every way. I am enclosing 50c (or \$1.00). (P. O. money order, check or currency acceptable.)

Name
Town
State R. F. D.

Mark (X) in square indicating size package wanted. Large package contains about two and one-third times as much as small.

(Continued from Page 22)

the exact cost of a duck at any age.

What we have said so far might seem that the business was all profit. However, we suggest that our readers keep calm, and keep out of the duck business until they know both sides of the question. The ducks on this farm ate two thousand tons of feed last year, and the cost of running the business was over \$190,000. When the duck fails to grow properly, they know the reason on this farm. They know that their work is cut out for them, if they are to show a profit, but through constant study they have been able to do this so far. We greatly enjoyed the trip to this farm, and greatly appreciate the courteous treatment which we received.—F. S.

Capons or Eggs for Most Profit

I would appreciate your advice relative to which is the most profitable, the raising and marketing of capons or Leghorns for egg production. I have facilities for 500 birds of either type and in the spring I intend to begin one or the other. Do you think I could clear \$2.00 apiece on a six months old bird and do it twice a year. What should a capon of the proper breed weigh at 6 months, also what breed produces best capons?—K. A. B., Pennsylvania.

THERE is of course, a chance to make money in both capons and egg production from Leghorns, but the chances of success are better in eggs than capons. You could not raise capons and dispose of them under eight or nine months because maturity and the rate of gain is apt to be slow. The question of what a capon should weigh at a given age is very largely dependent on feed, care and especially range during its growth. For a medium sized capon, no breed is better than the Barred Rock.

My suggestion is that you divide your interest: put in four hundred Leghorns and one hundred birds of a heavy breed, the males for capons. This will give you an opportunity to try both branches and feel out your success in each.—L. H. Hiscock.

Ways to Increase Farm Poultry Profits

I. The first opportunity is in lowering production costs. A reduction of 3 cents a dozen in the cost of producing eggs gives the same advantage as a 3 cent rise in price. Following are some of the steps in reducing costs:

1. Getting high producing strains.
2. Closer culling of low producers.
3. Better feeding, especially the use of more protein feeds, for which purpose skim milk is ideal.
4. Better housing to reduce exposure to inclement weather and infestation with parasites.
5. Sanitation to reduce losses from disease.

Measures to Insure Better Quality.

II. The second means of increasing the returns of the individual producer consists of improving the market quality. Following are some aids to the production of quality eggs:

1. Keeping healthy, vigorous hens of a standard variety to obtain larger eggs of uniform color and size.
2. Providing clean nests and enough of them.
3. Keeping abundant litter in the hen house, confining hens until mid-afternoon when yards are muddy, and keeping hens off the dropping boards in order to produce clean eggs.
4. Removing males when the hatching season is over to produce infertile eggs which keep better than fertile eggs.
5. Gathering eggs twice daily in hot weather, keeping in a cool, clean, fairly dry place free from odors, and using small and dirty eggs at home.
6. Marketing at least twice a week in warm weather and once a week at other times.

To produce quality poultry requires
(Continued on Page 24)



Princess Gertrude, owned by Charles A. Shepard, Winter-ville, Ga. Record made at Georgia egg laying contest

Oatmeal Wins Again!

Grand Champion of all North American egg laying contests, all breeds; Princess Gertrude, a Quaker Ful-O-Pep raised hen—335 eggs in 51 weeks

ONCE again the value of Quaker Ful-O-Pep Feeds—the oatmeal feeds—is proved in competition. Princess Gertrude, winner of the Grand Championship International, all breeds, with a record of 335 eggs in 51 weeks, was raised on Quaker Ful-O-Pep Chick Starter and Quaker Ful-O-Pep Growing Mash.

More and more poultry owners are turning to the famous oatmeal mash. Right now is the time for you to consider the advantages of using

1 Quaker FUL-O-PEP CHICK STARTER and **2 Quaker FUL-O-PEP GROWING MASH**

By all means, feed Quaker Ful-O-Pep Chick Starter for the first 6 weeks! This is the oatmeal feed that insures a good start. After the 6th week, feed Quaker Ful-O-Pep Growing Mash, because oatmeal is important as long as growth and development are in progress. Oatmeal builds pullets that have healthy organs and the disposition to lay. Oatmeal builds finest market fowl. Oatmeal—properly blended with the other good ingredients Quaker uses—is a most economical, most profitable feed for poultry. See your Quaker Dealer.

THE QUAKER OATS COMPANY, CHICAGO, U. S. A.

BUY QUAKER FEEDS IN STRIPED SACKS

BABY

CHICKS

SIEB'S GUARANTEED CHICKS

from CERTIFIED HOGAN TESTED
HEAVY LAYING FLOCKS

STILL
LOWER PRICES
WHY PAY MORE?

SIEB'S "OVERSIZE" CHICKS are from PURE-BRED Flocks of the WORLD'S FINEST BLOOD LINES. They are a new Sieb Development—an advanced step in scientific breeding to produce chicks that grow larger, stronger, mature quicker and lay more and larger eggs. All one quality only THE BEST.

WHY SIEB CHICKS PAY BETTER

Fortunes have been spent to produce a superior quality chick. It costs just as much to raise a chick that weighs 6 lbs. at 6 months old as it does a Sieb Chick that will weigh 8 lbs. or more at 6 months old. The best proof of this wonderful achievement is the testimonials from our customers. Think of young cockerels weighing 9 lbs. and pullets 8½ lbs. with remarkable egg laying records: If you want larger, stronger stock, more eggs, more meat, and more profits, buy Sieb's "OVERSIZE CHICKS". Our great capacity of over five million per year insures quick delivery, cuts down cost of production and enables us to give you THE BEST GRADE ONLY at prices even less than many hatcheries charge for second and third grade chicks. SEND FOR CATALOG or order from this ad. 100% live delivery guaranteed.

PRICES PREPAID	25	50	100	500	1000
Wh. Br. & Bl. Leghorns	\$3.00	\$5.75	\$11	\$52.50	\$100.
Br. Wh. & Buff Rocks	3.50	6.75	13	62.50	120.
Wh. Min. S. C. R. I. Reds	3.50	6.75	13	62.50	120.
R. C. R. I. Reds, Wh. Wyand.	3.75	7.25	14	67.50	130.
Wh. & Buff Orps. Sil. L. Wyand.	3.75	7.25	14	67.50	130.
Black Minorcas	3.25	6.25	12	57.50	110.
Anconas & Heavy Assorted	3.00	5.75	11	52.50	100.
Heavy & Light Assorted	2.75	5.25	10	47.50	90.
Light Assorted	2.50	4.75	9	42.50	80.

SIEB'S HATCHERY,
BOX 230 LINCOLN, ILL.
Members Int'l. Mid-West, Ill. & America
B. C. P. Association

20TH CENTURY "MARVEL" CHICKS

from Special Mating Imported Barron White Leghorns

This Superb Mating consists of 350 Yearling hens, imported from TOM BARRON, of England. The hens weigh not less than 4½ pounds and up to 6 pounds, and produce better than 250 eggs per year, per hen.

BIG HEALTHY CHICKS FROM THE WORLD'S BEST STRAINS

14 varieties. Matings sired by pure-bred Males from the World's finest Trapped Egg Strains. Dams of high production, 250 to 302 egg lines. Park's, Burroughs, Fishel, Sheppard, Dystin, Pape and others of similar famous breeding.

1 Guarantee Satisfaction and give you personal service. Prices reasonable. 100% Live Delivery Guaranteed. Ref: Commercial Bank, Dun or Bradstreet.

	50	100	500	1000
S. C. White, Br. Buff Leghorns; Anconas	\$7.00	\$13.00	\$60.00	\$115.00
Barred and Wh. Rocks; S. & R. C. Reds; Blk. Minorcas	8.00	15.00	70.00	135.00
Wh. Wyandottes; Buff Orpingtons; Buff Minorcas	8.50	16.00	75.00	145.00
Imported Barron Leghorns; Wh. Minorcas; Park's Rocks	9.50	18.00	85.00	160.00

Heavy Mixed, \$12.50 per 100; Light Mixed, \$9.00 per 100.
Ship C. O. D. if desired (pay postman on delivery). FREE Illustrated Catalog tells all about our big size Winter Laying Chicks and profits you can make with them. Send for your copy.

20th CENTURY HATCHERY Box R NEW WASHINGTON, OHIO

WOLF SELECTED CHICKS

CHICKS C. O. D.

Send only \$1.00 and pay Postman the balance.

Special pen mated and extra high bred chicks at slightly higher prices. Shipment made any time you wish.

S. C. Wh. Br. & Buff Leghorns, S. C. M. Anconas...\$3.25 \$6.50 \$12.00 \$57.50 \$110

Bd. & Wh. Rocks, S. C. & R. C. R. I. Reds, Bl. Minorcas

White Wyandottes, Buff Orpingtons

Jersey Black Giants

Assorted Odds and Ends, Mixed Chicks

Assorted Heavy Mixed Chicks

WOLF HATCHING & BREEDING COMPANY, BOX 1, GIBSONBURG, OHIO

Buy C.M.L. Chicks

C.M.L. CHICKS

in BARRON LEGHORNS. Imported direct from Barron. Pedigrees 285 to 314. BARRON S.C.W. LEGHORNS, BARRED ROCKS, WHITE ROCKS, REDS, WHITE WYANDOTTES.

Our birds have ample range which insures large, hardy chicks. They are carefully selected and mated. They mature early. Our fine quality chicks can be had at a price that will surprise you. Get our low prices. They will interest you. Write today for FREE catalogue.

C. M. Longenecker, Box 40, Elizabethtown, Pa.

HUBER'S RELIABLE CHICKS

MAKE EXTRA POULTRY PROFITS

With HUBER'S Reliable Chicks. When we say RELIABLE—we mean RELIABLE in every way. Breeding stock of highest quality of 19 years of careful development. Special attention paid to health of flocks and records kept.

CATALOG FREE—CHICKS SENT C. O. D. IF YOU WISH

Write for details—get our illustrated catalog which tells all the story. Our prices reasonable. A book on Raising Chicks worth many dollars given free with each order of \$10.00 or more. Big discount for early orders.

HUBER'S RELIABLE HATCHERY, No. High St., Fostoria, Ohio



Here: Nearly Everyone Raises

Full Blooded "AMERICAN" Quality Chicks

Write now for our new low prices. Your opportunity to get our special flock mating chicks at utility prices. Chicks shipped C. O. D. Catalogue and prices on request. 100% live arrival guaranteed. 15 breeds. Write now.

American Chickeries, Box 214, Grampian, Pa.

(Continued from Page 23)

some attention to meat qualities in the selection of breeding stock, keeping the flock free from disease, growing to good size and putting in reasonably good finish before sending to market.—Blue Valley Creamery Institute.

Leaves Not Advised for Litter

In a recent issue I saw an item on litter on hen house floors. My grandson has hens, a pen of about 400 and I gathered a lot of maple leaves for the floor this winter but have found that leaves are not good as they will quit laying. I would like your advice on this.—J.A., New Jersey.

THERE is apparently less emphasis placed upon the necessity for litter than there was a few years ago. This is based on experiments which show that hens fed a properly balanced ration do about as well without exercise as when the grain is fed in deep litter.

At the same time most poultrymen use some litter. Probably the best litter is peat moss which is sold by commercial firms. It lasts a long time and is very absorbent of moisture. However, it adds to costs especially where there is some other material on the farm which can be used as litter. The more durable the material the better litter it makes. Rye straw is one of the best materials grown on the farm, followed by wheat straw and oat straw.

Maple leaves are about the poorest form of litter as they break up very easily forming a solid mat on the floor at the same time becoming very dusty which does not add at all to the healthful condition under which the hens work.

Have your hens had their cod-liver oil today? If not they should have for they need it on sunless days just as children do. About a pint to one hundred pounds of mash is the right amount.

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S.C.W. Leghorns	\$3.25	\$6.50	\$12	\$57.50	\$110
Bd. Rocks & S.C. Reds	3.75	7.25	14	67.50	130
Heavy Mixed	3.25	6.50	12	57.50	110
Light Mixed	2.50	4.75	9	42.50	80

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Tancred Strn. Wh. Leghorns

Light Mixed

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From carefully selected free range flocks. 100% arrival

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SPECIAL FALL

prices for breeding Turkeys, Geese, Ducks, and Guinea. Write your wants and for mailing list, **PIONEER STOCK FARM, TELFORD, PA.**

The Necessity For Comfortable Rest

The Kind of Mattress Largely Determines Whether Sleep is Refreshing

EDITOR'S NOTE: This article is the last of the series on the tourist home written by specialists at the New York State College of Home Economics. Because of the widespread interest of rural people in adding to their cash income by this method and because of the need for the best possible information on how to go about it, the AMERICAN AGRICULTURIST is glad to make it available for the use of its readers. We hope you have kept the preceding articles on the tourist home, appearing in the issues of March 30th and April 6th.

By BEULAH BLACKMORE
N. Y. State College of Home Economics

ONE of the most fascinating games played by the tourist as the sun goes down on a day of driving is deciding upon which of the many homes open to tourists shall be chosen. Passing swiftly by, the first thing to at-

lost if the springs are not good. A good mattress will soon be destroyed if left on weak or sagging springs.

Because the mattress comes so closely in contact with the body it too should be flat and resilient. It is a matter of personal preference whether it should be soft or hard. Science says that mattresses insulate heat and the portions of the skin so insulated increase their temperature. If a large area of the skin, normally cool, should tend rapidly toward a high temperature the sleeper will change his position. It would therefore seem that one of the causes of restlessness is overheating the skin area. So it becomes de-

several hundred springs of well tempered steel, each held in a compartment of substantial cotton material. This mattress is usually surfaced with hair or cotton so that there is no possibility for an individual spring to pierce through or make an irregular surface on the mattress. When used on good springs these mattresses are extremely comfortable and give excellent satisfaction.

WEIGHT: The weight of a mattress is of importance to the housewife since the mattress must be turned from side to side and end to end after each occupant or at least once each week. A kapok mattress is probably the lightest and most easily turned.

SIZE: In purchasing a new mattress it should be secured slightly narrower and shorter than the springs on which it is to rest as it will stretch from one to two inches both in width and length in use. A mattress should never hang over the edge of the springs as the boxing will soon become broken and the bed will not have the smartness and crispness in shape which every well made bed should have. Sagging sides look bedraggled and give the impression of heavy bed-covers with little warmth.

THICKNESS: The average mattress for warmth and comfort should be about five inches thick. Thicker than this simply adds to the expense and affords no greater comfort or warmth.

Boxing or Edge Finish

The boxing or side finish of a mattress is of great importance both in the wear of the mattress and the appearance of the bed when made. When completely dressed a bed should have square edges and a flat top. If the boxing of a mattress is not made firm by the filling being held firmly to the edge it will soon become broken by use and by having persons sit on the edge of the bed. This latter tempting habit should be discouraged because no mattress or springs will long resist such abuse.

The three types of edge finishes are plain or taped, roll and imperial, listed in order of preference. An imperial edge has a roll on the edge and a number of rows of stitching on the side of the mattress between the edge rolls which securely holds the filling to the edge and makes it firmer. The imperial edge is only found on the better grades of mattresses. The roll edge mattress is satisfactory if given care. Modifications of these edge finishes are often found.

TUFTING: A mattress should be carefully and adequately tufted in order to prevent any shifting of the filling. There are a number of kinds of tufting, diamond, square and seam, all giving satisfaction. These mattresses are used in hospitals or if a person is very sensitive to the surface of a mattress. Regarding tufting there is one point which must always be kept in mind. Should a tuft or the strings which pass through the mattress become broken they must be replaced immediately or the filling of the mattress will change position and a cavity will be the result.

VENTILATION: The warmth of a mattress is an important factor especially in the late fall and winter. Just as in blankets the warmth of a mattress is dependent to a certain extent upon the still air held within it. This being true very small circular brass screens are inserted along the side boxing of many of the new mattresses allowing for a free passage of air into the mattress.

TICKING: Mattresses should be covered with a good quality of color-fast ticking. The ticking should be of close enough weave to prevent any filling from piercing through. In general the simple blue and white or brown and white old fashioned twill weave tick-

ing is most satisfactory. Ticking with an elaborate printed surface design is not resistant to moisture, the result being a soiled looking mattress and stained bed linen if it becomes wet.

CLEANLINESS: As before stated the mattress should be turned often and in addition to this care it should be carefully dusted and brushed or run over with the nozzle of a vacuum cleaner. A carpet beater should not be used. When dusting a mattress, watch carefully for any broken strings in the tufting.

REMAKING: The possibility of remaking a mattress is important to the tourist homekeeper. This information should always be secured when purchasing a mattress. Mattresses should be remade frequently enough to keep the bed flat and the filling resilient. If the ticking has been protected so that it can be used in the remaking the expense is not great as compared with the result. With an occasional remaking especially in the case of hair mattresses, the life of the mattress will be greatly extended.

STORAGE: If it is necessary to store mattresses out of season they should be stored in a cool dry room and allowed to lie perfectly flat. If rolled the tufting strings become strained and if piled one on top of another they become flattened. In storing mattresses they should be hung in such a way that they remain flat or placed on shelves with not more than two mattresses on any one shelf.

The splendid reputation of many tourist homes has been earned because of its excellent beds. Next to cleanliness and airiness a comfortable bed is the tourist's greatest joy.

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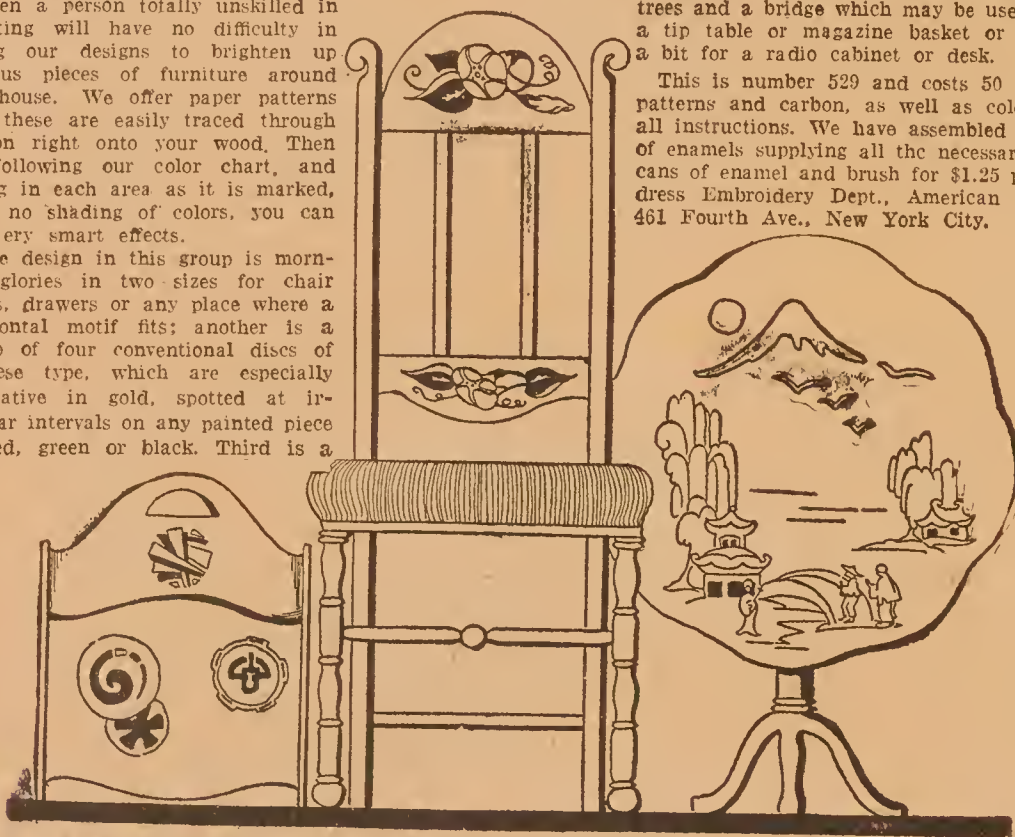
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Even a person totally unskilled in painting will have no difficulty in using our designs to brighten up various pieces of furniture around the house. We offer paper patterns and these are easily traced through carbon right onto your wood. Then by following our color chart, and filling in each area as it is marked, with no shading of colors, you can get very smart effects.

One design in this group is morning glories in two sizes for chair backs, drawers or any place where a horizontal motif fits; another is a group of four conventional discs of Chinese type, which are especially decorative in gold, spotted at irregular intervals on any painted piece in red, green or black. Third is a

group of typical pagodas, small figures, willow trees and a bridge which may be used "as it" on a tip table or magazine basket or spread apart a bit for a radio cabinet or desk.

This is number 529 and costs 50 cents for the patterns and carbon, as well as color chart and all instructions. We have assembled a special kit of enamels supplying all the necessary colors, two cans of enamel and brush for \$1.25 postpaid. Address Embroidery Dept., American Agriculturist, 461 Fourth Ave., New York City.



tract the party is a beautiful, an interesting or picturesque house and location.

Cautiously the car slows up for another lingering look, a spirited discussion takes place in the car, then someone ventures forth to look at the offerings of the home.

Cleanliness, a sense of freedom and airiness probably makes the first favorable appeal, then an inspection of the bed-room follows. If satisfied the whole party troops in, not to linger aimlessly about the house, but to get the sleep which is such a necessity after a long drive.

With what a sigh of contentment and satisfaction one drops onto a comfortable bed—a bed which permits a maximum number of comfortable positions through a period which should probably vary between six and one-half to nine hours if the next day's driving is to be enjoyable.

Just what it is that makes one bed comfortable and another one not depends somewhat upon the individual; however, there are certain comfortable characteristics which are common to all beds.

First of all, after exquisite cleanliness, there must be good springs on the bed, springs that are flat but resilient, flexible enough to yield to the body allowing it to assume a normal position and not the position as when lying in a hammock. No matter how perfect the mattress all of its value is

sirable to have a mattress that does not conform too closely to the body.

Points to Observe in Purchasing a Mattress

Practically any mattress is comfortable when new, so for temporary use an inexpensive mattress might satisfy, but for tourist rooms, where the mattress is to have hard wear over a period of many months, the best mattress that one is able to afford will give the greatest satisfaction and be an economy in the end.

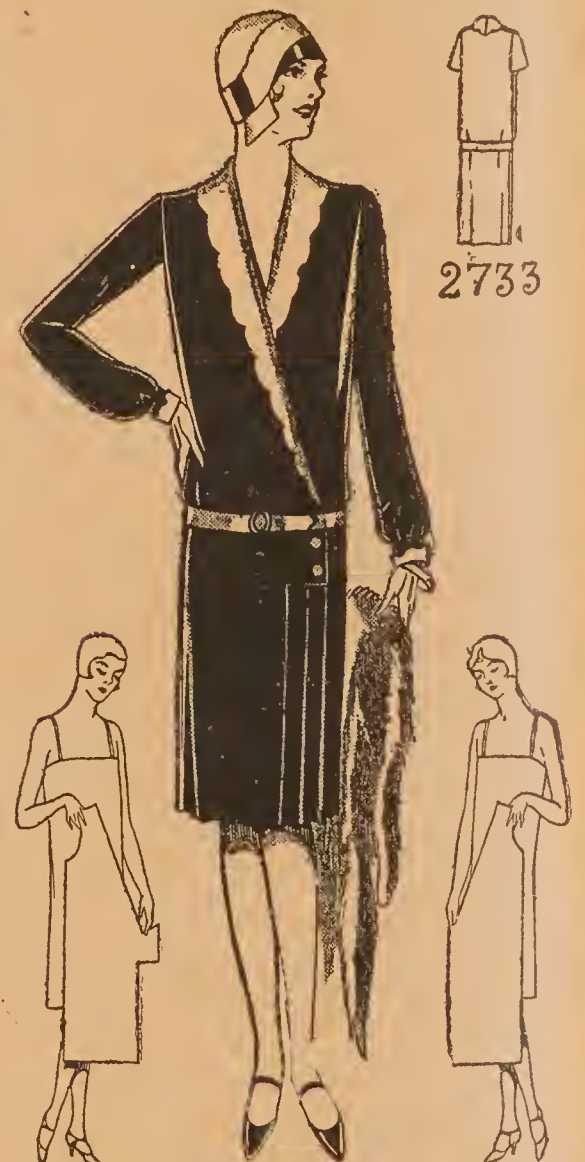
The resiliency of the mattress depends mainly upon the filling. Blown cotton and cotton felt mattresses are comfortable but since the cotton fibre or linter has very little elasticity it is more likely to become lumpy from use than other types. Cotton will absorb moisture readily, so it must be aired and sunned frequently. Of the two cotton mattresses the cotton felt, well tufted, is the better.

Kapok filling makes a very soft and comfortable mattress. It is light to handle, does not absorb moisture and can be very easily freshened by being exposed to the sunshine for a few hours. A kapok mattress needs to be handled carefully and never beaten as the kapok has a tendency to powder. A kapok mattress may be successfully remade.

Hair mattresses vary greatly in quality, from white to black to mixed hair of good and of inferior quality. Yet as everyone knows a good hair mattress is extremely comfortable, very resilient, enduring, and easily remade with the addition of a few pounds of new hair. The initial expense in purchasing a hair mattress is somewhat greater than other kinds but in the long run it gives greater and longer satisfaction.

There is also on the market a mattress—called the inner construction mattress. This mattress is made up of

Chic Tailored Lines



PATTERN No. 2733 with its trimly fitted hip line, scalloped collar and side pleats makes a decidedly tailored frock. Sheer tweed, faille silk crepe, silk checked gingham, or any of the heavier silks would be ideal for such a design. The pattern cuts in sizes 16, 18 years, 36, 38, 40 and 42 inches bust measure and requires 3 1/2 yards of 40-inch material with 1/8 yard of 27-inch contrasting for the 36-inch size. PRICE 13c.

TO ORDER: Write name, address, pattern numbers and sizes clearly and correctly and enclose the correct remittance in stamps or coin (although coin is sent at own risk). Add 12c for one of the new fashion catalogs and send to Pattern Department, American Agriculturist, 461-4th Avenue, New York City.

WOOL BLANKETS, and Colonial Coverlets, BATTING, Made from your own wool. ROBES, Also sold direct from the mill if you have no wool. Beautiful goods that give satisfaction and long wear. Write for catalog and samples. Prices reasonable. WEST UNITY WOOLEN MILLS, DEPT. G, WEST UNITY, OHIO.

QUALITY QUILT PATCH ROLLS SPECIAL BARGAIN. Now only 98c a roll containing two pounds or 15 yards. All sizes, colors, varieties. Dandy premium FREE with each order for two rolls. No money necessary. Sent C.O.D. or write today for interesting literature and get FREE sample. Stauffer Sales Service, 51 E. Goepf St., Dept. 2, Bethlehem, Pa.

Aunt Janet's Counsel Corner

Careful Reader Utilizes Small Scraps in "Candy Stick" Design

Dear Aunt Janet:
We have been taking the American Agriculturist for some time and I never get all the good out of them until some long winter evening. I get a bunch of them and read from beginning to end.
They are usually three or four years old before we destroy them. We would keep them longer but with other magazines they accumulate so fast I don't have a place to keep them. Would like to say of A. M. A. in American Agriculturist, July 24, 1926, that she isn't the only one who has quilt blocks per-

into your own lungs, as in kissing or whispering.

Do not put to your lips any food, drink, dish or utensil that the patient has touched, or that has been in the sick room. Do not eat or drink in the sick room.

Do not go into the sick room with an empty stomach.

Wear no clothing that the patient has worn just before, during or just after his sickness.

Keep the hands free from all discharges from the sick. If the hands are accidentally contaminated, wash them at once with antiseptic soap.

If the hands are scratched or cut, put adhesive plaster over the wounds. Never touch the sick with sore or scratched hands.

If the patient be sick with any of the eruptive contagious diseases, such as small pox or scarlet fever, take every precaution not to come in contact with the scales or scabs of the skin. Kill or drive out of the sick room all mosquitoes, flies or other insects.

Voter's Radio Service

Tuesdays at 7 p. m., eastern standard time, the National League of Women Voters and the National Broadcasting Company broadcast from WEA, New York City and WRC, Washington, D. C., non-partisan information concerning topics of interest to all citizens. The following programs will appear in April.

April 16th, 7 to 7:30 p. m.—"Why

Crime"—Professor Felix Frankfurter, Harvard Law School, Director of the Harvard Crime Survey. "Crime and the Voter"—Mr. Raymond T. Fosdick, Attorney, New York City.

April 23rd, 7 to 7:30 p. m.—"What Congress is Doing"—Mr. Charles G. Ross, Head of Washington Bureau of the St. Louis Post-Dispatch. "Who Votes"—Pres. Robert D. Leigh, of Bennington College, Vermont.

April 30th, 7 to 7:30 p. m.—"Trade and Our Foreign Relations"—Mr. Edward A. Filene, Boston, Massachusetts.

Rare Books Preserved by Coat of Varnish

A COAT of varnish may be applied over the finest tooled leather or other book binding without fear of injuring the color or appearance in any way. The idea is a good one for the protection of rare old books since the varnish forms a moist-proof, wear-resisting coat which will preserve the cover indefinitely. It is a good idea, too, for children's books which soon show finger prints and other signs of wear; or for the cook book which is apt to become spotted and sticky. The washable varnish makes the binding neater and the book more sanitary.

When I scour pots and pans with a cleanser, I use a cork the size of a dollar instead of a cloth. It scours better and is easier on hands.—M. F. M., Ark.

A disinfectant

for poultry houses, yards, pens, and stables



and about the home

DR. HESS Dip and Disinfectant destroys disease germs, keeps down foul odors and establishes health conditions. It is five times as strong as carbolic acid. Standardized—always uniform in strength.

Use in sinks, drains, closets—wherever there is filth or decaying, foul-smelling matter.

Sprinkle in poultry-houses, nests, roosts, pig pens, dairy barns and houses. It is death to lice. Keeps premises healthful and clean smelling. Guaranteed.

DR. HESS & CLARK, Inc.
Ashland, Ohio

DR. HESS DIP & DISINFECTANT

Infant's Dress

No. 1676

is stamped for embroidery with a design that is sure to please. It is made up on good quality white lawn and can be obtained in either six months or one year size. This dress will be sent postpaid to any address on receipt of 75 cents. State number and size.

Ten cents extra brings catalogue of complete line of materials stamped for embroidery, pillows, luncheon sets, scarfs, aprons, baby outfits, bedspreads,



etc. Order from Embroidery Department, AMERICAN AGRICULTURIST, 461 Fourth Avenue, New York City.

petually in the making, only mine are candy-stick design. Usually a block will have five sticks (five inches long by one and a half wide) dark stick in center, light each side, dark each side of that or vice versa. If the pieces I cut them out of are narrow, I have seven sticks. After the five or seven sticks are pieced together to make the blocks, I join the blocks together, ends to sides. We always have some on hand. If a caller drops in, my mother and I catch up a block. It's surprising how soon one will have blocks enough for a quilt. We tied two last winter of cretonne. My mother also pieced two for my son and daughter which won't take long to make when they are needed.

How many use a large fork to beat mashed potatoes? I like it much better than stirring with the potato masher. I also beat my flour and water for gravy or wheat pancakes with the egg beater. We all enjoyed "Christmas Bells, Ring On," by Mrs. Cola L. Fountain.

Would like to know where Elsie Duncan Yale (November 10, 1928) got her Pinks. I tried to get one some time ago to pink tray cloths made of oil cloth (stencil in the corner of each) but was unable to get one.

Am also interested about the care of chimneys as that hard substance gathers on our furnace chimney and burns out every once in a while.

Careful Reader.

Have any of our readers the pattern of the old-fashioned quilt block known as sunburst or rising sun? Another reader wants to know.

Aunt Janet.

How to Avoid Contagious Disease

Avoid sitting down in the sick room. Avoid touching the patient, the bed, walls or furniture.

Wash the hands with antiseptic soap after touching the patient.

Exercise regularly, if possible in the open air. Nurses and attendants upon the sick should wear washable dresses, which should be changed frequently. A washable cap should cover the hair.

Do not take the breath of the sick

Attractive Wash Frock



2728



DESIGN No. 2728 is a smart wrap around model which is slenderizing in its effect. Made up of cotton foulard, cotton broadcloth, pique, linen or prints, this design is lovely for morning wear. The pattern cuts in sizes 16, 18 years, 36, 38, 40, 42 and 44 inches bust measure. The 36-inch size requires 2 3/4 yards of 40-inch material with 1/2 yard of 27-inch contrasting. PRICE 13c.



Women Like Them!

FARM women always find the Farm Service Hardware Stores pleasing places to trade.

It is there that you get many new ideas and see new things that help to make the daily work easier and the home more attractive. You will appreciate the advantages of being able to "see before you buy" for you know that there is no way to make purchases as satisfactorily as being able to carefully examine an article and comparing it before deciding just which one you want. Prices at these "tag" stores mean true economy for you too as your comparisons will quickly show.

Stop in to your nearest one this week and see the big display of fine aluminum kitchen utensils you are sure to find some pieces that will help make your kitchen labors lighter.

Look for this tag in their window.

Your Farm Service HARDWARE STORES



Where prices are lower because you get personal help in the selection and maintenance of your purchases.

The Little Shepherd of Kingdom Come

By John Fox, Jr.

"Be as good a man as your father was, my boy," he said, and Dan rode back the pitiable way through the rear of that noble army of Virginia—through ranks of tattered, worn, hungry soldiers, among the broken debris of wagons and abandoned guns, past skeleton horses and skeleton men.

All hope was gone, but Fitz Lee led his cavalry through the Yankee lines and escaped. In that flight Daniel Dean got his only wound in the war—a bullet through the shoulder. When the surrender came, Fitz Lee gave up, too, and led back his command to get Grant's generous terms. But all his men did not go with him, and among the cavalymen who went on toward southwestern Virginia was Dan—making his way back to Richard Hunt—for now that gallant Morgan was dead, Hunt was general of the old command.

Behind, at Appomattox, Chad was with Grant. He saw the surrender—saw Lee look toward his army, when he came down the steps after he had given up, saw him strike his hands together three times and ride Traveller away through the profound and silent respect of his enemies and the tearful worship of his own men. And Chad got permission straightway to go back to Ohio, and he mustered out with his old regiment, and he, too, started back through Virginia.

Meanwhile, Dan was drawing near the mountains. He was worn out when he reached Abingdon. The wound in his shoulder was festering and he was in a high fever. At the camp of Morgan's Men he found only a hospital left—for General Hunt had gone southward—and a hospital was what he most needed now. As he lay, unconscious with fever, next day, a giant figure, lying near, turned his head and stared at the boy. It was Rebel Jerry Dillon, helpless from a sabre cut and frightfully scarred by the fearful wounds his brother, Yankee Jake, had given him. And thus, Chadwick Buford, making for the Ohio, saw the two strange messmates, a few days later, when he rode into the deserted rebel camp.

All was over. Red Mars had passed beyond the horizon and the white Star of Peace already shone faintly on the ravaged South. The shattered remnants of Morgan's cavalry, pall-bearers of the Lost Cause—had gone South—bare-footed and in rags—to guard Jefferson Davis to safety, and Chad's heart was wrung when he stepped into the little hospital they had left behind—a space cleared into a thicket of rhododendron. There was not a tent—there was little medicine—little food. The drizzling rain dropped on the group of ragged sick men from the branches above them. Nearly all were youthful, and the youngest was a mere boy, who lay delirious with his head on the root of a tree. As Chad stood looking, the boy opened his eyes and his mouth twitched with pain.

"Hello, you damned Yankee." Again his mouth twitched and again the old dare-devil light that Chad knew so well kindled in his hazy eyes.

"I said," he repeated distinctly, "Hello, you damned Yank. Damned Yank I said." Chad beckoned to two men.

"Go bring a stretcher."

The men shook their heads with a grim smile—they had no stretcher.

The boy talked dreamily.

"Say, Yank, didn't we give you hell in—oh, well, in lots o' places. But you've got me." The two soldiers were lifting him in their arms. "Goin' to take me to prison? Goin' to take me out to shoot me, Yank? You are a damned Yank." A hoarse growl rose behind them and the giant lifted him-

self on one elbow, swaying his head from side to side.

"Let that boy alone!" Dan nodded back at him confidently.

"That's all right, Jerry. This Yank's a friend of mine." His brow wrinkled. "At any rate he looks like somebody I know. He's goin' to give me something to eat and get me well—like hell," he added to himself—passing off into unconsciousness again. Chad had the lad carried to his own tent, had him stripped, bathed, and bandaged and stood looking down at him. It was hard to believe that the broken, aged youth was the red-cheeked, vigorous lad whom he had known as Daniel Dean. He was ragged, starved, all but bare-footed, wounded, sick, and yet he was as undaunted, as defiant, as when he

A tent was above him, a heavy blanket was beneath him and there were clothes on his body that felt strangely fresh and clean. He looked up to see Chad's face between the flaps of the tent.

"D'you do this?"

"That's all right," said Chad. "This war is over." And he went away to let Dan think it out. When he came again, Dan held out his hand silently.

XXVIII

PALL-BEARERS OF THE LOST CAUSE

THE rain was falling with a steady roar when General Hunt broke camp a few days before. The mountain-tops were black with thunderclouds, and along the muddy road went Morgan's Men—most of them on mules

The Story Thus Far

CHAD leaves "Lonesome" with his dog "Jack." His foster parents are both dead from the plague and plans have been laid to bind Chad out to a hard fisted neighbor. After the funeral, Chad collects a rifle, some powder, and shot and a haversack and with "Jack" by his side, starts out for unknown parts. He meets the sons of Joel Turner from over the mountain who take him home. Chad's cleverness at school gains the admiration of Caleb Hazel, the schoolmaster. They become close friends. Hazel tells Chad of the "Bluegrass Country" beyond the hills. Logging operations take Chad to a distant city where he gets lost and starts home on foot. He is picked up by Major Calvin Buford. It appears that Chad is also a Buford and is believed to be a kinsman of his new found friend, who takes him to his home in Lexington in the heart of the "Bluegrass." Chad accepts the Major's offer of a home and an education. Chad enters into the social life and becomes very popular at school. He falls in love with Margaret Dean, daughter of General Dean, neighbor of the Bufords. Meanwhile feeling grows bitter between North and South and war clouds gather. Chad joins the Union forces under Grant. His command takes him back to Lexington.

charged with Morgan's dare-devils at the beginning of the war. Then Chad went back to the hospital—for a blanket and some medicine.

"They are friends," he said to the Confederate surgeon, pointing at a huge gaunt figure.

"I reckon that big fellow has saved that boy's life a dozen times. Yes, they're mess-mates." And Chad stood looking down at Jerry Dillon, one of the giant twins—whose name was a terror throughout the mountains of the middle south. Then he turned and the surgeon followed. There was a rustle of branches on one side when they were gone, and at the sound the wounded man lifted his head. The branches parted and the ox-like face of Yankee Jake peered through. For a full minute, the two brothers stared at each other.

"I reckon you got me, Jake," said Jerry.

"I been lookin' fer ye a long while," said Jake, simply, and he smiled strangely as he moved slowly forward and looked down at his enemy—his heavy head wagging from side to side. Jerry was fumbling at his belt. The big knife flashed, but Jake's hand was as quick as its gleam and he had the wrist that held it. His great fingers crushed together, the blade dropped on the ground, and again the big twins looked at each other. Slowly, Yankee Jake picked up the knife. The other moved not a muscle and in his fierce eyes was no plea for mercy. The point of the blade moved slowly down—down over the rebel's heart, and was thrust into its sheath again. Then Jake let go the wrist.

"Don't tech it agin" he said, and he strode away. The big fellow lay blinking. He did not open his lips when, in a moment, Yankee Jake slouched in with a canteen of water. When Chad came back, one giant was drawing on the other a pair of socks. The other was still silent and had his face turned the other way. Looking up, Jake met Chad's surprised gaze with a grin.

A day later, Dan came to his senses.

which had been taken from abandoned wagons when news of the surrender came—without saddles and with blind bridles or rope halters—the rest sloping along through the yellow mud on foot—literally—for few of them had shoes; they were on their way to protect Davis and join Johnston, now that Lee was no more. There was no murmuring, no faltering, and it touched Richard Hunt to observe that they were now more prompt to obedience, when it was optional with them whether they should go or stay, than they had ever been in the proudest days of the Confederacy.

Threatened from Tennessee and cut off from Richmond, Hunt had made up his mind to march eastward to join Lee, when the news of the surrender came. Had the sun at that moment dropped suddenly to the horizon from the heaven above them, those Confederates would have been hardly more startled or plunged into deeper despair. Crowds of infantry threw down their arms and, with the rest, all sense of discipline was lost. Of the cavalry, however, not more than ten men declined to march south, and out they moved through the drenching rain in a silence that was broken only with a single cheer when ninety men from another Kentucky brigade joined them, who, too, felt that as long as the Confederate Government survived, there was work for them to do. So on they went to keep up the struggle, if the word was given, skirmishing, fighting and slipping past the enemies that were hemming them in, on with Davis, his cabinet, and General Breckinridge to join Taylor and Forrest in Alabama. Across the border of South Carolina, an irate old lady upbraided Hunt for allowing his soldiers to take forage from her barn.

"You are a gang of thieving Kentuckians," she said, hotly; "you are afraid to go home, while our boys are surrendering decently."

"Madam!" — Renfrew the Silent spoke—spoke from the depths of his once brilliant jacket—"you South Caro-

linians had a good deal to say about getting up this war, but we Kentuckians have contracted to close it out."

Then came the last Confederate council of war. In turn, each officer spoke of his men and of himself and each to the same effect; the cause was lost and there was no use in prolonging the war.

"We will give our lives to secure your safety, but we cannot urge our men to struggle against a fate that is inevitable, and perhaps thus forfeit all hope of a restoration to their homes and friends."

Davis was affable, dignified, calm, undaunted.

"I will hear of no plan that is concerned only with my safety. A few brave men can prolong the war until this panic has passed, and they will be a nucleus for thousands more."

The answer was silence, as the gaunt, beaten man looked from face to face. He rose with an effort.

"I see all hope is gone," he said, bitterly, and though his calm remained, his bearing was less erect, his face was deathly pale and his step so infirm that he leaned upon General Breckinridge as he neared the door—in the bitterest moment, perhaps, of his life.

So, the old Morgan's Men, so long separated, were united at the end. In a broken voice General Hunt forbade the men who had followed him on foot three hundred miles from Virginia to go farther, but to disperse to their homes; and they wept like children.

In front of him was a big force of Federal cavalry; retreat the way he had come was impossible, and to the left, if he escaped, was the sea; but dauntless Hunt refused to surrender except at the order of a superior, or unless told that all was done that could be done to assure the escape of his President. That order came from Breckinridge.

"Surrender," was the message. "Go back to your homes. I will not have one of these young men encounter one more hazard for my sake."

That night Richard Hunt fought out his fight with himself, pacing to and fro under the stars. He had struggled faithfully for what he believed, still believed, and would, perhaps, always believe, was right. He had fought for the broadest ideal of liberty as he understood it, for citizen, State, and nation. The appeal had gone to the sword and the verdict was against him. He would accept it. He would go home, take the oath of allegiance, resume the law, and, as an American citizen, do his duty. He had no sense of humiliation; he had no apology to make and would never have—he had done his duty. He felt no bitterness and had no fault to find with his foes, who were brave and had done their duty as they had seen it, for he granted them the right to see a different duty from what he had decided was his. And that was all.

Renfrew the Silent was waiting at the smoldering fire. He neither looked up nor made any comment when General Hunt spoke his determination. His own face grew more sullen and he reached his hand into his breast and pulled from his faded jacket the tattered colors that he once had borne.

"These will never be lowered as long as I live," he said, "nor afterwards if I can prevent it." And lowered they never were. On a little island in the Pacific Ocean, this strange soldier, after leaving his property and his kindred forever, lived out his life among the natives with his blood-stained remnant of the Stars and Bars over his hut, and when he died, the flag was hung over his grave, and above that

(Continued on Page 31)

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AMERICAN AGRICULTURIST

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LAKE SHORE KENNELS, Ilmrod, N. Y. offers coon hounds, Young stock and puppies, summer prices, 6 months trial.

PAINE'S COLLIE KENNELS, South Royalton, Vt. FOUR MALE PUPPIES, a breed which has given satisfaction for six years. Shepherds for sale at \$8 each on approval. Six weeks old, LEO H. BARNUM, Prattsville, N. Y.

DON'T DELAY and be too late, get your English or Welsh Shepherds now. Beautiful pups from natural heelers. A few strict heelbiting trained Shepherds ready to work. GEORGE BOORMAN, Marathon, N. Y.

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EVERLAY BROWN LEGHORNS. Tormohlen Famous strain. Baby chicks, eggs for hatching, SUNNYSIDE FARM, Emporium, Pa.

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BREEDERS OF PENNSYLVANIA'S Finest Baby Chicks. Excellent quality and sired for productiveness. Heavy breeds, 14c; light breeds 12c. May delivery, 2c less. Hatches each Monday and Wednesday. Illustrative catalog. MILTON POULTRY FARM, Milton, Pa.

BLUE ANDALUSIANS—Going fast, but still have a few hatching eggs to offer at \$2. per 15; \$6 per 50. Be quick if you want them. Same high quality. L. J. VAN SCIVER, Closter, N. J.

KEISER'S SINGLE COMB Brown Leghorns and Golden Buff Orpingtons. Excellent matings. Catalogue. F. KEISER, Grampian, Pa.

FOR SALE—Single Comb White Leghorn chicks. L. H. HISCOCK, Skaneateles, N. Y. Circular on request.

SINGLE COMB REDS—Barred Rocks. Eggs. Chicks. Extraordinary matings. Fine type. Bred for winter production. Catalogue. Low prices. GRAMPIAN HILLS POULTRY FARMS, Grampian, Pa.

AMERICAN MOTTLED ANCONAS—Record Layers. Lay large white eggs. Extra large type. Exceptional markings. Fine matings. Low prices. Catalogue. AMERICAN ANCONA FARMS, Grampian, Pa.

PRODUCTION BRED CHICKS that live. Large type S.C.V. Leghorns, \$20-100; \$180-1000; Invest now and take profits in 1929. ADAM SEABURY, Sayville, L. I.

SUNNYFIELD EXTRA LARGE Single Comb Black Minorcas. Exclusively. Chicks. Eggs. Stock. Extraordinary layers. Lay exceptionally large white eggs. Two matings. Low prices. Catalogue. SUNNYFIELD MINORCA FARMS, Grampian, Pa.

REGAL DORCAS WHITE WYANDOTTES—Eggs, chicks, stock. 256 egg record. Ledger. North American contest. Winter layers. Excellent type. Fine matings. Low prices. Catalogue. KEISER'S WHITE ACRES, Grampian, Pa.

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POULTRY

Baby Chicks, Breeding Stock, Eggs

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CHICKS C.O.D.—100 Rocks or Reds, \$14; Leghorns, \$12; heavy mixed, \$12; light, \$9. Delivery guaranteed. Feeding system, raising 95% to maturity, free. C. M. LAUVER, Box 26, McAlisterville, Pa.

CHICKS OF KNOWN quality bring greater returns. 16 breeds. Circular free. How to raise Better Chicks. PERRY POULTRY FARM, Perry, N. Y.

WOODSIDE POULTRY YARDS, chicks, Tom Barron S.C. White Leghorns Imported 250-298 egg strain Breeder of leghorns for 28 years, Catalogue. DAVID HAMMOND, Cortland, N. Y.

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CHICKS, LARGE TYPE, Leghorns, Rocks, Reds, Wyandottes, Turkeys, Geese, Ducks, Guineaes, Stock, Eggs, Catalog. PIONEER FARMS, Telford, Penn.

CASH ON DELIVERY, Wyckoff Tanager strain, White Leghorn chicks. Our own production bred flock. 100 chicks \$10.50, 500, \$50. Write BROOKSIDE POULTRY FARM, McAlisterville, Pa.

BABY CHICKS HATCHING Eggs 8 and 10 weeks old Pullets single comb White Leghorns only. Write for price. ALTOONA FARM, R. Neal Marshall, Honesdale, Pa. R. 4.

BABY CHICKS: From heavy laying strains of Rocks and Reds \$12. White and Brown Leghorns \$10. Mixed \$9. prepaid. Member I. B. C. A. SUNNYSIDE HATCHERY, Liverpool, Pa.

EGGS—WHITE CRESTED Black Polish Barred Rocks, Scabrights. PAINE, South Royalton, Vt.

COLUMBIAN WYANDOTTES. Large handsome heavy layers. Splendid chicks, right prices. INVALE FARM, R4, Walkill, N. Y.

SELECTED JERSEY BLACK Giant eggs \$1.50—15; chicks \$10—100. MRS. HOMER BAKER, Richfield Springs, N. Y.

ROSE COMB BROWN Leghorns, Frostproof egg producers. Very profitable. Baby Chicks. J. M. CHASE, Box 40, Walkill, N. Y.

CHICKS, PURE BARRON English White Leghorns. We import Large Trapped Birds. 11c and up. Big, husky chicks hatched from our Egg-bred Leghorns insure success. Get free Catalog, prices, before buying. WILLACKER LEGHORN FARM, Box G, New Washington, Ohio.

TOM BARRON STRAIN S. C. White Leghorns exclusively. Extra nice healthy chicks March and April \$20 per 100. May \$15. June \$12. Safe delivery by prepaid parcel post and satisfaction guaranteed. FEEK'S WHITE LEGHORN FARM, Clyde, N. Y. R. 4.

BEST WHITE LEGHORN Chicks, Tanager strain. Satisfaction guaranteed. Circular free. FREE RANGE POULTRY FARM, Richfield, Pa.

CHICKS: S. C. ENGLISH White Leghorn and common White Leghorns, Barred Rocks and Reds. Bank references. Be sure and get my prices before ordering. CLOYD NEIMOND, McAlisterville, Pa.

RHODE ISLAND RED chicks, S. C. Best quality. \$16. per hundred. L. HAMBLIN, Wilson, N. Y.

PULLETS—Barron and Tanager White Leghorns from four and five lb. breeders. Three to ten weeks old. 27c and up. Free circular. GOODFLOX POULTRY FARM, Leghorn Blvd., Dansville, N. Y.

POULTRY

Baby Chicks, Breeding Stock, Eggs

THOMPSON STRAIN BARRED Rock Chicks: From healthy free range stock April—\$12 per 100. May and June \$10 per 100 postpaid. 100% live delivery guaranteed. Hatching eggs \$6 per 100. Order direct from this add. WEST DENTON HATCHERY, Denton, Md.

TANGRED WHITE LEGHORN Baby Chicks, Direct from the breeder. Same stock as our contest leading pens, carrying three generations of breeding over 250. Large eggs. Every mating brooder tested—vitality and livability assured. Also Ringlet Barred Rocks and Tompkins Reds from real stock. Duck eggs, 11 breeds. SHADYLAWN POULTRY FARM, Hughesville, Pa.

POULTRY

Turkeys—Ducks—Geese

TURKEYS—LARGE, PUREBRED, Mammoth Bronze Dark colored. Very beautifully marked. Best strain. Yearlings and young stock. MRS. ARTHUR INGER-SOLL, Lowville, N. Y.

WHITE WYANDOTTE: MAMMOTH PEKIN Duck eggs. Pearl Guineaes eggs. LAURA DECKER, Stamfordville, N. Y.

MAMMOTH WHITE PEKIN Duck eggs for hatching, ten cents apiece, delivered, satisfaction guaranteed. JOS. KENNEL, Atglen, Pa.

PUREBRED MAMMOTH BRONZE turkey eggs. "Baker's Bronze Beauties" strain. TROWBRIDGE TURKEY FARM, Sabinsville, Pa.

MAMMOTH BRONZE TURKEY Eggs, 10 for \$5. MRS. FLOYD MILLER, Walton, N. Y.

TEN CHOICE BOURBON Red Turkey eggs, \$5. Free range stock. HOMER LEHMAN, Amaranth, Pa.

W. HOLLAND HATCHING EGGS. From Madison Square Garden winners. MRS. A. H. SMITH, Sodus, N. Y.

TURKEYS FOR SALE, Bourbon Red Tom, Hornings strain, also eggs in season. SABRINA TWEEDIE, Walton, N. Y.

TURKEY EGGS—from our famous pure bred Mammoth Bronze, Bourbon Red, Narragansett and White Holland flocks. Write WALTER BROS., Powhatan Point, Ohio.

BOURBON RED TURKEY Eggs, Horning & Honsinger Strain 50c each. One tom. MRS. C. H. BROOKMAN, R. D. 3, Fort Plain, N. Y.

BOURBON RED TURKEY Eggs \$5-10, Giant hen eggs \$1.75-15. GEO. LEHMAN, Amaranth, Pa.

MAMMOTH BRONZE TURKEY Eggs from healthy free farm range stock. 100 eggs \$45. 50, \$23.50. 12, \$6. Prepaid. Fertility and safe delivery guaranteed. Valuable instructions with order. HIGHLAND FARM, Sellersville, Pa.

MAMMOTH TOULOUSE GEESE Eggs. From large old breeders. 50-\$23.50. 12-\$6.00. Prepaid. Pekin Duck eggs. 100-\$11.00. 50-\$6.00. 12-\$2.00 prepaid. Ducklings \$30.00. Satisfaction guaranteed. HIGHLAND FARM, Sellersville, Pa.

FARM EQUIPMENT

ROOFING PAPER, 3-ply, \$1.35 per roll, 100 sq-ft. Prepaid. Asphalt shingles, roofcoating, paint. Send for price list. WINIKER BROS., Mills, Mass.

SEEDS—NURSERY STOCK

HIGH GRADE SEED Potatoes—Russets. Green Mountain, Gold Coin, Cobbler, Banner, Walter Raleighs and Carman No. 3. Prices right. Catalog free. THE KEYSTONE POTATO FARMS, Richfield, Pa.

SEEDS—NURSERY STOCK

C. O. D. FROST PROOF Cabbage plants, Leading varieties now ready. 500, 65c; 1000, \$1.00; 5000, \$4.50. FARMERS PLANT CO., Tifton, Ga.

SEND NO MONEY. C.O.D. Frost proof Cabbage and Onion plants. All Varieties now ready. 500, 65c; 1000, \$1.00; 5000, \$4.50. STANDARD PLANT CO., Tifton, Ga.

CABBAGE PLANTS, NOW Ready. My frost proof Cabbage plants will head three weeks earlier than home grown plants. Varieties: Jersey and Charleston Wakefield, Succession, Flat Dutch, Golden Acre and Copenhagen Market. Prices by parcel post postpaid: 500, \$1.25; 1000, \$2.25. Express: 1000, \$1.00; 5000, \$4.50; 10,000, \$7.50. Bermuda Onion plants same prices as Cabbage plants. Roots wrapped in moss and shipped promptly. Satisfaction Guaranteed. P. D. FULWOOD, Tifton, Ga.

STRAWBERRY, BLACK, PURPLE and Red Raspberry plants, let us mail you our circular, giving description and prices. Our plants are strictly fresh dug from new fields. F. G. MANGUS, Maple View, N. Y.

CERTIFIED SEED POTATOES, Smooth rural type. High yielding strain, grown by APPLETON BROS., Canandaigua, N. Y.

FREE GLADIOLUS BOOK—36 pages, 45 illustrations. Describes 171 exquisite varieties, many new. Tells how to grow. It's free! The famous beautiful Rainbow Collection of thirty bulbs, all different, \$1. postpaid. HOWARD GILLET, Gladiolus Specialist, Box J, New Lebanon, N. Y.

RAISE BEARDLESS BARLEY. New two rowed, stiff strawed, heavy yielder. Also Burbank Oats and Gold Nugget Corn. Descriptions and samples free. LONG-ACRE FARM, Route 2, Geneva, N. Y.

COOK'S CERTIFIED POTATOES. Cobblers and Russets. Better than ever. Attractive prices. We pay freight. IRVING E. COOK, Munsville, N. Y.

PAY ON ARRIVAL—Frostproof Cabbage Plants immediate shipment. 75c-1000. EMPIRE PLANT CO., Albany, Ga.

FROSTPROOF CABBAGE PLANTS. Order today. Pay postman, 500-60c, 1000-\$1. POSTAL PLANT CO., Albany, Ga.

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STRAWBERRY, RASPBERRY, BLACKBERRY, Dewberry, Loganberry, Wineberry, Grape, Juneberry plants; Asparagus, Rhubarb, Horseradish roots; Hardy Perennial and Annual Flower plants; Roses, Vines, Shrubs, Hedge plants. Catalogue free. HARRY E SQUIRES, Hampton Bays, N. Y.

VEGETABLE SEEDLINGS—Ready now for you to transplant into cold frames or greenhouse. \$3. per 1000. Postpaid. Peppers—Ruby King, Worldbeater, Bull Nose, Sunnybrook, Sweet Cheese, and Chinese Giant. Tomatoes—Langdon's Earliana, Penn State Earliana, Marglobe, Chalk's Early Jewel, Bonny Best John Baer, Stone and Matchless. Send for list of other plants. PAUL F. ROCHELLE, Morristown, N. J.

OLD FASHIONED HARDY Flower Plants. Holly hocks, Delphiniums, Bleeding Hearts, Anemones, Blue Bells, Canterbury Bells, Columbines, Monkshoods, Hardy Carnations, Hardy Chrysanthemums, Hardy Lilies, Hardy Phloxes, Lupines, Hardy Pinks, Oriental Poppies, and 240 other Perennials that will bloom this summer! Pansies, Asters, Salvias, Petunias, Zinnias, Snapdragons and other annuals; Roses, Vines, Shrubs, Hedge Plants; Berry plants, Asparagus roots. Catalogue free. HARRY E. SQUIRES, Hampton Bays, N. Y.

Additional Classified Advertising On Page 30

HANDY ANDY Says "Here's How"

To Grow Sweet Clover for Pasture

By Ray Inman

Take steps NOW to prevent summer pasture shortage.

ARE YOU GONNA DO ANYTHING ABOUT PASTURE SHORTAGE THIS YEAR, LEANDER?

ISHOULD SAY I AM! —I'M GONNA MAKE THIS ONE ABOUT TWICET AS SHORT

SOOTHING PASTORAL SCENE....

grow SWEET CLOVER with your small grain

THEY MUST BE A FEW OTHER BRIGHT FELLERS IN THE WORLD. — WHY AINT NONE O' THEM EVER THOUGHT O' THIS B'FORE?

IN CONFERENCE DON'T DISTURB

WE NEVER CHARGE EXTRA FOR THESE LITTLE IDEAS—WHAT WOULD BE THE USE?

it will be ready for pasture by september 1 and it's good for a couple of months

WHAT IN THE 'WORLD HAS COME OVER YOU, ROSCOE YOU'VE HAD THE SWEETEST DISPOSITION LATELY!

ITELL YOU MAGGY IT'S THIS SWEET CLOVER THE DADBLAMED STUFF IS IRRESISTABLE

next spring it will be ready again, 2 weeks earlier than blue grass.....

WHAT'S WALT WHIFFLE SPREADIN' ON THAT FIELD?

SUGAR. HIS SWEET CLOVER TURNED SOWER ON HIM—ANHE'S TRYIN' TO SWEETEN IT UP AGAIN

Additional Classified Advertising

SEEDS—NURSERY STOCK

COLORADO BLUE SPRUCE 50 seeds with planting instructions 10c. BOX 92, Greenlane, Pa.

CERTIFIED SEED POTATOES. Smooth white Rurals. Write for prices. H. L. HODNETT & SONS, Fillmore, N. Y.

PREMIER OR HOWARD 17 Strawberry Plants \$1.00 per 100, \$5.00 per 1000. BASIL A. PERRY, Georgetown, Delaware.

GLADIOLUS \$1.00 Blooming Bulbs \$1.00, 12 choice Dahlias \$1.00. Catalogue. 20 Evergreen Trees \$2.00. GLADAILIA FARMS, Chicopee Falls, Mass.

SEED CORN—CERTIFIED West Branch Sweepstakes for sale, grown by Penna State College Instructions. 95 to 100% germination. \$3. per bu. A. L. WINTER & SON, Montoursville, Pa.

FROSTPROOF CABBAGE and Onion Plants \$1 thousand. Prompt shipments. Good delivery guaranteed. OLD DOMINION PLANT COMPANY, Franklin, Va.

PURE STRAIN BRAND Certified and Near-Certified Seed Potatoes. Best proven varieties. Northern Grown. Ask for price list. A. G. ALDRIDGE SONS, Established 1889, Fishers, N. Y.

GLADOLI. CHOICE COLLECTION of new and standard kinds. Write for catalogue. Exceptionally choice mixture, large flowering kinds at \$2.50 per hundred. ECHO HEIGHTS FARM, Jordan, N. Y. R. 2.

MASTODON EVERBEARING STRAWBERRY Plants \$2.50 per 100, \$15.00 per 1000. Plants set out this Spring will bear quantities of large delicious berries this summer and fall. BASIL A. PERRY, Georgetown, Delaware.

CERTIFIED SEED POTATOES. Smooth and Russet Rurals. Buy direct from one of New York's Premier growers, car lots or less. A. A. WEEKS, Locke, N. Y.

Set Our "FROSTPROOF" Cabbage and Onion plants, and mature crop three weeks earlier 300, \$1.00; 500, \$1.75; 1000, \$2.75; 10,000, \$20. All delivered prepaid. Prompt shipment, good plants delivered or money refunded. J. P. COUNCILL COMPANY, Franklin, Virginia.

CERTIFIED LATHAM and HERBERT RASPBERRIES, Howard 17 and Mastodon Strawberries, Washington Asparagus. Other leading varieties Raspberries, Strawberries, Blackberries, Fruit trees, Shrubs, Evergreens, etc. Prices low. Everything guaranteed. Send for price list. BERT BAKER, Hoosick Falls, N. Y.

"FROSTPROOF" Cabbage and Onion Plants—Special wholesale Prices: 500, \$1.25; 1000, \$2.00; 5000, \$9.00; 10,000, \$17.50 all charges prepaid. Fine Plants, good delivery guaranteed or money refunded. WHOLESALE PLANT COMPANY, Thomasville, Ga.

DAHLIAS. ASSORTED not labeled. \$1. a dozen prepaid. ANER L. SMITH, Sodas, N. Y.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912.

OF AMERICAN AGRICULTURIST published weekly at 10 N. Cherry St., Poughkeepsie, N. Y., for April 1, 1929.

State of New York, County of Dutchess, ss.

Before me, a notary public in and for the State and county aforesaid, personally appeared Henry Morgenthau, Jr., who, having been duly sworn according to law, deposes and says that he is the publisher of AMERICAN AGRICULTURIST, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor and business managers are:

Publisher, Henry Morgenthau, Jr., Hopewell Junction, N. Y.; Editor, E. R. Eastman, 139 Caryl Avenue, Yonkers, N. Y.; Managing Editor, E. R. Eastman, 139 Caryl Avenue, Yonkers, N. Y.; Business Manager, Henry Morgenthau, Jr., Hopewell Junction, N. Y.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.) AMERICAN AGRICULTURIST INC., New York, N. Y.; Henry Morgenthau, Jr., Hopewell Junction, N. Y.; E. R. Eastman, 139 Caryl Avenue, Yonkers, N. Y.; Elinor F. Morgenthau, Hopewell Junction, N. Y.; Henry Morgenthau, 1133 5th Avenue, New York, N. Y.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent, or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear on the books of the company, but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and his affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is (This information is required from daily publications only.)

H. Morgenthau, Jr.,

Publisher.

Sworn to and subscribed before me this 26th day of March.

(Seal)

Elizabeth Campbell.

(My commission expires March 30, 1929.)

SEEDS—NURSERY STOCK

MILLIONS. CABBAGE, ONIONS, and Tomato Plants \$1, 1000. Pepper and Potato Plants \$1.75 1000. Gladiolus Bulbs \$1. Hundred, CLARK PLANT CO., Thomasville, Ga.

CERTIFIED SEED POTATOES, Irish Cobblers and original strain Carman No. 3. Buy direct from grower. Write today for prices. N. A. BAKER & SONS, Fairport, N. Y.

SEED CORN. Germination 97%. Grow Oswego Ensilage for quality silage. Write HAYNES SNYDER, Fulton, N. Y.

DAHLIA TUBERS 25-\$2.00. Good large varieties, postpaid. Shrubs, Roses, price list. EDGEWOOD FARM, R. 2, Jamesburg, N. J.

CERTIFIED RUSSET SEED Potatoes. College inspected. One year from Michigan. Special prices on large orders. J. W. HOPKINS & SON, Pittsford, N. Y.

CORNELL NO. 11 Seed Corn. From the original source of this dual purpose corn. \$3.50 a bushel delivered to your station. R. E. MOSHER, Aurora, N. Y.

BERMUDA ONION PLANTS—Grow bigger and better Onions. Frostproof. Postpaid: 200-55c; 500-\$1.00; 1,000-\$1.75. Transplanted Cabbage Plants: three dozen. 40c; 500-\$4.00. PORT MELLINGER, North Lima, Ohio.

A GREEN DAHLIA at last, this marvelous freak of nature and 10 Giant labeled Dahlias \$2.50. Regular value \$7.50. 12 beautiful labeled Dahlias all colors for \$1., worth \$3.50. BOLTS DAHLIA FARM, Stepaney, Conn.

FROST PROOF CABBAGE and Bermuda Onion plants. Prepaid mail, 500-\$1; 1,000-\$2. Expresed, 5,000-\$3.75; 10,000-\$7.50. COLEMAN PLANT FARMS, Tifton, Ga.

FROST PROOF CABBAGE plants and Bermuda Onion plants. 500-65c and postage; 1,000-\$1 and postage; 5,000-\$3.75 and express charges. EUREKA FARMS, Tifton, Ga.

EARLY JUNE RED Raspberry sets for sale. The earliest, largest, heaviest bearing berry grown. Send for literature telling what the New York State Experiment Station says of the June, \$20, thousand, \$3, hundred. LESTER BENNETT, Victor, N. Y.

CERTIFIED BERRY PLANTS. Columbian purple also Kansas, Cumberland, Plum Farmer, Black Caps. Prices 60c doz. \$3 hundred delivered. CHAS. WHEELER, Mannsville, N. Y.

SITUATIONS WANTED

DO YOU NEED FARM HELP. We have Jewish young men, able-bodied, some with, but mostly without experience, who want farm work. If you need a good, steady man, write for an order blank. Ours is not a commercial agency. We make no charge. THE JEWISH AGRICULTURAL SOCIETY, Inc., Box A, 301 E. 14th Street, New York City.

EXPERIENCED GARDENERS, FARMERS, Milkmen, laborers supplied immediately. INTERNATIONAL LABOR AGENCY, 153 Bowery, N. Y. C.

NOW IS THE TIME to give in your orders for good, reliable Gardeners, Farmers, Milkmen, Laborers (all kinds of help) state wages and write to GERMAN EMPLOYMENT AGENCY, 228 E. 74th, New York City. Free of charge to Employers.

HELP WANTED

AGENTS: SELL TROUSERS, Overalls, Dry Goods, Etc. Some advertised brands. Write FREEMAN E. HUNTER CO., Riverton, N. J.

WANTED: A Man to work a large equipped dairy farm on equal shares. Address V. D., American Agriculturist.

ASSOCIATION TESTERS NEEDED in New York State. Give age, experience in dairy work and references. G. W. TAILBY, JR., Department of Animal Husbandry, Ithaca, N. Y.

AGENTS—Make \$25.00—\$100.00 weekly, selling Comet Sprayers and Autowashers to farmers and Autoists. All brass. Throws continuous stream. Established 35 years. Particulars free. RUSLER CO., Johnstown, Ohio. Box C 12.

FARMS FOR SALE

SIXTY ACRES—Fertile. Nearly new house. Twenty acres timber. Good barns, near school. J. I. PHILLIPS, Delmar, Delaware.

WANTED. RESPONSIBLE PARTY to live free of rent on 80 acre farm in New Jersey, not under cultivation, to take care of property. Situated on main roads, farm house in good condition. Large chicken coops, vegetable garden. Willing to make lease. Apply, giving all particulars to E. H. care of AMERICAN AGRICULTURIST.

DESIRABLE DAIRY FARMS for sale in Erie County, Penna., for a trifle more than the original first mortgages. From 80 to 260 acres in each. Good buildings. Near improved highways, good markets, churches and schools. These farms are bargains as they must be sold this spring. Terms: one-fifth cash, balance in long time mortgages with low interest. THOS. W. SPOFFORD, Agent, 512 Masonic Temple, Erie, Pa.

DEL-MAR-VA—THE MARKET BASKET OF THE EAST. Three to ten hours by motor truck to New York, Philadelphia, Baltimore and Washington markets. Pennsylvania Railroad permeates Peninsula. Splendid productive land, farms, town and waterfront homes. Low prices. Good schools, low taxes. Very little snow and freezing. Handsome descriptive booklet, FREE. Address 164 Del-Mar-Va Building, Salisbury, Md.

FOR SALE. 170 acre, stone road, big buildings, good water, fruit, timber, 150 purebred Delaine sheep. 40 ton hay. \$6000, \$4000 cash, balance mortgage on farm. 220 acres, big barn and house. \$7000 cash. A good farm on Star mail route, to be paved. CLARE GREGORY, Mt. Vision, N. Y.

160 ACRES ON RIVER. 20 Cows. Only \$1000 required. Includes cows, teams, machinery, tools; over \$3100 income from milk; pleasant 7-room house, few steps state highway; several barns, silo, etc. Real producer, \$10,000 complete, only \$1000 down. See pg. 52. Also many letters telling of money-making, money-saving Strout Service. Write now for this big free catalog of 1000 bargains and 553 pictures. STROUT AGENCY, 255-R Fourth Ave., N. Y. City.

WANTED TO BUY

WANTED—HAY, GRAIN, Potatoes, Apples, Cabbage, Carloads. Pay highest market prices. THE HAMILTON CO., New Castle, Pa.

WANTED TO BUY old bags. We pay excellent prices. Write for prices. We pay freight. OWASCO BAG CO., Rochester, N. Y.

WOOL—HIDES—FURS

MUSKRAT FURS WANTED. Black—Large \$3.50. Medium \$2.50. Brown—Large \$2.50. Medium \$1.50. All furs wanted. EVERETTE SHERMAN, Whitman, Mass.

WOOL and SHEEP Pelts Wanted. I specialize in Wool and Pelts. Hundreds of satisfied shippers. Write for prices. ALVAH A. CONOVER, Lebanon, N. Y.

PRINTING—STATIONERY

250 BUSINESS ENVELOPES and 250 Letter Heads only \$3.00, 500 of each \$5.00. Cuts used free. Write your wants. INDEPENDENT PRESS, Mexico, N. Y.

BEST PRINTING. Least Money. 500 excellent envelopes, \$1.50 postpaid. Write us your requirements. HONESTY PRESS, Putney, Vermont.

MISCELLANEOUS

WANTED USED BAGS any quantity and grade. Highest prices and freight paid. HOFFMAN BROS. BAG CO., 39 Gorham St., Rochester, N. Y.

LEARN AUCTIONEERING at home. Every student successful. SCHOOL, Box 707, Davenport, Iowa.

BARRELS OF SLIGHTLY damaged crockery—Hotel chinaware — Cookingware — Glassware — Pottery. E. SWASEY COMPANY, Portland, Maine.

SUPERIOR GRAFTING WAX for Successful grafting. 1 lb. 50c; 3 lbs. \$1.25 postpaid. D. VICTOR MFG. CO., So. Weymouth, Mass.

AVIATION—If you are interested in aviation instruction and earning while learning, write WEEKS AIRCRAFT CORPORATION, Dept. B11, for free information without obligation, Milwaukee, Wis.

USED CIVIL WAR ENVELOPES with flags, designs, etc., \$1 to \$15 paid. Other stamps on envelopes before 1871 bought. Three-face lamps and old glassware bought. W. RICHMOND, Cold Spring, N. Y.

BALSAM PILLOWS filled with fresh Adirondack Balsam \$1.25 postpaid. Makes an ideal gift. Fill your own pillow; enough balsam in bulk for two pillows. \$1.00 postpaid. WONDER GIFT SHOP, Box 24, Newcomb, N. Y.

FARMERS. End crow pests and replanting. Treat corn seed with guaranteed formula costing few cents per bushel. Same mailed on receipt of \$1. R. WHEELER, Marathon, N. Y., R. D. 1.

CORTLAND APPLE WOOD for grafting; large supply excellent wood. MARTIN THEW, Arthursburg, N. Y.

FOR SALE: Five cars Clover, Mixed, and Timothy hay. Baled ready to ship. MARYDALE STOCK FARMS, New Berlin, N. Y.

CASH PAID for old pictures published by Currier & Ives or N. Currier or others. Send description, condition, size and price wanted. Write today. NOVAL STEWART, Binghamton, N. Y.

IOWA CREAM SEPARATOR slightly used, M 25, not needed, write. ADELIA CLANSZ, Lyons, N. Y.

TOBACCO

LEAF TOBACCO—Good sweet chewing, 3 lbs., 90c; 5, \$1.25; 10, \$2.00. Smoking, 3 lbs., 60c; 5, 90c; 10, \$1.50. UNITED FARMERS, Mayfield, Kentucky.

GUARANTEED CHEWING or Smoking five lbs. \$1.50; Ten \$2.50; Fifty Cigars \$1.85; pay when received. KENTUCKY TOBACCO CO., West Paducah, Kentucky.

HONESPUN TOBACCO: Chewing, 5 lbs. \$1.50; Smoking, 5 lbs. \$1.25. Fifty cigars \$1.75. Pay when received. Pipe free. FARMERS UNION, Paducah, Ky.

GUARANTEED HONESPUN TOBACCO. Chewing, 5 lbs. \$1.50; 10-\$2.50. Smoking, 10, \$1.75. Pipe Free. Pay Postman. UNITED FARMERS, Bardwell, Ky.

NATURAL LEAF TOBACCO—Best grade, guaranteed. Chewing, 5 pounds, \$1.00; 12, \$2.00. Smoking, 10, \$1.50. Pipe free. Pay when received. VAILEY FARMERS, Murra, Kentucky.

WOMEN'S WANTS

20 YARDS DRESS GOODS, Percales, Gingham, Voiles, etc., \$1.90. 3 lbs. Silks \$1. Pay postman plus postage. Large package Silks or Velvets 25c postpaid. NATIONAL TEXTILE CO., 661 Main St., Cambridge, Mass.

PATCHWORK 7 pounds Percales, Gingham \$1. 4 lbs. creton samples \$1. 3 lbs. woollens \$1., suitable for Boy's Knee Pants. 3 lbs. White Flannel \$1. 3 lbs. Chambray Remnants \$1. 3 lbs. Corduroy Remnants \$1. Nile Green only. Pay postman Plus postage. NATIONAL TEXTILE CO., 661 Main St., Cambridge, Mass.

LADIES' FINE LISLE STOCKINGS 3 pair \$1.00. Black, gunmetal, grey, beige, nude, French nude; sizes 8 1/2-10. Good openings for agents. A. H. TALBOT SALES COMPANY, Norwood, Mass.

Have a Debate in Your Grange

Send 2 cents to cover postage for an outline on the subject:

Is prohibition under present conditions a damage rather than a benefit?

American Agriculturist

461, 4th Ave. New York City

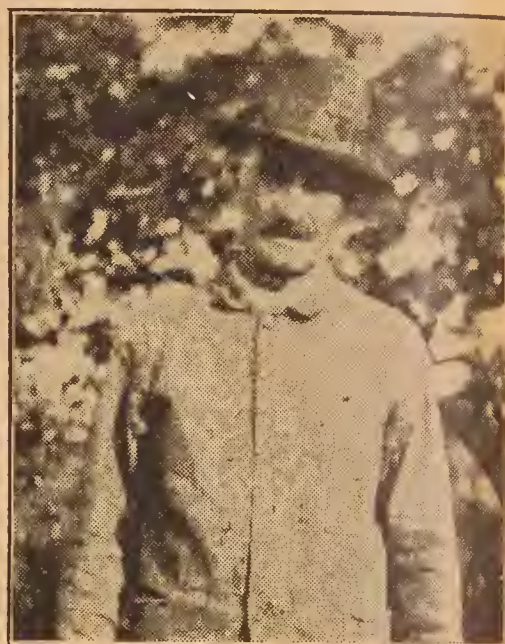
Meet These New York Master Farmers

(Continued from Page 5)

that he specializes in producing milk of an unusual quality.

Two interesting sidelights are the tennis court just across the road which Mr. Nichols has helped his children to build, and the fact that his hired man lives in one half of the house with exactly the same conveniences that are enjoyed by Mr. Nichols' family. The tennis court indicates that Mr. Nichols believes in the old adage "All work and no play makes Jack a dull boy," while the consideration given to living conditions goes a long way toward solving the problem of keeping a hired man.

Mr. Nichols is a member of his local church, the farm bureau and grange. He is an officer in the Grange, and last



Mr. Thomas McKeary

year attended every Grange meeting. The picture would not be complete without some mention of the family. Mr. and Mrs. Nichols have six children, three of them are now in high school, two of them have attended business school and one is at present attending the Ithaca Conservatory of Music.

The Little Shepherd of Kingdom Come


(Continued from Page 28)

grave today the tattered emblem still sways in southern air.

A week earlier, two Rebels and two Yankees started across the mountain together—Chad and Dan and the giant Dillon twins—Chad and Yankee Jake afoot. Up Lonesome they went toward the shaggy flank of Black Mountain where the Great Reaper had mowed down Chad's first friends. The logs of the cabin were still standing, though the roof was caved in and the yard was a tangle of undergrowth. A dull pain settled in Chad's breast, while he looked, and as they were climbing the spur, he choked when he caught sight of the graves under the big poplar.


There was the little pen he had built over his foster-mother's grave—still undisturbed. He said nothing and, as they went down the spur, across the river and up Pine Mountain, he kept his gnawing memories to himself. Only ten years before, and he seemed an old, old man now. He recognized the very spot where he had slept the first night after he ran away and awakened to that fearful never-forgotten storm at sunrise, which lived in his memory now as a mighty portent of the storms of human passion that had swept around him on many a battle-field. There was the very tree where he had killed the squirrel and the rattlesnake. It was bursting spring now, but the buds of laurel and rhododendron were unbroken. Down Kingdom Come they went. Here was where he had met the old cow, and here was the little hill where Jack had fought Whizzer and he had fought Tad Dillon and where he had first seen Melissa.

(To be Continued Next Week)



The Service Bureau

A Department Devoted to the Interests, Welfare and Protection of A. A. Readers



Why Throw Good Money After Bad?

Can you give me information about the National Business Analytical Corporation of New York City. I hold some stock in the Commonwealth Finance Corporation of New York which has gone out of business and a representative of the National Business Analytical Corporation has been trying to get us to advance them 10 per cent of the amount of my stock holdings in cash indicating that they would take action against the officers of the Commonwealth Finance Corporation. This man said they had plenty of evidence against the officers of the company and that they might be able to secure the return of some of our investment. I told him I would have to think it over first and I am writing to you immediately to get your advice.

ON investigation we learn that the National Business Analytical Corporation has solicited owners of stock in several companies that have failed indicating that they would be able to secure the return of some of the money

Collège of Agriculture and ask for Bulletin E 137, on the Bang abortion disease of cattle.

You Are Loaning Money When You Buy Stocks

JUDGING from the activity of stock salesmen, the returns from farming are increasing. Every mail brings us letters that tell of losses from investments. There are all kinds of stocks, but for the benefit of our subscribers they may be grouped into three classes.

The first class includes stock whose promoter knows is worthless when he attempts to sell it to you. When you buy this kind of stock your money is gone. Legal action may later result in a prison sentence for the promoter, which of course does not help the pocketbook of the man who has already invested.

In the second class we would put stock of new enterprises. The men back of a new concern may have every confidence that it will succeed. Their judgment, however, may be bad or unavoidable conditions may develop which may cause the company to fail.

The investor however, has no recourse. When you buy stock you are really lending money to the company on the belief that they will be able to make a profit and pay you dividends.

We would include in the third class all stock in old established enterprises where dividends have been paid for years. The fact that dividends have been regularly paid in the past indicates that the company will continue to pay them yet even here there is always a chance that conditions beyond the control of the company will make it impossible to show a profit.

Our suggestion is to buy only stock that is listed on the New York Stock Exchange and then only when the nature of the investment is thoroughly understood.

May Hunt on Own Farm With License

I would like to know if by posting my land, am I required by law to own a license to hunt and trap. There are a good many muskrats on my land and I think I could just as well have them as some one else. A nice spring brook runs right through my pasture, flows into a pond on another man's land and just as soon as the season opens people are right here as it is near town and they enjoy it. Please give me what information you can.

THERE is an exception to the law requiring licenses for fishermen and trappers, and that is in the case of an owner of land or his renter who wishes to fish and hunt on that land. This he can do without a license, but this is as far as it goes. The exception does not include friends.

For Those Who Buy Baby Chicks

EACH year at this time we have learned to expect a considerable number of complaints against baby chick advertisers. In fact the most reputable hatcheries themselves have learned to expect a certain number of complaints per thousand orders filled.

Due to the fact that baby chicks are living creatures, complaints against hatcheries are more difficult to settle to the satisfaction of every one concerned than complaints against advertisers who deal in other products. We often ask ourselves just how far we can go in asking for adjustments from advertisers and to just what extent our subscribers are justified in blaming the hatchery when chicks fail to grow as well as might be expected.

In the first place we wish to again repeat that we check up very closely on advertisements and refuse to accept any where it is evident that the firm conducts a fraudulent business. We have refused to accept several advertisements where it developed that the firm did not hatch their own chicks but were shopping around and were buying them wherever they could find them.

Reliable Hatcheries Aim to Please

It is only fair to the reliable chick hatcheries to state that they are vitally interested in pleasing our subscribers. Any advertiser realizes that the profit comes from the repeat business. In other words the cost of advertising takes off most of the profit from the first order received.

Most hatcheries guarantee live delivery of the chicks. When they are received the buyer should inspect them in the presence of the postman or express agent and put in a claim for any chicks which are dead. In fact most hatcheries put in a few chicks above the number ordered to reduce the number of cases where it is necessary to make second shipments.

The type of complaints that cause the most trouble and which are very difficult to adjust, are those in which the buyer states that the chicks began to die within a few days after they were received until a large percentage of them were lost. In many cases the hatchery is blamed for this loss and the buyer feels that they are conducting a fraudulent business.

Many Causes for Death of Chicks

There are any number of troubles that can kill off baby chicks very quickly during the first week of their

life. Among these are chilling either before or after they are put into the brooder house, improper feeding, over-feeding and over heating. Many complaints state that the chicks die from white diarrhea. This may or may not be the real trouble but at any rate buyers cannot logically expect chicks free from white diarrhea unless they are advertised as such by hatcheries in which case they will sell for a premium above those not so guaranteed.

We find it comparatively easy to adjust complaints where orders fail to be filled or where it is evident that the hatchery itself has made an error. The fact that we advertise only reputable firms means that they are ready and willing to make an adjustment when they are in the wrong. In fact many of them go even farther than this and will replace chicks at a reduction in price which die after they are received. No hatchery however, can do more than guarantee live delivery and expect to stay in business.

What to Do

We make the following suggestions to our readers, in order that they may get a greater degree of satisfaction from their purchases.

1. Buy only from reliable hatcheries.
2. Baby chicks are sold at different prices and in general you get what you pay for. If you want extra good chicks you must expect to pay a good price for them.
3. Inspect the chicks before they are accepted and put in a claim for any chicks which are dead.
4. Use extreme caution that the chicks are not chilled in transferring them from their boxes to the brooder house. Arrange with the post man to notify you by telephone when they arrive and plan to go to the post office immediately and get them.
5. If you have not already done so, get in touch with your county farm bureau agent or state college and follow their recommendations as to feeding and care of the chicks.

In closing, it is only fair to say that under the best of conditions there seems to be no way in which the element of risk in raising chicks can be entirely eliminated. Even if you were to hatch your chicks yourself you would find that your troubles were not entirely taken care of. Where there is a just cause for complaint we ask that you write the Service Bureau immediately as the chance of getting an adjustment is much better than where complaints are delayed for a considerable time.

Money Collected for A.A. Subscribers in 1928

January	\$ 320.92
February	1,212.56
March	354.76
April	544.46
May	570.11
June	646.31
July	198.33
August	450.41
September	347.66
October	562.48
November	225.97
December	605.21
Total	\$6,039.18

invested. On analyzing their proposition it develops that the money which they ask for is to be used in making a full and complete audit and examination of the books of the company and to report thereon with appropriate recommendations to enable the owners of the stock to recover their investment.

The National Business Analytical Corporation is not bound by agreement to institute any action against the company which issued the stock. They state, "if in our opinion an action may be productive of beneficial results to the stockholders we will, at our own cost and expense, institute such action and pay all necessary expenses."

Recently an Ohio court refused to permit the National Business Analytical Corporation to examine the books of the Continental Clay Company, a company whose stockholders they had been soliciting.

With these facts our subscribers will be able to judge the chance they might have of securing returns for money paid to the National Business Analytical Corporation. As a general rule it is safe to say that when a poor investment is made it will not help any to throw good money after bad.

Government Fights Fake Remedies

OUR readers will be interested in the steps taken by the government against numerous fake remedies, sold as cures for every disease known to man and beast. For example, an alleged cure for contagious abortion of cattle was found by them to consist of nothing more than brown sugar and wheat bran. Nine and one-half pounds of the "remedy" cost less than forty cents to produce, and was sold for \$5.00. This product is no longer for sale. It is claimed that the monthly sales were over \$15,000, and it is obvious that the stopping of this fraud by the government is saving cattle owners at least \$180,000 a year. Our readers who are interested in learning more about contagious abortion will do well to write to the New York State

RUSH-ABSOLUTELY FREE!

THIS E-F ANGLE SCREWDRIVER—of tempered crucible spring steel—has 7 powerful edg- es for large & small screws. Works under obstructions where others won't—101 other uses. Carries like pen-knife—often more valuable. Sent Free on Receipt of Coupon.

Name _____

Route _____

No., St. _____

P. O. _____

City, St. _____

☐ Interested in Factory Representative Proposition!

☐ In User Literature! **THE FLASH SALES CORP.**

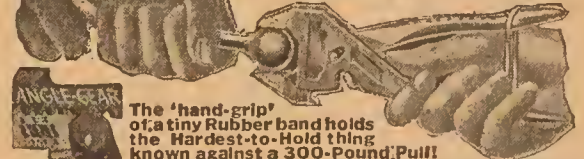
D A A-4809 N. Ashland Ave., CHICAGO, ILL.

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Also FREE ON COUPON—the "\$5,000" CIRCULAR giving amazing 125-Picture story of

The "Pocket Machine Shop!"

with its 1-TON POWER-GEAR
It Outgrips a 40-Lb. Visol

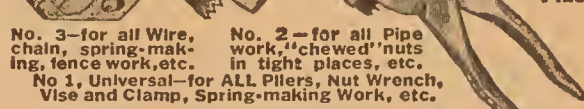


The "hand-grip" of a tiny Rubber band holds the Hardest-to-Hold thing known against a 300-Pound Pull!

Its 10-to-1 ratio Power-Gear Transmission gives YOUR hands the 1-TON GRIP of 20 Hands. Yet—YOU CAN GRIP A HAIR.

An Automatic Lock-Grip Ratchet Wrench

Speed VISE
Parallel
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Plus



EIFEL-FLASH PIERRENCH KIT

(Say "Eye-fel-Flash") "The T.N.T. of Tools"

You get the amazingly Quicker, Better, Easier, Universal Tool Service of Nos. 1, 2 & 3—Convertible in 1/5 second—in this new 24-Ounce Master Tool Kit—for the Price of One Good Tool; yet it Does the Work of the best other tools Weighing 60 pounds and costing \$50.00!

Hundreds of Thousands of Men and Women are using these wonder Kits to make Homes and Estates more comfortable—Farms, Shops, etc., more profitable; to get more and better service from Auto's and all mechanical devices with a huge saving in money, time and energy! Used by the U. S. Army and Navy. Just try a Pierrench Kit Once, and you'd no more go back to other tools than to the ancient Ox-cart! With each Kit a 64-page Manual of Mechanics

A GUARANTEED SUPER-QUALITY PRODUCT (©'29 J. E.) "It's a Life Saver on the Farm—the One Right Remedy for All Farm Tool Problems. Saves many times its low cost in the 4 weeks' Free Trial!"

A Great Spring and Summer Money-Maker for Pierrench Factory Representatives—Full or Part Time. Amazing Pierrench Demonstration sells at sight—makes \$75-\$200 weekly all year 'round.

Mail Valuable Coupon Above NOW!



Kill Rats Without Poison

A New Exterminator that Won't Kill Livestock, Poultry, Dogs, Cats, or even Baby Chicks

K-R-O can be used about the home, barn or poultry yard with absolute safety as it contains **no deadly poison**. K-R-O is made of Squill, as recommended by U. S. Dept. of Agriculture. Under the Connable process which insures maximum strength. Two cans killed 578 rats at Arkansas State Farm. Hundreds of other testimonials.

Sold on a Money-Back Guarantee. Insist upon K-R-O, the original Squill exterminator. All druggists, 75c. Large size (four times as much) \$2.00. Direct if dealer cannot supply you. K-R-O Co., Springfield, O.

K-R-O

KILLS-RATS-ONLY



The "Royal" Was \$58.50 Now \$52.50

Modern Bathroom \$52.50

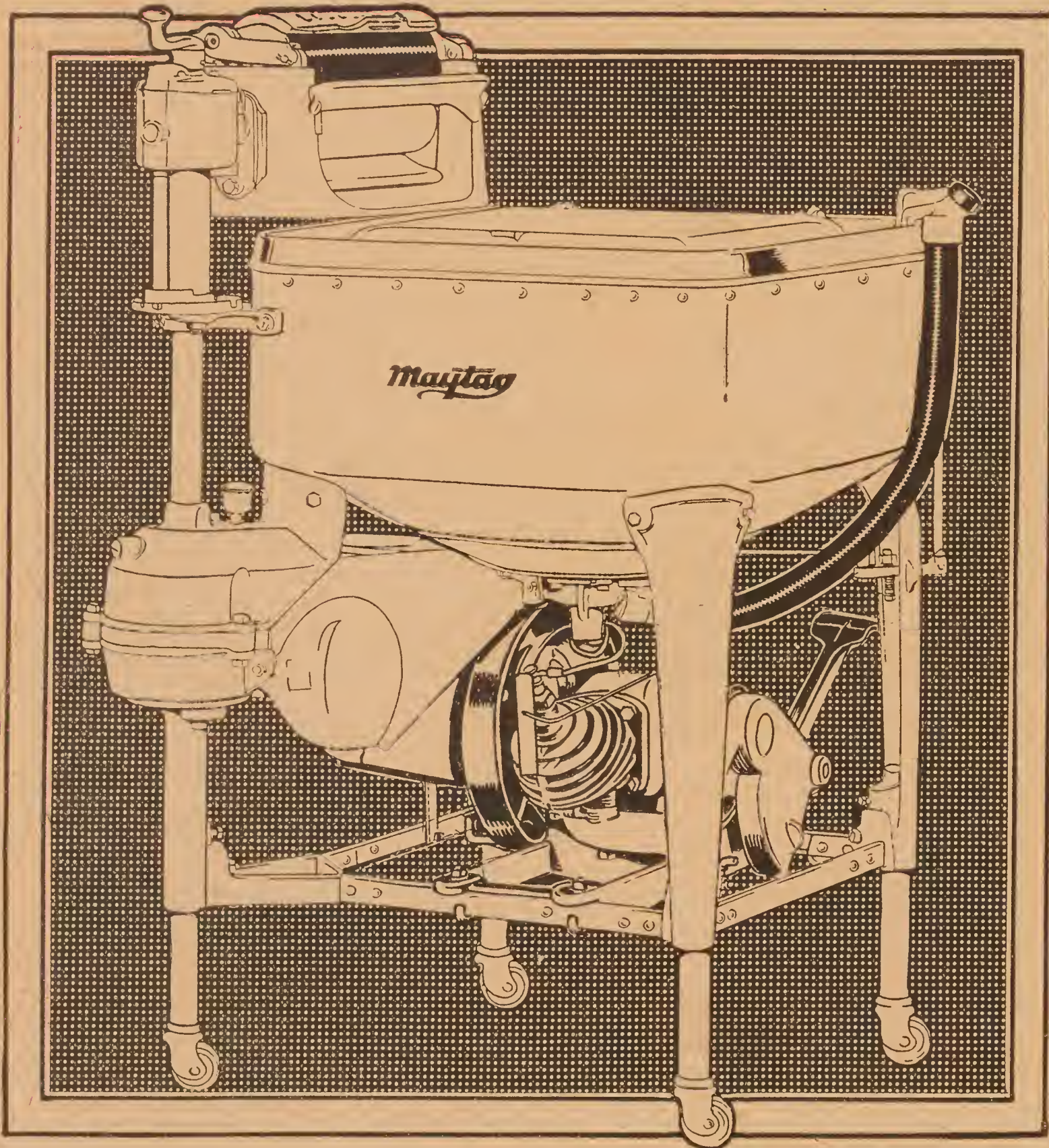
A wonderful Bargain consisting of Complete Bathing, Toilet and Basin. We carry a full Line of Plumbing and Heating Supplies at reduced prices. We pay the freight.

Send for Free Catalogue 20, J. M. SEIDENBERG CO., Inc. 254 West 34th St. New York City

If There is Anything That You Wish To Buy, Sell or Trade
Advertise in the
Classified Columns
OF THE
AMERICAN AGRICULTURIST

More than ever...

The MAYTAG is a help to the farmwife

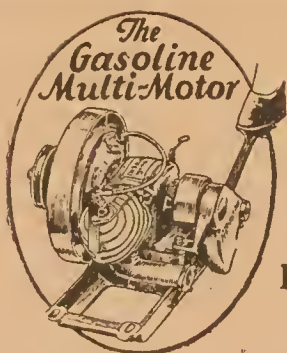


FOR years and years, the Maytag has been the favorite farm washer, serving equally well the home with or without electricity. Its roomy, cast-aluminum tub and gyrafoam washing action changed the farm washday to an hour or two of pleasant employment. The grimeiest work clothes are washed perfectly clean without hand rubbing. The Roller Water Remover makes wringing safer, easier and more thorough. The Maytag enjoys the largest farm sale of any washer.



now-
a CHURN
attachment
for your Maytag

The washer that holds world leadership in both farm and city homes, now offers you a high-grade, three-gallon aluminum churn attachment. The churn sets over the gyrafator post of the Maytag and the same power that washes your clothes churns the butter. Water placed in the washer tub about the churn keeps the cream at the most desirable churning temperature. It takes but a minute to get it ready. It is simple, durable and easily cleaned.



Free Trial Washing

Telephone the nearest Maytag dealer. Use a Maytag for your next washing without cost or obligation. If it doesn't sell itself, don't keep it. *Deferred payments you'll never miss.*

THE MAYTAG COMPANY, Newton, Iowa

Founded 1893

EASTERN BRANCH: 851 No. Broad St., PHILADELPHIA, Pa.

The Maytag Co., Ltd., Winnipeg, Canada
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Interchangeable Power

The Maytag Gasoline Multi-Motor is now in its fifteenth year and Maytag is the world's largest producer of single-cylinder, two-cycle gasoline engines. By removing only four bolts, the gasoline Multi-Motor is interchangeable with the electric motor. High-grade Bronze Bearings, flood-proof carburetor, Bosch high-tension magneto and speed governor, give it a steady flow of reliable power. A step on the pedal starts it.

Maytag

Aluminum Washer

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Over 50 stations now on the schedule; watch newspapers for date and hour.

AMERICAN AGRICULTURIST

\$1.00 Per Year

April 20, 1929

Published Weekly

He Was My Boyhood Friend

A Fireside Reflection On One Who Served Us for Three Generations

I AM setting down here, in-so-far as I am able, the simple and unadorned life story of John Brown, sometime of County Caven, Ireland, and later of Lawyerville, N. Y., the hamlet where he was for fifty-six years a resident and in whose churchyard he lies buried. He was in truth my boyhood friend



Jared Van Wagenen, Jr.

although there was a gulf of some sixty years between his birth and mine. And because of the regard for him which I cherish, I have in mind to write some things which I cannot forget concerning him and because there is no shameful fact that must needs be concealed, I can use his name and if any middle aged (or older) men who knew him (our neighbors) chance to read this screed, they will bear witness that I write the truth.

Of what the historians call "documentary evidence" I have almost none. I fix the year of his coming with considerable certainty as 1848 because he used to tell me that he arrived in Lawyerville "the year before they built the brick church". He was even then a man no longer young—at least not a boy—for he had a strapping wife and I think a couple of bairns. I take it that, like hundreds of thousands of his countrymen, he was fleeing the terrible potato famine of the 1840s and he came directly to Lawyerville because he had friends here who had preceded him and who had assured him that America was a land of plenty and of promise, meaning thereby that always there were potatoes enough to go round with perhaps fowl in the pot of a Sunday and always rough labor of a sort for willing hands to do. Having these, with possibly a fat pig to call their own in the autumn, this tide of Irish exiles deemed that theirs was a happy fortune.

My father often told me the exact circumstances of his coming. That day two of our

By JARED VAN WAGENEN, JR.

farm teams were starting on a long journey. They were bound for Troy some fifty miles distant to bring back a pair of millstones for the neighborhood grist-mill. They were large stones so that one team was to bring the "bedder" and the other the "runner". My father, then a lad of 13, was to go along and I think was entrusted with the care of the second team. I doubt not that it was a wonderful occasion for him. Half a mile down the road they met a tall, gangling Irishman with an alert step and a rich brogue inquiring for his friends and asking after a job. That was the beginning of a connection with our farm which persisted unbroken for many years and to a great extent to the end of his life.

During John's early years on the farm, we built him a house on a site of his own choosing. It was far back and almost out of sight of the highway, but it stood in the edge of a dense pine grove which sheltered it from all wintry gales. In the lee of the woods was a southern slope with a sunny garden while close at hand was a sawmill where he gathered bark and rubbish for fuel. The house was built not of the usual frame but of planks set up endwise and then sided over. It was small and low but extraordinarily snug and warm and he always spoke of it with vast admiration. In later years, desiring to sit under the

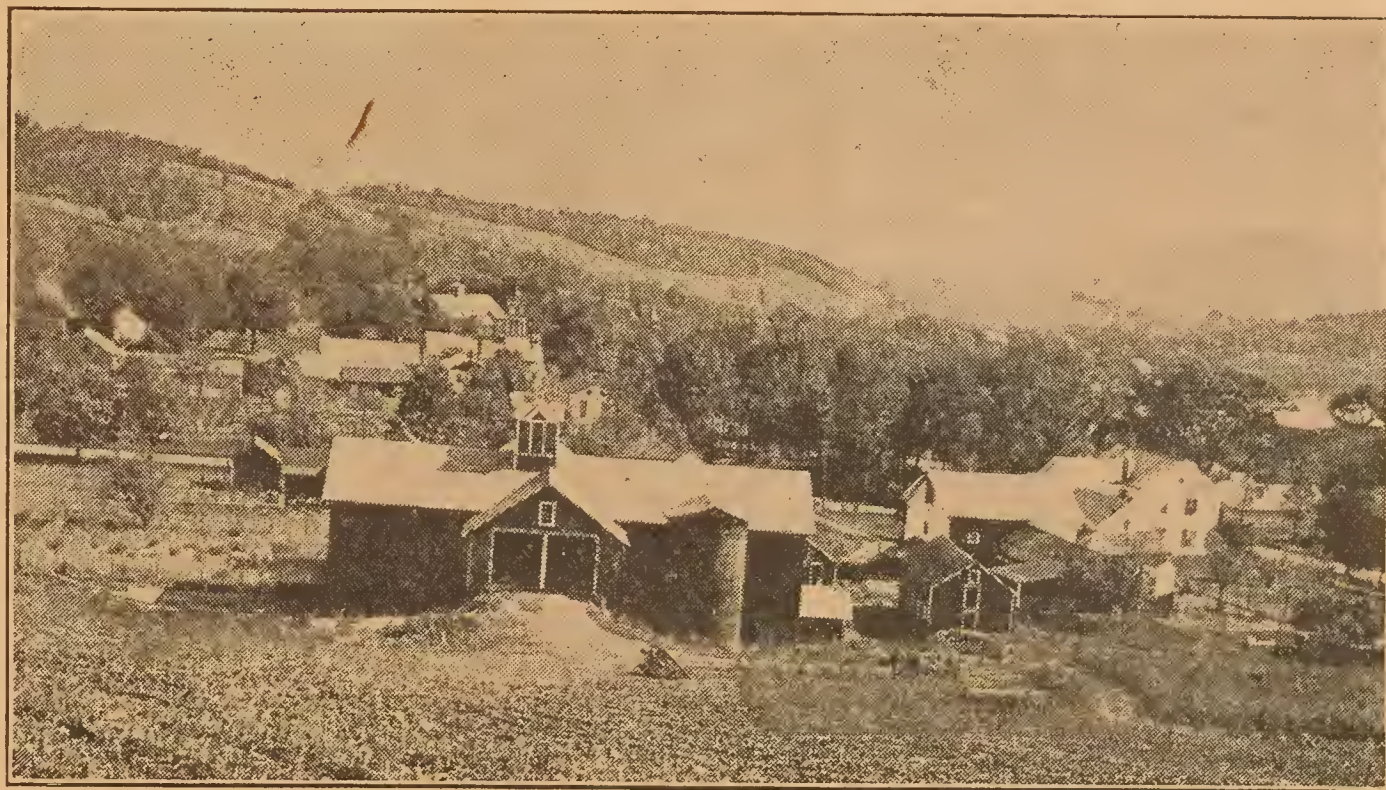
vine and fig tree of his own landed estate, he bought two acres from one corner of the farm and there built him a very small cottage; nevertheless he afterwards regretted its too liberal dimensions and frequently was wont to remark that if he had the job to do over again he would "build it only half as big". Years afterwards not long before his death he added a miniature piazza—hardly more than a "stoop" with a roof. This improvement as he explained was not at all for his own comfort and convenience, but solely as a place for the "Quality" to sit when they called upon him.

In all the numberless times that we communed together I cannot remember that he ever told me of how he made the journey from New York to Albany or from there to Schoharie County. Neither do I know if he was accompanied by or followed by his family. I am sorry that I must be a sketchy and inaccurate historian—and now, alas, John can never be questioned any more. He did, however, frequently tell the epic story of the long two months' ocean voyage—a terrible passage with crowded, stinking quarters and vile food. According to him it was a voyage noteworthy for awful tempests and with a cranky and unseaworthy ship. Doubtless, John was at heart a romancer and when regaling a small boy like me who listened with wide-eyed wonder to his tales, he could scarcely be blamed if he sometimes drew the long bow. At any rate he had

picked up one bit of the vocabulary of the sea and long years after he had a rallying cry when concerted action was necessary, "All hands to the pump".

It happened that John like most of the little Irish colony around Lawyerville was staunchly Protestant although he had a near neighbor, one Thomas Kilfoyl, who was the village tanner. This Thomas was a "Papist" and John frankly regarded him as a considerable fly in the local ointment. Let me record, however, that he, too, was an Irish gentleman with courtly manners and a fine white

(Continued on Page 16)



The old hamlet of Lawyerville showing the Van Wagenen homestead in the foreground. Mr. Van Wagenen's son who is now working the farm, is the fourth generation of Van Wagenens to live on this old farm.

Little Recipes for Little Cooks

By *Betty*

Here Is Another Lesson That Is Lots of Fun

This is No. 2 of a great long series of simple lessons in cookery that have been prepared by Betty and her mother. Betty, you know, is a real farm girl. She lives with her mother, Mrs. R. C. Dahlberg, at Springfield, Minnesota. These lessons are just like the ones with which she has learned to cook almost everything.

Let's Try Some Baked Potatoes

DEAR LITTLE COOKS:

When I want to bake potatoes I first see that there is a good hot fire for the oven must be hot. Then I go down cellar and pick out as many nice, smooth, sound looking potatoes as I think we can eat. I try to get them all about the same size and a little larger than the average.

When I have them up in the kitchen I put them into a pan of water and scrub them very clean.

My potatoes are ready for the oven now and I put them in on the grate to bake. It takes from forty-five to sixty minutes for baking, depending on the size of the potatoes and the heat of the oven.

Some people like to grease the skin of the potatoes well before they put them in to bake, it makes the skins softer.

Now look after the fire again so the oven will keep hot.

When it is time for the potatoes to be done I take a clean holder in my right hand and open the oven door with my left hand. I reach in and pick up a potato and squeeze it gently in the holder. If it seems all soft it is done, if not it needs more baking.

Although plain baked potatoes are very good, eaten piping hot with good gravy or plenty of butter, you may like to try a little different way of fixing them, one which mother may not have time for very often.

Stuffed Baked Potatoes or creamy baked potatoes as they are sometimes called, are baked just as the plain ones. The potatoes are taken from the oven and a slice is cut from one side of each potato. Then with a spoon I scoop out all the potato, being careful not to break the skin at all as I want these skins later. The potato I put into a deep bowl and when I have scooped out all the potatoes I mash it and add just enough milk or cream to moisten it as mother does her mashed potatoes. I also add a little salt. Then I beat the mixture until it is light and fluffy.

Now I am ready to stuff the shells which I was so careful to save. I fill them up real full with the mashed potato and put a little melted butter on the top of each. If there is paprika I sprinkle a little of that on to give a pretty color.



Then I place all the potatoes on a tin and put them on the top grate to brown.

Mother says the older girls who read this would like to try adding chopped meat, chicken or fish to the hot potato after it is mashed, just for a change.

Good Little Cooks Will Want to Know How to Measure

With a Spoon

For a spoonful, dip the spoon into the material, lift it, and level true with a knife.

For a half spoonful, level a spoonful and then divide lengthwise through the middle.

For one-fourth spoonful, divide the half spoonful, crosswise, dividing a little back of the middle.

For one-eighth spoonful, divide a fourth of a spoonful diagonally across from center of spoon to outer rim.

For one-third spoonful, divide the spoon into three equal parts, crosswise, using one part.

For one-sixth spoonful, just cut a one-third spoonful in half.



With a Cup

For a cupful, fill the cup with a spoon and level with a knife. Unless otherwise stated a cupful means a level one in all recipes. Regular measuring cups are very convenient and those made of glass are especially good for the young cook because they enable her to see whether she has her measuring exactly right or not.



Here is a picture of Little Betty with her scrapbook. You should have one like it. Read how to get one at the bottom of this page.

Do You Like Cocoa?

I am so glad that I like cocoa, aren't you? You know how it is when we have health charts at school, those who drink coffee for breakfast have a time getting a good looking chart full of points because tea and coffee are not supposed to be healthy for children.

I like to make cocoa, too, and this is how I make one cup just for myself: Into a small saucepan I put one teaspoonful of cocoa, two tablespoonfuls of water, one teaspoonful of sugar and just a few grains of salt. I cook this until it thickens a little and then I add the milk and let it all get hot. Then I add one drop of vanilla and my cocoa is ready to pour into the cup and drink.

This is ever so good in the thermos bottle for my school lunch, too.

When my cousins, Dick and Dorothy, come we sometimes want a little party and I make cocoa and we have cookies and cocoa. With my little sister and baby brother and myself there are five and so I make more.

2 tablespoons of cocoa 6 cups of milk
2 tablespoons sugar 1/2 cup water
A pinch of salt

I cook this until it thickens and then add the six cups of milk which I have heated in a double boiler because you know how easily milk cooks on and scorches if it has to heat long. Then I add one teaspoonful of vanilla and pour out five cups full and the party is ready.

If we can have a marshmallow to put on top of each cup of cocoa it's even better. A spoonful of whipped cream on top tastes awfully good.

This party recipe is just right to make for our supper, too.

I wonder how many of you "Little Cooks" will try this?

Send for My Nice Scrapbook

I still have some scrapbooks for little girls who are reading these cooking lessons. They are dandy big ones, large enough so you can cut out the full page, like this, and paste it in, and there is room for twenty-four of these lesson pages. If you want one, send 10 cents in coin or stamps and it will be sent to you by return mail. Address

Betty

American Agriculturist
461 4th Ave., N. Y. City

A Program for the Poultryman

A Summary of the Best Practices from Years of Experience

AT a conference held at the College of Agriculture at Ithaca, New York, the other day, Professor L. M. Hurd, representing the Poultry Department of the New York State College, outlined a program for poultry keepers. This program includes most of the old and new practices recommended by the Poultry Department boiled down and summarized so concisely that in a few minutes' reading you can obtain the chief fundamentals for successful poultry growing. Here in brief form are the leading practices and principles which poultry keepers and experiment stations have been many years in accumulating.

If some of these directions seem to provide for too much labor and detail, remember that they are the practices found necessary by the most successful poultrymen and from long years of experimentation. Where Cornell ration or other Cornell matters are mentioned, substitute the directions on the same subject from the colleges of agriculture or experiment stations of your own state, if you do not happen to live in New York.

If you are interested in poultry keeping, we most emphatically suggest that you save this issue of AMERICAN AGRICULTURIST carefully so that you can have this article for constant reference.

I. Secure or Breed Quality Stock.

1. Good stock in the poultry business is just as important as good seed in crop growing. The results of fifteen years of careful experiments starting with both good and poor stock show that no amount of care given to the poultry bred from the poor stock could ever bring them up in results to what the good stock did even with poor care.

II. How To Get Good Stock.

1. Keep only purebred stock.

This is much easier to do than it is with animals, but

your mongrel or scrub hen is just as bad in proportion to the size of the business as a mongrel or scrub cow.

2. If buying hatching eggs, secure 2-ounce eggs of uniform color, shape and size.

3. Buy chicks weighing 8 pounds per 100 from supervised, certified R. O. P. (Record of Performance) flocks, or those of known high production, and if possible free from B. W. D. (Bacillary White Diarrhea).

4. If carrying on a breeding enterprise, special matings should be made.

5. Use carefully selected, vigorous males. Pedigreed males are preferred.

6. Always breed from selected hens when possible.

7. Give proper attention to size, shape and color of eggs.

8. Select breeders typical of breed or variety in color and size and free from outstanding defects.

(Constant study of breeds and good poultry books on breeding is helpful and necessary.)

III. Grow Paying Pullets.

1. Hatch or buy chicks early.

a. Heavy breeds should be hatched by April 1.

b. Light breeds should be hatched by May 1, in order to get pullets which will lay before November 1.

c. This is extremely important in order to get them laying early enough in the fall so that their eggs will bring high prices.

d. Growing early chicks is a difficult job, increasing the problems all the way along the line, because it is against Nature. Ordinarily a hen would not hatch her brood until much later. But it can be done, and must be done, if the poultryman is to succeed.

2. Practice clean brooding.

a. Two poultrymen may start with exactly the same kind of baby chicks hatched under the same conditions and at the same time, and one will lose half or all of his chicks, the other very few, the reason being that one uses proper sanitation and care, the other does not.

b. Start with a clean house by scraping and scrubbing the floor with a hot lye solution, $\frac{1}{4}$ pound of household lye ($\frac{1}{4}$ can) to one 12-quart pail of hot water.

c. Keep the brooder house dry by avoiding sloppy fountains, poor ventilation and overcrowding. Not more than 500 chicks should be brooded together; 300 in a flock is better.

d. Keep the house reasonably clean. Change the litter about every two weeks.

e. Use cut straw or coarse shavings for litter.

3. Brood chicks on clean ground.

a. Move brooder houses to clean ground; i. e., where fowls or chicks have not ranged for at least two years or where poultry manure has been spread within this time.

b. If clean ground is not available, wire covered concrete or board platform.

4. Follow clean feeding practices.

a. Feed the regular Cornell chick ration, when a home mixed ration is used.

b. Use only wholesome clean feed.

c. Allow approximately $3\frac{1}{2}$ square inches of tray feeding space per chick or tray 35 inches x 10 x 1 inch per 100 chicks.

d. Give no feed in the litter or on the ground.

e. On range hopper feed all grain and mash.

5. Keep the chicks growing thriftily.

a. Artificial heat should be available first 8 weeks.

b. Provide roosts at 4-6 weeks.

c. Separate cockerels from pullets before 8 weeks of age if possible.

d. Control lice and mites.

e. Have green food always available.

f. Provide shade on range.

IV. Keep Laying House and Yards Clean.

1. Clean out the litter once every month or six weeks.

2. Never pile litter or manure within 100 yards of the poultry house during the summer, fall and spring.

3. Screen the dropping boards and clean them weekly.

4. Plow the yards at least yearly and follow a double yard system if possible.

5. Clean and disinfect the laying house thoroughly every fall before pullets are housed or breeders and layers are changed to permanent quarters.

6. Paint perches with carbolineum or creosote during May to prevent mites.

7. Treat pullets for lice at time of removal to laying houses. Use Black Leaf 40 treatment. Delouse hens and males during the month of November.

8. Burn or bury all carcasses of dead birds.

V. Make Pullets and Hens Lay.

1. Use a satisfactory ration.

2. Use the Cornell formula and method if home mixing is practiced. (Continued on Page 17)

The First Five Minutes Count in Fighting Fires

A Few Definite Suggestions for Protecting Your Buildings Against Loss

THERE are many reasons why the fire hazard on farms is greater than it is in cities. Farm buildings are seldom fireproof or even fire resistant and added to this is the fact that the isolation of farms makes it practically impossible to summon fire fighting equipment from the village in time to be effective. Some communities have made a start toward the solution of this problem by forming a cooperative organization for the purchase and upkeep of equipment particularly suited for fighting fires on farms. We believe this is an excellent thing to do. The number of such organizations could well be increased yet even this fails to solve the problem completely.

The loss of farm buildings by fire is a serious problem due to the heavy cost of replacing them and the serious manner in which a fire, either of house or barn, interferes with the business. Where a fire occurs in a dairy barn during the wintertime it is impossible to replace the building until spring and the winter supply of roughage is lost. Even if the animals themselves are saved it is necessary in most cases to sell them and begin over again the next year.

There are several things which can and should be done to lessen the danger from fire and to lessen the loss in case buildings are unavoidably lost. For example it has been definitely established that lightning rods properly installed reduce losses from lightning to a minimum. Many farm owners have "no smoking" rules which unfortunately are not always perfectly enforced. A num-

ber of recent farm fires seem to be traceable to smoking on the part of tramps who use the barn for their night's lodging.

Then there is the problem of insurance. Many buildings were insured years ago and although the cost of replacing the structure has doubled, the original amount of insurance is still in force. Few, if any, of the old line companies are anxious to insure farm buildings. Farmers have met this situation by the formation of mutual companies which have served their needs well. We suggest that our readers check up on their fire insurance policies and, if it seems advisable, increase the amount of insurance.

Most city buildings are as nearly fireproof as it is possible to make them yet they are also

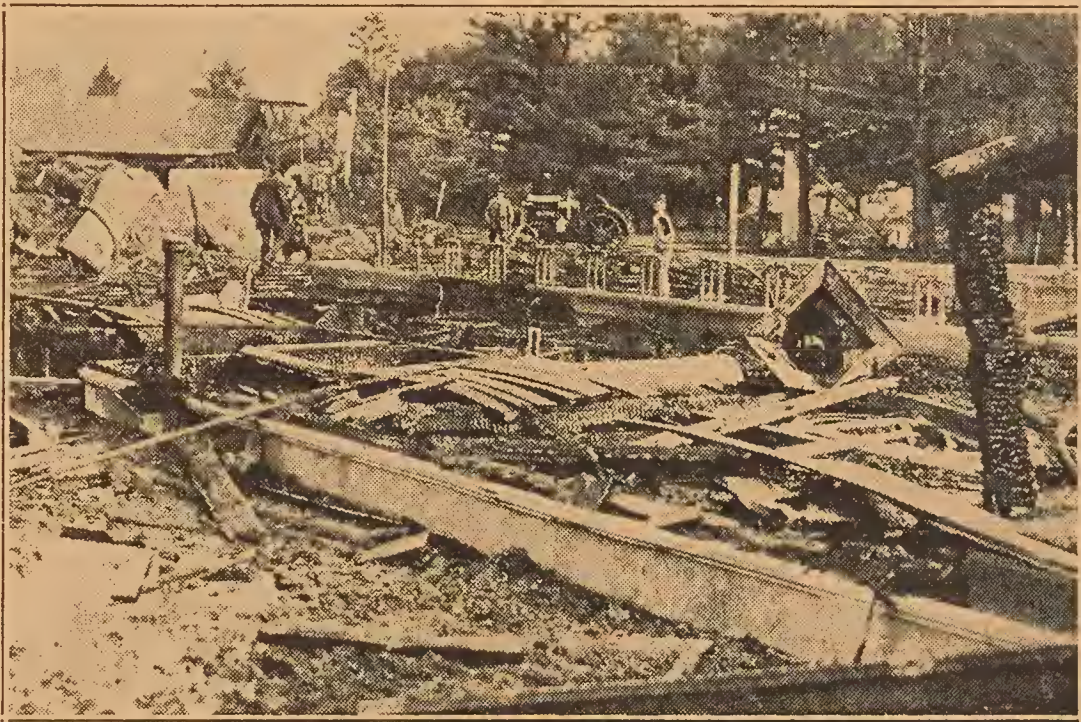
equipped with hose lines, fire extinguishers and automatic sprinklers which start a stream of water in case a fire occurs where no one is present. In most cases there is also a watchman who makes frequent rounds at night.

We have often been impressed by the lack of even the simplest of fire fighting equipments in farm buildings. In our opinion one of the important advantages of complete water systems on farms is the added protection which it gives against fire. Whether or not such a system is available it is good business to provide all possible means of fighting fire. With this item in mind we recently asked a friend who has studied this problem for years to give his idea on the subject. Following is his answer:

"The farm fire hazard is much greater than city property. The insurance companies know this to be a fact and, consequently, insurance rates are much higher. The farmer will continue to pay the increased rates as long as the farm fire loss keeps on increasing. The farmer is paying a big sum of money every year for insurance. This money takes a big part of his profits. There is only one way to cut down this big expense and that way is to cut down the fire loss.

"In many communities the farmer is heavily taxed and cannot afford to join in with his neighbors and spend from \$5,000 to \$10,000 for a fire truck and also pay for the upkeep after it is purchased. It is for this class of communities in particular that this information is given.

(Continued on Page 10)



A fine dairy barn with all improvements stood here the day before this picture was taken. Are your buildings adequately protected?

Editorial Page of the American Agriculturist

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Everybody Happy

JUST about the happiest group of persons we have seen in a long time was the Governor's Agricultural Advisory Commission in the Executive Chamber in Albany on Monday, April 8, when Governor Roosevelt signed the new farm bills, thus putting them on the statute books of the State.

It was this same group of earnest men and women, representing the agricultural organizations, the Department of Agriculture and Markets, and the New York State Colleges of Agriculture and Home Economics, who met informally in the AMERICAN AGRICULTURIST office in November of last year at the request of Governor Roosevelt to make suggestions as to what the State might do for the relief of New York State agriculture.

It is not often that such things work out in real life, but this same group had the great satisfaction of watching the Governor sign the bills which carried out nearly all of the fundamental principles that this group had suggested for the relief and aid and adjustment of the problems of New York State farmers.

As we have pointed out in explaining these laws on the next page, these great results were obtained chiefly because of 100 per cent team work, on the part of the farm organizations, farm leaders, the State Colleges of Agriculture and Home Economics, the State Department of Agriculture and Markets, the legislature and the Governor. Everybody's views and suggestions were thrown into the pot. There was considerable disagreement over details, but out of it all came the final legislation incorporating fundamental principles that are of historic importance and that set the example for every State in the Union and for the federal government itself as to what can be done in a practical way for real farm relief.

Price Cutting Brings Lower Prices

THE milk situation in New York City is still boiling. The recent hot days relieved the situation somewhat by increasing by several thousand cans per day the consumption of milk and cream. But there is still too much milk, giving an opportunity for unscrupulous, fly-by-night dealers to steal markets, and in general upset the whole situation.

The wholesale price of milk is supposed to be around \$4.20 a can, but because of price cutting, little or no milk is sold at this price, and prices

range as low as \$3.20. In order to save their own markets, the reputable dealers have been obliged to meet the competition, with the result that it is expected that prices to farmers for cream at least will be cut by April 15th and it is only a matter of time before the price to farmers on all milk products will have to go down.

The pity of it is that there is no real reason as yet in the market for price reductions. Every year the cuts are started, not by the real consumers, but by the few robber dealers who use their surplus to try to steal the other fellow's market.

Of course, the result, as usual, is that the farmer ultimately pays the bill. All dairymen have to suffer because of the lack of responsibility of a few farmers who sell their milk to unreliable dealers, and, we are sorry to say, to some small cooperatives, who for several years now have been among the first to start cutting prices.

To School Trustees

"We have an individual in our district who is always preaching School Improvement Society. I understand he is going to bring before the school meeting the question of raising some money for said Society.

"Will you please inform me if money belonging to the district can be sent to the School Improvement Society even by vote."

TO this question the Law Division of the State Education Department replies as follows:

"It is illegal to appropriate moneys belonging to a school district for the purpose which you mention."

The Law Division also states that there is no authority in the Education Law giving trustees the right, even if voted by a district meeting, to expend moneys raised by general taxation or received from the State, for the support of any organization such as the Rural School Improvement Society. Trustees may not, of course, exceed the powers given them by the Education Law. Any trustee who expends money illegally might be compelled to defend an action for the recovery of the money personally, for his removal or for the withholding of the public money from his district. That is, any taxpayer in the district may bring such legal action against the trustee for such illegal expenditure of public funds. If the district loses any portion of the public money because of a wilful act of the trustee, under Section 855 of the Education Law, the trustee is made responsible personally for the full amount of such money.

This should be plain enough as to what the action of trustees may be. Even though the appropriation is made for a good organization or cause, it would still be illegal. The personal responsibilities of the trustees are all the greater, therefore, if there is any doubt about the rightness of the cause for which the money is to be expended.

We understand that the officers of the Rural School Improvement Society have acquired a list of the names of all the school trustees of the State, with the evident purpose of writing these trustees a begging letter for funds with which to carry on the operations of the Society and to pay the salary and expenses of the officers of this Society.

We have explained before in the columns of AMERICAN AGRICULTURIST that it is possible that the right kind of a farmers' rural school organization might be of real help in advancing the interests of the rural school districts and the educational welfare of the country boys and girls. But no good help can be expected from the Rural School Improvement Society because of the methods which it uses. The Society is entirely without standing at Albany, both with the Education Department and with practically all of the legislators. The Assembly Committee on Education, entirely disgusted with the officers of this Society after the recent school hearing on bills proposed by the Society, voted unanimously not to report these bills out of committee.

The best evidence that this Society has not

accomplished any results is the fact that Governor Roosevelt's Agricultural Advisory Commission recommended, the legislature passed, and the Governor signed, a bill giving \$2,050,000 more State aid to the one-room schools. The Rural School Improvement Society had absolutely nothing to do in any way, shape or manner with the passage of this bill, but this new law will do more to enable farmers to keep their schools and improve them and at the same time keep their taxes down, than any other school law that has been passed in the last fifty years. It is action and not destructive criticism that gets results.

In view of these facts, therefore, we earnestly advise both voters and school trustees in one-room school districts not to waste their money or to make themselves liable to the law by making appropriations for the Rural School Improvement Society.

Letters to Betty

"Do you allow little boys to have scrapbooks too? My boy would like to have one very much. He baked a batch of molasses cookies last Saturday that I would be willing to offer anyone to eat. He is very fond of cooking.

"He is fourteen years old, but only has 20 per cent vision. He studies at home with the sight saving method, writes with the typewriter touch system and so on. He is very nervous and I think that cooking would make a good side line for him to keep his mind occupied as long as he likes it so well."

From His Mother.

OF course, we sent him a scrapbook. We think it is almost as important for a boy to know how to cook as it is for a girl. This is a sample of the swarms of letters that we have had since announcing our new teaching cooking service for little girls.

Here is another one:

"My ten-year-old daughter likes to cook and this page will be a blessing to us busy farmer-mothers and a wonderful help to the little hands so eager to help. Thank you, and wishing you the best of luck with your page, I am A Young Cook's Mother."

And a little girl writes as follows:

"Dear Betty: 'I am glad you are sending Little Recipes for Little Cooks. Mama lets me cook some now. I know how to make cocoa and I can make coffee for Daddy. I am sending ten cents for a scrapbook. I am seven years old. Carolyn E. King.'"

On Page 2 of this issue, you will find our second lesson for little cooks. As we have before explained, we furnish a scrapbook for ten cents in stamps to cover the cost of the book and the postage. If you are a little girl, or a little girl's mother, we think you are missing something very much worth while if you are not taking these free lessons.

If you little girls have tried some of Betty's recipes, Betty will be glad to have letters from you telling her what luck you have had.

Eastman's Chestnut

I AM not usually critical of schools and school teachers for school teaching is one of the professions which everybody seems to think he knows more about than the teacher does. However, some of the problems in the average arithmetic are so far removed from all practical conditions and from anything which a boy or girl would ever use in real life as to be absurd.

My sympathies are with the mother in the following story:

"Dear Mrs. Pucket," a school teacher wrote to the mother of a pupil, "William was absent this morning. Will you please tell me what kept him out of school?"

"Dear Ma'am," was the reply. "Willie is keeping time for his father. Last nite he cum home with an example about how long would it take a man walking three miles an hour to walk 2½ times around a field four miles square. And as Willie ain't no man, we had to send his pap. They left erly this morning but I don't know when they will git back. Please make the next problem about something else, as my husband hasn't the time for such things."

Tax Relief for New York Farmers

Governor Signs Most Important Farm Laws in a Generation

By E. R. EASTMAN

ON Monday, April 8, the writer stood in the Executive Chamber at Albany with the members of Governor Roosevelt's Agricultural Advisory Commission and watched the Governor sign the most important and far-reaching farm legislation that has been passed in this State, or any state, in a generation. It was indeed an historic occasion.

Throughout the winter, AMERICAN AGRICULTURIST has printed many articles in an effort to keep you informed on the progress of the efforts of the State government to give New York State farmers real tax relief. There follows on this page a complete review and explanation of these bills in the final form as signed by the Governor. We earnestly advise you to study these laws and discuss them as individuals and in your local farm meetings.

The Result of Team Work

These fine results for agriculture were obtained by cooperation, by the pulling together of those interested in the welfare of New York State farmers. Without this united, fine team work on the part of all of the farm organizations, the New York State Colleges, of Agriculture and Home Economics, all of the State departments, the legislature and the Governor, these important laws would never have been put on the statute books. They are the best demonstration we have ever known of what can be done when everybody forgets small differences and works unselfishly for the general good.

The new laws are particularly satisfactory to AMERICAN AGRICULTURIST, for, as our readers know, we have missed no opportunity for many years to hammer the idea that farmers must be relieved of some of their back-breaking tax burden. We believe that the constant publicity and discussions which have led to thinking and discussion of this subject aroused and united public opinion, making the passage of tax reduction and adjustment bills possible.

Governor Franklin D. Roosevelt, however, is responsible for the inspiration and the initiative which started the movement in the State government this winter which finally resulted in this new farm legislation. Immediately after his election, Governor Roosevelt

asked Henry Morgenthau, Jr., to call a meeting of the representative agricultural leaders of New York State to consider the problems of agriculture and to make suggestions as to what the State could do, if anything, to help New York State farmers. As a result of this request over twenty persons met in New York City to begin their study of the situation.

After the Governor was inaugurated on January 1, this informal committee was formally designated by the Governor as his Agricultural Advisory Commission, and Henry Morgenthau, Jr., was asked to serve as chairman. The committee was non-partisan, more than two-thirds of its members being Republican, and everyone was sincerely concerned in making every contribution which he or she personally could to bring aid to agriculture.

Those Represented

On this commission were represented the New York State Grange, New York State College of Agriculture, New York State College of Home Economics, Home Bureau Federation, Farm Bureau Federation, Dairymen's League Cooperative Association, G. L. F. Exchange, several Master Farmers, several leading Assemblymen and Senators from the State legislature, the Sheffield Producers' Cooperative Association, the New York State Horticultural Society, New York State Department of Agriculture and Markets, the *Rural New Yorker* and AMERICAN AGRICULTURIST.

Many meetings of the commission were held and a program of legislation for New York State agriculture was formulated and recommended to the Governor and to the State legislature. The fundamental principles recommended by this commission were finally enacted into law.

In the meantime, the legislature itself also determined to do its part to make sure that New York State farmers got a square deal, and a Legislative Agricultural Commission was also appointed, held several meetings, and made definite recommendations.

As a result, we have the new farm laws explained below, which are the result of the deliberations and recommendations of both the Legislative and

Governor's Agricultural Commissions. On some of the recommendations made by the different commissions there were disagreements, but most of these were finally worked out, with the result that the legislature passed the bills and the Governor has signed them.

As we look over this legislation, and know what it is going to mean to you farmer taxpayers, we realize that sometimes, even in this workaday world, dreams do come true. Here are the laws:

The New School Laws

Of all the far-reaching farm legislation just passed, in our opinion the bill giving relief to the one-room schools is the most important. We have explained this before in AMERICAN AGRICULTURIST, but here it is again. The new law provides \$2,050,000 more State aid for the one-room schools to be apportioned as follows: Next year, \$1300 will be provided to maintain each common school district. Of this sum, the local district is to raise only a four-mill tax on its true valuation, and all of the remainder of the \$1300 is to be paid by the State. In order that you may have a chance to improve your schools in coming years, the \$1300 is raised to \$1400 the year after next, and \$1500 in all succeeding years.

Here is how it works. Suppose your district has a true valuation of \$80,000. A four-mill tax on this valuation would make \$320 to be raised by your district by local taxation. All of the rest of the \$1300, or \$980, will be paid by the State. It will be seen from this that the poorer districts receive the most help, as they should.

But even the rich districts will get some help because the law provides that no district shall receive less than \$425 of State aid. In the majority of one-room schools in this State, this new law will cut local taxes right in half.

There has been a lot of talk about doing away with the "little red schoolhouse", but nothing that has ever been done will do more to help you save your one-room school than this law.

If I may be allowed to be personal for a moment, I would like to state that one of the happiest moments of the writer's life came when Governor Roosevelt presented me with the pen

with which he signed this historic school bill.

More Aid to the Two, Three and Four-Teacher Schools

Another important school law is the one which gives \$1,000,000 more State aid to the small schools with less than five teachers. Heretofore, these schools have had a hard struggle because they did not receive the same aid as those with five teachers or more. All will now be on an equal and equitable basis.

The Road Bills

The next most important legislation of benefit to farmers is the new road laws. One of these provides \$5,400,000 in State aid for State highways to take the place of 35 per cent of the cost of building these roads now paid by the counties. In other words, this tremendous burden of local taxes has been lifted from the county and transferred to the State. The principle is recognized that these highways are used by everybody, including those in cities and non-residents, and therefore they should be paid for by the State and not by the localities.

This increased aid will be reflected to a considerable extent in your lower county taxes particularly if the State is building considerable mileage of new roads in your county.

Special Aid to the Towns

Another law provided \$550,000 more State aid to the towns to relieve them of their contributions toward maintenance of State highways.

The New Gasoline Tax Law

The legislature passed, and the Governor has signed, a gas tax law placing a tax of two cents on gasoline. New York was the last state in the Union to pass such a law. This fact alone proves that a gas tax is recognized as just and fair.

The best part of it is that the new revenue which the State will obtain from the gas tax made practically all of the farm relief legislation possible.

For example, the law provides that 25 per cent of the gas tax, estimated at, at least \$6,000,000, is to be paid to the localities and to New York City

(Continued on Page 26)



AN HISTORIC OCCASION—Governor Roosevelt signing the bills for the relief of New York State Farm Taxpayers in the presence of his Agricultural Advisory Commission. Those present were: seated, left to right, Edward Griffin, Governor Franklin D. Roosevelt, Henry Morgenthau, Jr.; standing left to right, C. A. Halliday, C. R. White, Senator S. C. Mastick, Professor Martha Van Rensselaer, Mrs. Edward Young, E. R. Eastman, Paul Judson, Berne A. Pyrke, Dr. C. E. Ladd, Guernsey Cross, Dr. G. F. Warren, I. D. Karr.

21 Barrels more Potatoes from each Acre

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C. E. Randolph of Aroostook County, Maine, discarded the old-fashioned, time-consuming soak method of seed treatment in favor of Semesan Bel *instantaneous* dip.

He not only saved time and labor in disinfecting his seed but he obtained an increase in yield over untreated seed of 21 barrels per acre.

Increased yields like this prove the advantage of Semesan Bel over the older methods.

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Even the best seed often carries some disease. Writing about certified seed in the *American Produce Grower*, Dr. Wm. H. Martin of the New Jersey Experiment station warns: "There is no state that does not permit at least 10% of scab and Rhizoctonia."

Overcome this handicap with Semesan Bel. Use it to control surface-borne Rhizoctonia, black leg and scab of white potatoes, and black rot and scurf or soil stain of sweet potatoes. Treats whole or cut potatoes and even

sprouted seed, which other treatments so often injure. Protects the seed piece against soil-borne disease organisms.

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Semesan Bel is *instantaneous*! One man can treat 200 to 400 bushels of seed a day. No long soaking or costly equipment is needed. A pound treats from 22 bushels of whole or large seed, to 16 bushels of small or cut seed, at very low cost.

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Diseases of many other crops can be controlled with Du Bay Seed Disinfectants. Mail the coupon below for information, or ask your seedsman, druggist, hardware dealer or general merchant for pamphlets on Ceresan, for seed grains; Semesan Jr., for seed corn; and Semesan, for vegetable and flower seeds and bulbs.

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A.A.'s Western New York Farm and Home Talk

Unseasonable Weather

APRIL has behaved very badly in this part of the country. After a mild moderate March with little wind or rain, this month started off with a terrible wind storm, the worst in western New York in fifteen years. The wind blew 40 miles an hour and at times gusts reached almost seventy miles according to weather bureau records. Barns were unroofed, hen houses and other small buildings turned over and many trees blown down or broken. We had a brooder house turned end over end

By M. C. BURRITT

we pour in the oil slowly, using the pump to thoroughly mix or emulsify the oil and water. As soon as no free oil is apparent on the surface we fill the tank with water. We have been using an eight per cent oil mixture so far but the advanced bud development showing green at the tips, will compel a reduction to six per cent to finish.



M. C. Burritt

—fortunately the only one of three that didn't have chickens in it at that time. Hundreds of apple trees were broken or uprooted but as these were mostly old trees and of little value this part of the damage was not serious.

Then two days later and again on the fifth of April we had two unusually heavy rain storms accompanied by severe thunder and lightning. While I haven't seen the record of the amount of rainfall, overflowing creeks and drainage ditches would indicate that three to four inches of rain has fallen in the first six days in this month. Our prospects of early plowing and seeding are now put off at least two weeks. Moreover, temperatures are unseasonably high ranging from 65 degrees to 78 degrees Fahrenheit. This is bringing the buds out very fast and increasing the danger from later cold waves. The ice has been out of Lake Ontario for some time and that influence in holding back vegetation along the shores will probably be less than usual.

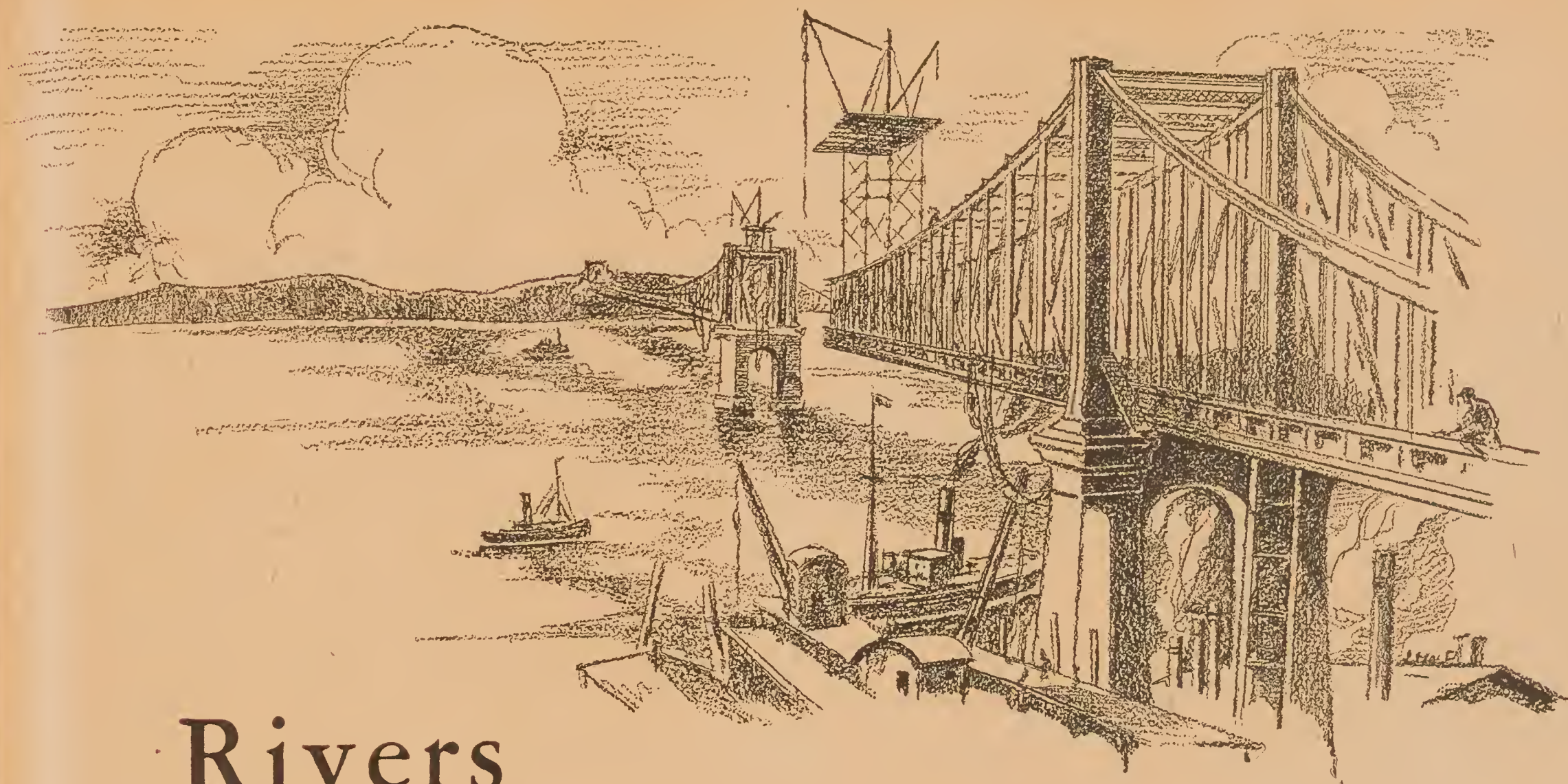
Controlling Leaf Rollers

During the week we got in all of our spraying supplies, overhauled the spray rig and started the application of an oil spray to control leaf roller. We are using a home mixed oil emulsion made with a diamond paraffin lubricating oil according to spray service direction, with bordeaux mixture for an emulsifier. First we make up the bordeaux in the tank with 8 to 10 gallons of water, using two pounds of copper sulphate and four pounds of lime for the 200-gallon tank. Then with the pump running and the spray gun open and directed back into the tank,

Dairymen must also be breeders of dairy cattle if the herd is to improve with the passing of the years. See that your calves are well born with an inheritance that makes possible their developing into better cows than their mothers, and then keep them growing all the time. This takes feed and care but gives big returns on the investment.



About a year ago we published a story telling of results secured in the Wilson-Jones orchard at Hall, N. Y. through the use of nitrate of soda. The illustration above shows even more striking results secured last fall. In 1927, thirty-one trees not fertilized yielded 49½ bushels as compared with 178½ bushels from thirty-one trees that were fertilized. Last fall the unfertilized trees yielded four bushels and those fertilized with nitrate of soda yielded 159 bushels.



Rivers to Cross

HERE are always rivers to cross, difficulties to surmount, in fact, in life, in business. In the feed business the biggest rivers to cross are one's own achievements.

Having produced a feed that may be widely welcomed, the temptation is strong to rest on one's oars. But to yield would be fatal, for with greater effort an even better feed may be created.

Everybody must exert himself—the chemists in the laboratories, the practical feeders on the experimental farms, the grain buyers, the millers, the salesmen, the traffic experts, the dealers, and the service men.

Each individual phase of creating, producing and selling presents its own peculiar difficulties. By overcoming these difficulties, or, if necessary, perfecting perfection, better feeds can be made at lower prices.

True, it means a tremendous amount of constant effort—but it makes things easier for the farmer.

By thus crossing its rivers The Park and Pollard Company has done its share to make the poultry and dairy businesses vastly more profitable—and, incidentally, has assured success for itself.

The Park & Pollard Co

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McCORMICK-DEERING Corn Planters and Drills *are famous for their reliability*



A well-prepared seed bed, tested seed, and favorable weather are not enough. The crop must be planted right! A planter that misses, mixes hills, or scatters, makes you lose money. Play safe—use a reliable McCormick-Deering Corn Planter.

THE McCormick-Deering "100 Series" planter will plant corn accurately anyway you want it planted. It has a simple, three-speed seed-plate drive that enables you, without stopping the team, to plant 2, 3, or 4 kernels to a hill when checkrow planting. The variable-drop drive and three gear-and-chain combinations provide 9 different seed spacings when drilling, without changing the seed plate. A built-in, power hill-drop enables you to bunch-drop-drill by making a simple change in the heavy-duty clutch.

The planter boots are of approved design. Sure-shot, plunger-type valves deposit the seed without fail each time the check-wire button trips the release. Valves can be locked open for drilling.

If you prefer a planter for check-rows only, ask the McCormick-Deering dealer to show you the McCormick-Deering No. 8 Wire-Drive Planter. It is one of the simplest planters built—very practical and durable. The seeding mechanism is operated by a dependable check-wire drive. Flat, edge, or full-hill drop plates, combination pea-and-bean hoppers, fertilizer attachments, runners, stub runners, and disk openers can be supplied.

INTERNATIONAL HARVESTER COMPANY

606 So. Michigan Ave. of America Chicago, Illinois
(Incorporated)

Our 16-page Corn Planter folder describes the No. 8, the "100 Series", and the special equipment in detail. Also tells how to test seed corn. Write to the address above for a copy.



With the A. A. Vegetable Grower



Some Questions About Mulch Paper

WHAT makes your garden look so queer?" we were frequently asked during the season of 1928. "What makes your garden sound so queer?" "It looks queer because it is covered with mulch-paper. And it sounds queer when it rains because the drops patter on the paper as upon a roof," we answer.

"Why did you use this paper?" "Because it was advertised to keep down weeds, to conserve moisture and to produce better crops."

"Well, did it fulfill all or any of said claims?"—this always skeptically. "It kept down weeds absolutely except a few that came in the open spaces left for vegetables and possibly a half dozen thistles that pricked through. It conserved moisture so well that we did little or no watering of transplanted plants except at the time of transplanting. It produced at least as good vegetables as usual—better, we thought, although we made no comparative sowings."

It Saved Us Labor

"Wasn't it a lot of bother to lay the paper?" "Very little bother; we raked the prepared earth smooth, unrolled a strip of paper, threw the 'rakings' along the edge of the paper to keep the wind from getting under and then sowed or planted vegetables or flowers along the edge of the paper. About two inches of open space was left between strips for plants to grow."

"Pretty expensive, wasn't it?" "If you count your time worth anything it was cheap help because much of the garden where paper was used received little or no attention after planting. It was a great season for weeds too."

"Doesn't it take more space to plant with paper?" "Less, really. Vegetables 'under paper' seem to produce more abundantly and so we shall plant smaller areas this year. Also we planted an extra row down the center of the paper in the case of such things as onions, cabbages, head-lettuce and other 'non-branching' varieties—just cut two slashes in the paper with a little trowel so that the cuts crossed in the center, turned in the corners and set the plant in the open space."

For Root Crops, Too

"Might be all right for vine and stalk varieties, but don't root vegetables smother under such a cover?" "We never raised better winter onions. Our small experimental patch of potatoes were a fair average and were never touched with a hoe. No, the roots made no objection to their black covering."

"1928 was a fine growing season with us—maybe your garden would have been extra good, anyway." "True. It was a fine season for weeds, too! However, I expect we still have a lot to learn about mulch-paper."

"Going to use it again this year?" "We certainly are. And in greater quantities. And for more purposes. We thought our vegetables somewhat earlier where paper was used. Our tomatoes were especially fine and early."

"Oh well, I like to hoe, so there'd be no real object in my using mulch-paper." "Maybe not. But I'm planning on just about three additional hours daily this spring for other work because I have always had to spend about that amount of time keeping weeds out of the garden. I'm aiming to do a lot of nice things in those three hours each day!"—A. M. A.

The Effect of Potash on Potato Yields

IN a recent issue of *Better Crops for Plant Food*, Professor Mushbach of the Wisconsin College gives the results of some experiments with potatoes in that state. The experiments which were conducted in three counties compare the yields and the quality of potatoes

grown with manure alone, with manure plus a medium potash fertilizer and with manure plus a high potash fertilizer.

Professor Mushbach states that prior to 1922 analyses such as 3-8-6 and 3-10-3 were considered as special potato fertilizers and that in 1922 the popular 5-8-7 analysis was introduced and is now one of the most widely used grades. In 1923 the 3-10-10 was licensed and since that time other analyses carrying relatively more plant food per ton have been introduced.

Following is a table showing the results of the experiments. In the table a fertilizer carrying from 6 to 7 per cent potash is considered as a medium potash fertilizer and those carrying from 10 to 12 per cent are considered as high potash fertilizers. Further tests will be made to determine whether a still higher percentage of potash may prove profitable.

TREATMENT	Yield in Bushels per Acre Barron Co. Langlade Co. Price Co.		
MANURE	47.9	182.6	166.3
Manure and Med. Potash Av. plots			
2, 3, 4.....	138.8	377.7	291.1
Manure and High Potash Av. Plots			
4, 5, 6.....	168.1	405.5	304.1

Sand Under Manure in Cold Frames Helps Plants

BY spreading a thin coating of drift sand under the manure in the cold frames many New Jersey vegetable growers find that they can grow much stronger and healthier plants than where the sand is not used. The thin layer of sand acts as a regulator on the moisture content of the coldframe soil and assures the plants of a more abundant supply of water all the time.

Beds which have been treated with the sand will stand much heavier watering without injury to the plants as the sand acts as a sponge to hold the surplus. The sand permits the water to sink below the bottom of the manure and gives the air a chance to circulate through the soil. Later on the bed does not dry out so quickly if the sand has been used as the capillary attraction of the soil draws the surplus water up to the roots of the plants.

This contrast is particularly noticeable when the beds are located on a heavy clay soil where the water has no chance to soak away. Plants on the sand base are ready to go in the field a week earlier than the others not treated, besides being more thrifty and with much larger leaves. Where the sand has been evenly deposited there are no bare spots where the plants are drowned out.

Beds so treated are less susceptible to damping off thus assuring a more even stand.

The same treatment applied to the benches in the seed houses and to the bottoms of sweet potato plant beds will give equally as satisfactory results under most conditions. A cubic yard of sand will be sufficient for 12 sash giving an inch of soil to the entire floor of the bed.—AMOS KIRBY.

An Easy Way to Ventilate Coldframes

AT a cost of only 16 cents a sash, a New Jersey early vegetable grower increased the capacity of his coldframes fourteen per cent and provided a ventilator that paid handsome dividends in better plants.

In building his single sash coldframes, he built them one foot wider than usual. Rafters were cut one foot longer to fit these special beds and represented practically no additional cost as the extra foot was what would have been wasted from the 16 foot pieces of lumber he was using.

After the bed was constructed, a
(Continued on Opposite Page)

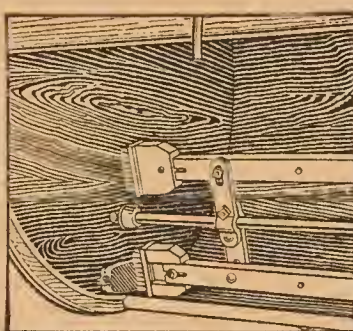


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Traction Sprayer has 1, 2 or 3 nozzles per row; 4, 6 or more rows per boom. Wheels adjustable to width of rows. 60 to 100 gal. tanks. Double or triple action pumps. Thousands of satisfied users.

Combination and Power Sprayers for orchards, groves, and field crops, have 3 cylinder pump; pressure regulator; several sizes of engines and tanks for pressures 200 to 400 lbs. with spray booms and guns.

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Eureka Mower Co., Box 817, Utica, N. Y.

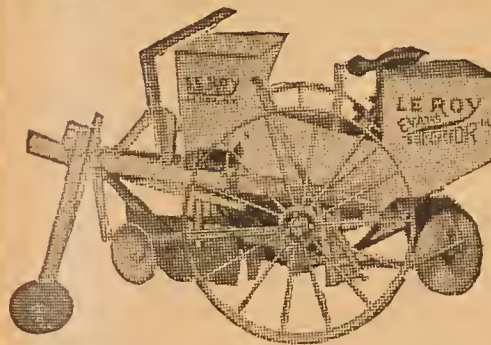


an EXTRA truckload of POTATOES from one acre sprayed with Pyrox

Mr. C. S. Newcomer, of Chambersburg, Pa., got an extra truckload of potatoes (seventy bushels) from one acre sprayed with PYROX. This seventy bushel EXTRA YIELD amounted to a 22% increase over his yield from potatoes sprayed with a home-made mixture.

PYROX, the scientifically prepared plant spray does three things at once. That is why it is so economical, and helps produce bigger and better crops. PYROX kills bugs, prevents the development of blight and disease, and stimulates plant growth. Does away with the costly labor of home-made spray mixtures, and eliminates the danger of improperly mixed chemicals. Safe and easy to use. Will not wash off. Does not clog sprayer nozzle. Use PYROX this year for BIGGER PROFITS. Now priced lowest in 30 years' successful use. Write us or ask your dealer for the new Spray Guide—free. Bowker Chemical Company, 419 Fourth Avenue, New York.

Le Roy (Evans-Superior) Potato Planter



High percentage of accuracy in operation—a leader since 1895. Extras for all old models.

Ask for circular.

LeRoy Plow Company, LeRoy, N. Y. Makers of Farm Implements

(Continued from Opposite Page)

board twelve inches wide was lightly nailed to the high side of the cold-frame. This permitted the sash frames to slide nicely under the extended board and afforded them considerable protection from high winds.

The board did not rob the plants of any sunlight and they grew equally as well as those out in the middle of the frame. Of course the coldframe had been built on an angle facing the south-east which gave it the advantage of the sun's rays from eight in the morning until three in the afternoon.

Boards Removed for Ventilation

Later in the season when it became necessary to air the beds, the board provided the necessary ventilation. By removing the board the excess heat was given a chance to quickly leave the frames and all drafts were kept from the tender plants. By removing the board for the necessary ventilation considerable time was saved as it was not necessary to lift each sash. It also overcame the danger of sudden gusts of wind lifting the sash and throwing them on the ground. Over an hour a day was saved on a bed of 200 sash on the item of ventilation alone.

Coldframes used for the starting of tomato plants for the late crop gave equally as satisfactory results. The seed germinated just as quickly under the board covering and when ready to go in the field the plants were fine and stocky.

This grower estimated that the saving in labor of airing the plants paid for the extra lumber and the increased capacity of the bed made a nice profit on his coldframe operations.—AMOS KIRBY.

Plowing Under a Cover Crop

Does the time of plowing under a cover crop have any effect upon the value as soil improvement?

THERE are two important things to consider in plowing under a cover crop. In the first place, a crop that is allowed to grow until late in the spring uses up an enormous amount of water from the soil which later might have been used to advantage by the growing crop. This use of water is sometimes helpful in drying out a wet soil but can easily be overdone to the damage of the crop.

The other point to consider is that the more mature a cover crop becomes, the more slowly it decays. In other words, the best results from a cover crop are secured when it is plowed under while the crop is still succulent.

A Question About Sweet Clover

Why is it that although sweet clover seems to grow and reproduce itself for years in waste spots along the roadsides, it seems to be a biennial when planted in the field and runs out after the second year's crop?

IN the first place, sweet clover has little competition from other plants in certain waste places. Sweet clover is a biennial but under field conditions where it is not harvested, it produces seed which reproduces the plant when other plants will not grow. Even under these conditions, sweet clover is likely to improve the ground so that other grasses come and finally force out the sweet clover.

Alfalfa in a Short Rotation

Is it possible to grow alfalfa in a short rotation?—D. W., New York.

WHERE it is difficult to get a seed, it is doubtful if it will be profitable to grow alfalfa unless it can be left down for several years. In sections where common alfalfa can be grown, so that there is no heavy investment involved, it may be profitable to grow it in a short rotation.

Final plans have been drawn for a world agricultural census to be taken in 1930 by the International Institute of Agriculture at Rome. The census is expected to cover more than 99 per cent of the world's agriculture.

"Plant your corn, and forget about the crows"

says W. E. Tyler, of Dewittville, N. Y.

Like most other corn-growers, Mr. Tyler didn't believe that anything could stop the awful waste caused by the pesky crows, and other little pests such as moles, squirrels, etc. But he was willing to try almost anything. So he sent for some Stanley's Crow Repellent. He coated his seed-corn with it, and planted it at once, as it is not necessary to wait for it to dry, nor does it clog the planter. And from that day, Mr. Tyler's worries over crows were over for good and all time.

If you want to stop your worries, too, use Stanley's Crow Repellent as hundreds of corn-growers have been doing for over twenty years. Large can, enough for 2 bu. of seed-corn (8 to 10 acres), \$1.50. Half size can \$1.00. "Money Back" guarantee. If your hardware, drug or seed store doesn't have it in stock, then order direct. Address Cedar Hill Formulae Co., Box 500M New Britain, Conn.

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STANLEY'S CROW REPELLENT



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We also have full stocks of the standard varieties of Ensilage Corn, several as low as \$2.25 per bushel and a complete line of Alfalfa, Clover and Grass Seeds, Oats, Barley, Corn, Seed Potatoes, etc., at prices you can afford to pay.

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Swayne Robinson No. 65 Ensilage Cutters,
Big Valley Woodsaw Attachments,
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PREVENTS CROWS PULLING YOUR CORN

1 BUSHEL SIZE 60c
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It costs you real money to permit any hurt or discomfort to udder or teats. For an effective guard against milkloss due to chaps, cuts, bruises, and inflammation use Bag Balm promptly and liberally. QUICK healing is assured, through the medium of a remarkable penetrating antiseptic oil that carries into the tissues the healing virtues of the medicated ointment. This potent oil is made only by our own exclusive process.

For treating Caked Bag, Bunches and similar udder troubles Bag Balm is the remedy most widely used by careful dairymen. Clean and pleasant to use, Bag Balm will not taint the milk.

Big 10-ounce package, 60c, at feed, drug, hardware and general stores. Mailed postpaid if dealer is not supplied. Booklet, "Dairy Wrinkles," mailed free.

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If you intend to erect a silo this Fall, it will pay you to place your order as early as possible. We are prepared to make special prices to early buyers. And the terms will be made to suit your convenience. You know Harder quality; it has stood the test of time, nearly a third of a century. Our 1929 model embodies several new features which make it a better buy than ever.

The Harder Silo Catalog shows how to determine the size you need. Write for it—free, of course.

Harder Round Brooder Houses save chicks and fuel. Can be moved anywhere. Write for Poultry House Folder.

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Why Butterfat Varies

By E. R. EASTMAN

THERE is no more interesting, and sometimes annoying, problem connected with the dairy business than the way the butterfat content in the milk varies. Almost every day AMERICAN AGRICULTURIST receives letters from farmers asking why the butterfat in the milk of their cows changes so, and what can be done to increase it.

There are a good many reasons why the amount of butterfat from the herd or from the individual cow is different at one time than it is at another.

The chief differences of course are between the different breeds. The following table shows that the Guernseys and Jerseys give the richest milk and the Ayrshires and Holstein-Friesians the poorest, but because the Ayrshires and Holsteins give a larger quantity of milk, the total production of solids and fat is nearly the same for all dairy breeds.

BREED	SOLIDS PER CENT.	FAT PER CENT.
Jersey	14.70	5.35
Guernsey	14.71	5.16
Devon	14.50	4.60
Shorthorn	13.38	4.05
Brown Swiss	13.27	4.24
Ayrshire	12.61	3.66
Holstein-Friesian	11.85	3.42

No one knows why a Jersey cow, for example, naturally gives more fat than a Holstein. It is just the "nature of the critter." If you could take the Jersey's udder and attach it to the Holstein, then the Holstein would give just as rich milk as the original Jersey did, for it has been found that it is in the glands of the udders that the butterfat is made.

Strange to say, there are almost as wide differences in butterfat production between individuals of the same breed as there are between breeds. One of the things that constantly puzzles farmers is why the composition of the milk from an individual cow often varies considerably from day to day. He is apt to blame the local dealer who tests his milk or even his own cow testing association for these changes when, as a matter of fact, the cow herself is to blame. The amount of butterfat in the milk from the same cow may vary because the cow has been sick or because of change in milkers, excitement, variations in the weather and to some extent because of changes in feed.

Do not get the idea, however, that you can materially increase the butterfat content of the milk by your feeding methods. You may be able to do this

for a short time, but years of experiment have shown that feed has little permanent effect on the amount of butterfat in milk.

Richest Milk at End of Lactation

Every farmer knows that the cow's milk is richest in fat near the end of her lactation period. He may not know that immediately after freshening the cow also gives richer milk. Every milk dealer knows that he gets the richest milk in the early winter and the poorest during the flush period in June. For example, reports from 680 local factories in 1927 showed an average butterfat test of 3.79 per cent for October and November, and 3.53 per cent for June. The chief reason for this difference is in the stage of the lactation period. Most of the milk received in the fall comes from cows that have been milked a long time.

The following table shows the results of experiments with 14 cows of six breeds in determining how the butterfat and amount of milk vary from month to month after freshening.

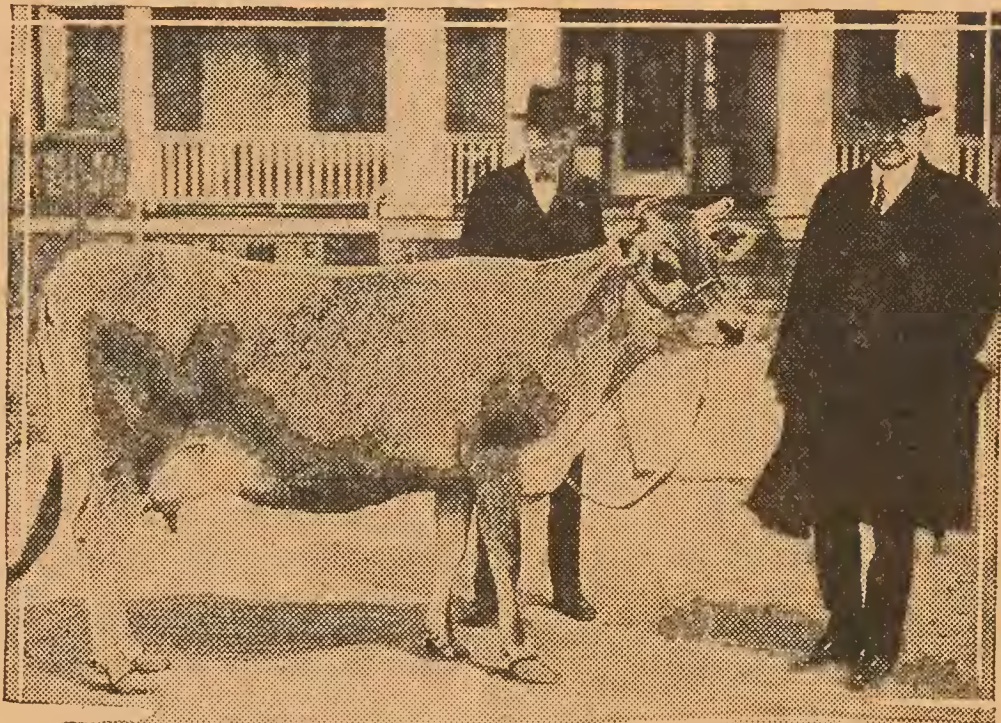
MONTH	DAILY YIELD	
	MILK LBS.	FAT PER CENT.
First month	25.1	4.02
Second month	26.0	3.74
Third month	23.8	3.71
Fourth month	21.2	3.84
Fifth month	19.6	3.87
Sixth month	19.8	3.90
Seventh month	19.0	3.94
Eighth month	16.0	3.89
Ninth month	12.5	3.92
Tenth month	9.4	4.19
Eleventh month	5.6	4.58

Last Drawn Milk Richest

One of the largest and therefore most important changes in the amount of butterfat is between the milk first drawn at milking and that last drawn. For example, experiments have shown that the milk first drawn from a Guernsey cow tested only .76 per cent butterfat while the last quarter of her milk tested 9.8 per cent. Here is the easiest way for a farmer to bring up his butterfat test; that is, those who let the calf have the first milk drawn and reserve the strippings keep the richest milk.

Some of the minor causes of the difference in amount of butterfat are the length of time between milkings, the age of the cow, and her condition at calving.

When the intervals of time between milkings are unequal, cows generally yield a smaller amount of milk after



Herbert Hoover with Fred H. Young, Timmonsville, S. C., and Mr. Young's Jersey cow, Sensation's Mikado's Millie, most efficient senior two-year-old Jersey producer in the world. In an official 365-day production test Millie yielded a total of 850.81 lbs. of butterfat and 13,303 lbs. of milk. The contented smiles would indicate that on this farm, at least, there is no need for farm relief.

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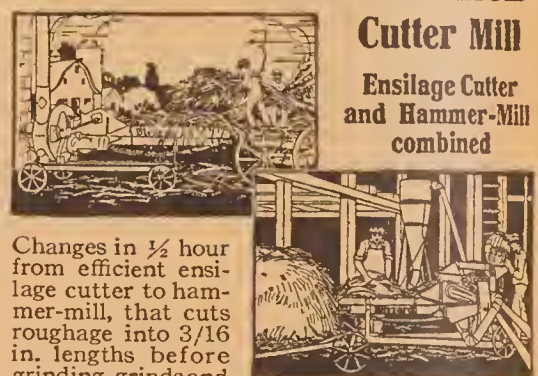
—Dr. A. J. Tarr, Geneva, N. Y.

Send for Catalog "It Milks the Cows Clean"

Cherry-Burrell Corporation 27 Albany St., Little Falls, N. Y.

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continues to be the standard one-purpose machine. Saves power, time and money. Light tractor gives ample power. Feeds self fast as two men can unload. No choking or clogging. Unlimited elevating capacity. Outlet adjustable. Gears run in oil.

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COUGHS and COLDS are often the forerunners of serious complications, trouble and expense. Don't allow your horses to be laid up when you need them most. Keep them working with

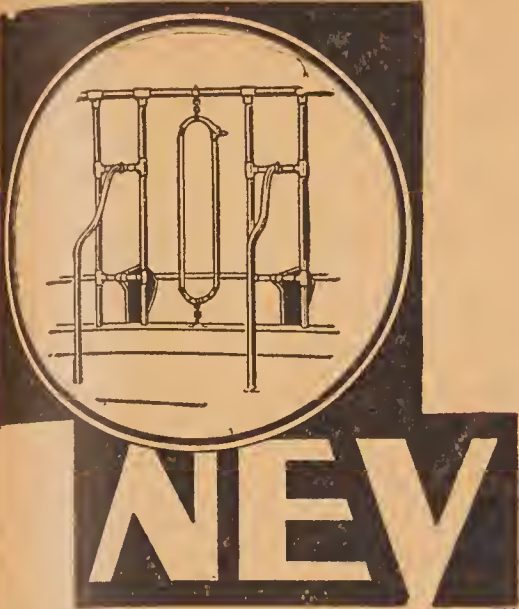
SPOHN'S Horsemen swear by it—sold for 35 years. 60 cents and \$1.20 at drug stores or direct. **FREE SAMPLE** Write today for free trial bottle—convince yourself at our expense. SPOHN MED. CO., Dept. 1 Goshen, Ind.

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Milk 2 to 4 cows at a time—18 to 40 an hour. Clean, convenient. Easy to use. Sold on 30 days Free Trial. Satisfaction Guaranteed.

Comes With 2 H. P. Engine or Electric Motor Ready to use when uncrated—no installation cost—no pipes—no special equipment needed. Does the work of four milk hands. Self-cleaning.

Free Book—Let us send you our Free Book "The Truth About Milkers." Complete with pictures. Write today! OTTAWA MFG. CO. 822 White St., Ottawa, Kan.



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Note the steel stall above. Simply designed. Rugged. Durable. No complicated mechanical parts. As the cow enters the stall the stanchion is flipped shut with the hand.

Ney Water Bowls insure plenty of pure water. Easy flow. No splashing. No overflow.

Write for a Ney catalog No. 180. Sent free to all farmers interested in bigger profits.

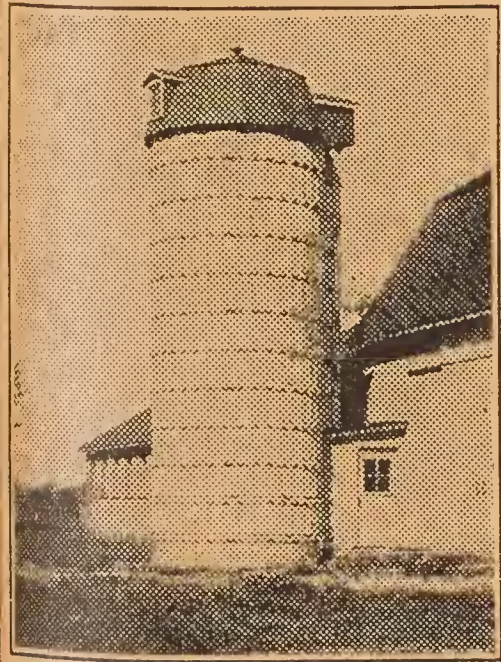
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The complete Ney Line includes stalls, stanchions, water bowls, pens, litter carriers, hay racks, including hay carriers, hay forks, hay knives, pulleys and hardware specialties.

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COMPLETE—ERECTED.
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Have a Debate in Your Grange

Send 2 cents to cover postage for an outline on the subject:

Is the young man who chooses farming as a life work making a mistake?

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461-4th Ave. New York City

To benefit by our guarantee of ads, say
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American Agriculturist"

the shorter period, but this milk is usually richer in fat. For this reason, the evening milk is generally the richest in fat and total solids. When cows are milked three times daily with equal intervals, the mid-day milk is usually a little the richer.

After the third lactation period, there is a very slow but gradual decline in the amount of butterfat which the cow produces with advancing years. This decline is insignificant until she is at least twelve years old.

Period of Greatest Yield

The period of the greatest yield for the average cow for both milk and butterfat has been found to be during the first ten weeks of her lactation. The greatest number of cows give the most milk during the third week and the most fat the second week after calving. A cow that is very fat when she freshens will give richer milk for a while than one that is poor. In other words, the way to affect the butterfat of milk by feeding is to do it indirectly by putting the cow in good condition.

When cows are turned out to grass, everyone knows that this increases the milk flow and the amount of butterfat. However, the percentage of fat will fall back to normal after the cow has been on grass some twenty days. Temperatures and weather have some effect upon both milk production and butterfat. Experiments have shown that the tendency is for cows to give richer milk when the temperature falls and poorer milk when it rises. Cows exposed to cold rains shrink in milk flow and also usually in butterfat.

Regularity of handling and kindness have an influence on both the amount of milk and its quality. The best cows, that is, the highest yielding cows, are naturally of a nervous temperament and any excitement affects them adversely very quickly. Changes in care and environment should never be made unless absolutely necessary.

The First Five Minutes Count in Fighting Fires

(Continued from Page 3)

The first five minutes are the most important in fighting fires in farm buildings. In 90 per cent of farm fires a fire could be stopped quickly if there were a portable extinguisher at hand for use. A fire is usually beyond control within 10 or 15 minutes which is the usual time required for a fire truck to reach the scene.

"The farmer should have two types of extinguishers. (1) A one-quart or 1½ quart carbon tetrachloride type for use in the home. This type will extinguish all classes of small fires which may start inside the house, such as fires from heating stoves, ranges, lamps, matches, grease, oil, gasoline, kerosene, electric fires, etc. These extinguishers are non-freeze and can easily be operated by a woman or child.

(2) In addition to one or more of the small type, a 1¼-gallon or 2½-gallon non-freeze type of extinguisher should be kept in a handy place in the house. This type of extinguisher can be used for fires which may start on the outside of the house, such as roof fires, brush fires, or fires in the garage or sheds. These extinguishers can also be used on all classes of fires which may occur in the home or buildings.

"Now, in addition to the equipment kept in handy places in the house, a few of the larger types such as the 1¼-gallon Instant, or 2½ or 5-gallon Pump Tank, (both non-freeze extinguishers) should be kept in convenient places in the barn, garage or other buildings.

"Fire losses all over the country were cut down during the year of 1927 (the 1928 figures as yet have not been announced) and I feel safe in saying that 90 per cent of the reduction was caused by the timely use of first aid fire extinguishers. The first most important step in farm fire protection can be taken by equipping home and buildings with a sufficient quantity of reliable extinguishers which bear the label of approval of the underwriters."

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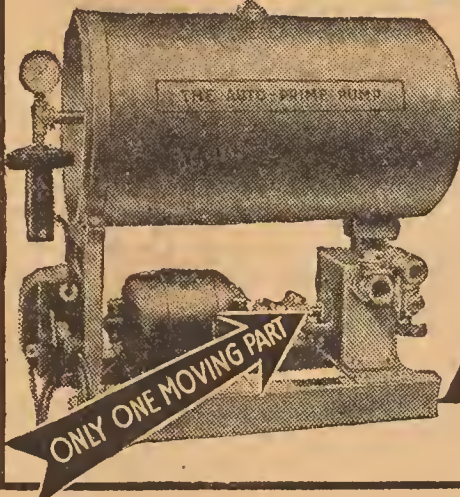
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AMERICAN AGRICULTURIST

Reviewing the Latest Eastern Markets

Milk Prices

The following are the April prices for milk in the basic zone of 201-210 miles from New York City.

Dairymen's League prices are based on milk testing 3.5%. Sheffield on the basis of 3%.

Class	Dairymen's League	Sheffield Producers
1 Fluid Milk....	3.37	3.17
2 Fluid Cream		2.30
2A Fluid Cream	2.46	
2B Cond. Milk..		
Soft Cheese..	2.71	
3 Evap. Cond. Milk Powder		2.15
Hard Cheese	2.35	
4 Butter and American cheese, Based on New York City Market quotations on butter and American cheese.		

The Class 1 League price for April 1928 was \$2.90 for 3.5% milk and Sheffield's \$2.80 for 3%.

The above prices in each class are not the final prices the farmer receives. The final price received from the dealer is the result of the weighted average.

March Prices Announced

The Dairymen's League announces the following pool prices for March for 3.5% milk.

Gross	\$2.89
Expenses .....	.06
Net Pool	\$2.83
Certificates of Indebtedness.....	.10
Net Cash Price to Farmers.....	\$2.73

Mar. 1928, Net CASH Price, 3.5% milk.....	\$2.38
Mar. 1928, Net POOL Price, 3.5% milk.....	\$2.48
Mar. 1927, Net. CASH Price, 3.5% milk.....	\$2.50
Mar. 1928, Net POOL Price, 3.5% milk.....	\$2.48
Mar. 1926, Net CASH Price, 3.5% milk.....	\$2.12

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Mar. 1926, Net POOL Price, 3.5% milk.....	\$2.22
Mar. 1925, Net POOL Price, 3.5% milk.....	\$2.26
Mar. 1925, Net CASH Price, 3.5% milk.....	\$2.26

The Sheffield Producers announce the cash price to producers for 3% milk in the 201-210 mile zone, as \$2.75 per hundred, (\$2.95 for 3.5% milk).

Mar. 1928 price to producer, 3% milk, \$2.33; 3.5%, \$2.53	
Mar. 1927 price to producer, 3% milk, \$2.49; 3.5%, \$2.69	
Feb. 1926 price to producer, 3% milk, \$2.41; 3.5%, \$2.61	
Mar. 1925 price to producer, 3% milk, \$2.57; 3.5%, \$2.77	

Butter Buyers Cautious

CREAMERY	Apr. 10	Apr. 3	Apr. 11, 1928
SALTED			
Higher than extra....	45 -45 1/2	45 1/2-46	45 1/4-46
Extra (92sc).....	-44 1/2	45 -	44 3/4-45
84-91 score.....	43 -44 1/4	43 1/2-44 3/4	43 -44 1/2
Lower Grades.....	42 1/2-42 3/4	43 -43 1/4	42 -42 1/2

The buying element in the butter trade is following a very conservative policy, showing extreme caution in the amount of butter they take on. Jobbers are working very close to current needs. This conservative policy has led to a slight reduction in prices compared with a week ago. At this writing, however, the feeling appears to be a little steadier. On April 10 sufficient stock moved in some houses to encourage a more confident feeling. Some operators took on more butter than they actually needed for the day's business. There has been a better call from out of town and it is reported that several cars have been shipped from New York to other points. In addition to this a large block of high quality goods was reported to have been withdrawn from the market under instructions from the West. This had a strengthening influence although the supply of butter is sufficient from other quarters to supply the current trade needs.

Production, according to the Producers' Price Current, varies widely. Some localities report that they are turning out more butter each week, while others show no increase but actually report a shortage after local requirements are satisfied.

Fresh Cheese a Shade Easier

STATE	Apr. 10	Apr. 3	Apr. 11, 1928
FLATS			
Fresh Fancy.....	23 -25	23 1/2-25	22 1/4-23
Fresh Average.....			
Held Fancy.....	27 1/2-29 1/2	27 1/2-29 1/2	29 -30
Held Average.....			

Fresh New York State whole milk flats show just a trace of easiness this week in the form of a one-half cent reduction of inside quotations. For some time past fresh cheese has been moving very slowly, and we doubt very much if there will be any change during the next few weeks. The cheese market has been extremely dull as far as fresh cheese is concerned and held cheese has been in such strong hands that there has not been much of interest to the general run of the trade, except those who have had to buy. The amount of well cured cheese on hand is not large for this time of the year. The demand for fine quality, cured, light colored cheese from New York State has held prices steady. There appears to be no burdensome supply of held Young Americas.

Egg Trade Marking Time

NEARBY WHITE ..	Apr. 10	Apr. 3	Apr. 11, 1928
Hen'y Sel. Extras....	33 -34	33 -34	34 -35
Hen'y Av'ge Extras....	31 -32	31 -32	32 -33
Extra Firsts.....	30 -30 1/2	30 1/2-	31 -31 1/2
Firsts	29 -29 1/2	30 -	30 -30 1/2
Undergrades			27 -31 1/2
Pullets			
Pewees			
NEARBY BROWNS			
Hennery	32 -34	32 -33	33 -34
Gathered	28 1/2-31	28 1/2-31	28 1/2-32 1/2

The egg-trade appears to be following a stand-off policy, waiting for something to take place. The speculative interest has not been particularly active, many operators taking the attitude that we are going to see a heavier lay later in the season. New York's receipts of eggs have been running lighter than last year, due partly to the lateness of the season as well as to the fact that many competing markets have been offering better prices than the Metropolitan District. The absence of the speculative interest has made it necessary that some receivers

place stocks in the cold storage rather than take a loss on some of the high cost goods that are coming in. Others have been prone to sell at any cost fearing a heavy accumulation later on, and desiring to keep their floors clear. This prompt selling policy has kept New York below a parity with Central Western values. Many operators have freely predicted that early April would find us with a shortage of a half a million cases but this has been cut down since. In spite of this the trade feels confident that later production will make up this early loss. On April 5, the ten cities making daily reports had in cold storage 456,849 cases of eggs, compared with 677,492 cases on the same day last year. The into storage movement from March 29 to April 5 in these ten cities was very close to the 1928 increase being only about 43-000 cases in excess.

No matter how things develop it looks as though the egg producer has a fairly good outlook ahead of him. If production does pick up it is very doubtful if it will be heavy enough to hurt prices. However, it is our opinion that we are not going to see such a tremendous increase in the lay. The movement of live poultry to market has been heavy and a surface examination would indicate that the hen population is less than it was a year ago.

Live Poultry Market Unsettled

	Apr. 10	Apr. 3	Apr. 11, 1928
FOWLS			
Colored	33-35	-35	-28
Leghorn	-35	-36	-25
CHICKENS			
Colored			
Leghorn			
BROILERS			
Colored		40-55	57-60
Leghorn		45-52	45-57
CAPONS	45-50	45-50	-55
TURKEYS	40-45	40-45	35-45
DUCKS, Nearby.....	27-30	27-30	23-24
GEESE	-18	20-22	

The live poultry market is a little unsteady this week. Trade is quiet and the market is barely steady. Considering the high price level, offerings have been very liberal. The cooler weather may check a break. The extremely hot weather that we experienced at the close of the first week of April and the first two days of the second week had an unfavorable effect on the fowl market, the market on express fowls especially, being very irregular. Express broilers have been a problem for the supply has been increasing and freight stock offerings are on the increase. There were insufficient sales of express broilers on April 10 to warrant quotations. In general, however, they followed very close to the freight market which ranged from 40c to 45c for Leghorns and 45c to 50c for colored broilers.

The Jewish population celebrates Passover on April 25 and 26. The best market days will be April 22 and 23. Those who contemplate shipping poultry for that holiday should time their shipments so that they will arrive in New York not later than Tuesday morning, April 23. It looks as though that will be the best market day. Stock most in demand will be fat fowls, ducks, geese and turkeys. Readers are warned not to try to dispose of any undergrade stock at this time for it will doubtless go begging for buyers. Only well finished birds are wanted.

Old Potatoes Down and Up Again

	Apr. 10	Apr. 3	Apr. 11, 1928
STATE			
150 lb. sack.....			3.50-3.75
Bulk, 180 lbs.....			
MAINE			
150 lb. sack.....	1.75-2.00	1.75-2.00	3.25-4.00
Bulk, 180 lbs.....	2.00-2.25	2.00-2.25	4.25-4.85
PENNA.			
150 lb. sack			
No. 1			3.60-3.85
Bulk, 180 lbs.....			
LONG ISLAND			
150 lb. sack			
No. 1	2.00-2.25	2.00-2.25	4.50-4.75
Bulk, 180 lbs.....	2.25-2.50	2.35-2.60	5.40-5.75

The old potato market suffered a dip in its price curve during the past week. On Monday, April 8, Long Islands dropped 10c per 150 pound sack and bulk good slipped 10c per 180 pounds. Whether this had a psychological effect on the market we do not know

but the fact remains that on the following day there was a better demand for old potatoes, prices recovered and they have been fairly steady ever since. We can hear some folks remark that it may be a good idea to try two or three more dips and maybe they will bounce right out of the rut. We certainly wish it were possible.

Meats and Live Stock

Veal calves have not been meeting a very satisfactory demand and prices are fifty cents lower than they were a week ago. Good to choice have been from \$15 to \$17 with mediums from \$12 to \$14.50. Culls sell as low as \$8.

Steers have slackened up a bit both in demand and price. Their market is irregular. Common mediums bring \$10 to \$12.75 but seldom higher.

Bulls, like all other live-stock, are irregular. A few good are bringing \$9.50 but most of the sales range from \$8.50 to \$9.

Cows are still bringing the same prices that they brought a week ago, from \$4 to \$8.25, but the market is more irregular.

Hogs have slipped a little on some weights. Those weighing 85 to 130 pounds, \$11 to \$11.50; 130 to 160 pounds, \$11.75 to \$12.25; 165 to 220, \$12.25 to \$12.50.

Fancy Hay Scarce

Fancy timothy hay is meeting an active demand. No. 1 grade is actually scarce and if it were here, in large bales, it could easily bring \$27. Mixed hay, medium and lower grades, are not as active and selling lower and more slowly.

Feeds and Grains

FUTURES	Apr. 11, 1928	Apr. 3	Apr. 10
(At Chicago)			
Wheat, (May)	1.47 7/8	1.18 1/2	1.20 1/4
Corn (Mar.).....	1.00 1/4	.90 1/4	.92 1/4
Oats (Mar.).....	.57 7/8	.45 1/2	.48 1/2
CASH GRAINS			
(At New York)			
Wheat, No. 2 Red..	1.92 7/8	1.46 1/2	1.48 1/4
Corn, No. 2 Yel....	1.20 3/4	1.08 3/4	1.10 1/4
Oats, No. 2 .....	.71 3/4	.57 3/4	.61 1/4
FEEDS			
(At Buffalo)	Apr. 6	Mar. 30	Apr. 7, 1928
Grade Oats.....	33.00	33.00	39.00
Spring Bran.....	27.50	29.00	38.00
Hard Bran.....	30.00	31.00	40.00
Standard Mids.....	26.50	28.50	37.50
Soft W. Mids.....	35.00	36.00	43.00
Flour Mids.....	33.00	33.50	40.00
Red Dog.....	36.50	36.50	41.00
Wh. Hominy.....	36.50	37.00	41.00
Yel. Hominy.....	37.00	37.00	41.50
Corn Meal.....	38.00	39.00	44.75
Gluten Feed.....	42.50	45.50	57.00
Gluten Meal.....	52.50	52.50	57.00
36% C. S. Meal.....	41.00	41.00	54.00
41% C. S. Meal.....	45.50	46.50	59.50
43% C. S. Meal.....	48.00	49.00	61.50
34% O. P. Linseed Meal	51.00	53.50	56.00

Central Pennsylvania Notes

THE last public sale for the season was held today. Beginning with the middle of February, one or two were held daily. Cows have sold from \$100 to \$325 for registered Holsteins and hens from 32 to 39 1/2 cents per pound. The sale of Mrs. Minnie Orndorf on the John C. Miller farm on the 30th ran to \$5410.47 for stock and equipment on a 120 acre farm. George McCormick's sale in Gregg Township totaled over \$5100 for his cattle alone, mostly pure-bred and registered Holsteins. He bought a smaller farm which money from his surplus stock will nearly pay for.

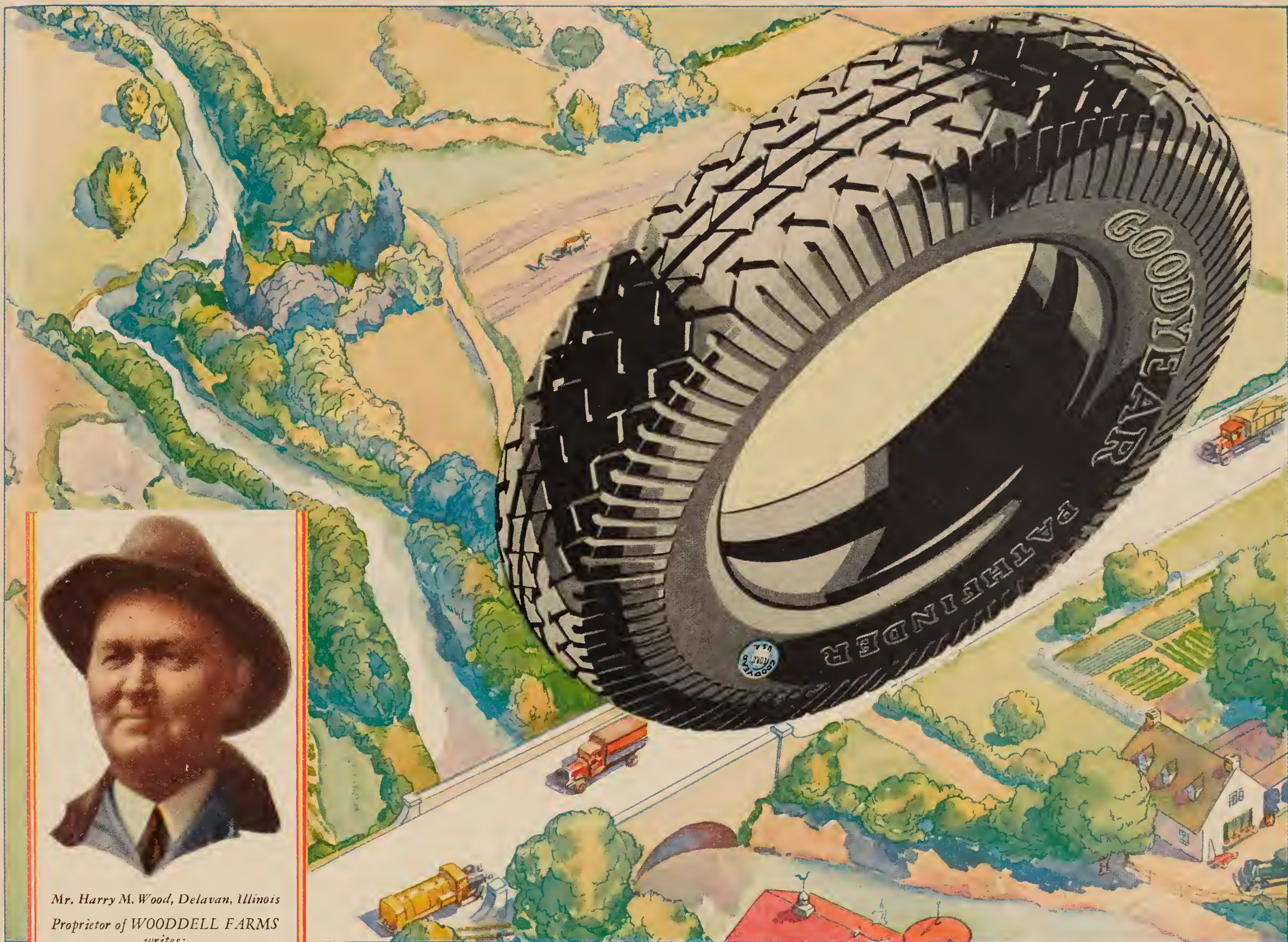
Farmers are busy plowing sod and corn stalks or hauling out manure for corn. A few farmers have planted early potatoes and some clover seed has been sown. All the good farms have been rented.

Fertilizer for spring crops is being delivered, as well as seed potatoes. Buyers are paying 75 cents for marketable potatoes in two bushel sacks, the seller to find the sacks, which makes 35 cents per bushel for the potatoes.

Very few steers were fed in this section of the state this winter, and only a few hogs for market. Rural schools will close about the 19th of this month.

Measles are an epidemic among young people now.

The Laurelton State Village has taken possession of the three farms they bought in Hartley Township, and are stocking them with new and improved machinery, among which is a double gang plow for their tractor which turns two 18 inch furrows. Prices: Wheat, \$1.40; Corn, \$1.00; Oats, 55c; eggs, 26c; and veal calves 14c.—J. V. GLOVE.



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writes:

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No, even if it is low-priced, you can't call the new Goodyear Pathfinder a "second-line" tire — it is "first-line" quality and superior in most cases to the highest price tires built by many manufacturers.

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GOODYEAR

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“Cheap” paint isn’t cheap at all. Price per gallon has little to do with economy. It is service *on the wall* that counts.

“Cheap” paint can’t cover because of its poor body. Where fine old SWP House Paint covers

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Where 7 gallons of fine old SWP will do a two-coat job on an average size house or other building, 4 gallons *more* of “cheap” paint are required.

Figure that out and you’ll find that the “cheap” paint required costs just as much or more than fine old SWP.

BUT a beautiful SWP job needs renewing only once in five years, on the average. “Cheap” paint begins to chip, chalk, peel—in *no time*. In five years, it may have to be done over completely, one, two or even *three times*. And it always has a *cheap* look.

So fine old SWP—even at a little higher price per gallon—costs only about half as much as “cheap” paint *on the wall*.

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Don’t fall for any “slick” paint propositions. They are terribly costly—as many a man has found to his



The extravagant “low price” offer is usually “cheap” paint

sorrow. You will save money by calling upon your local Sherwin-Williams dealer at “Paint Headquarters.” He is a reputable dealer whose integrity is established and whom you know personally.

Let him give you an estimate on the gallonage of fine old SWP that you will need. Compare it with what “cheap” paint will cost you. And for real economy have your painting done by an experienced Master Painter, if possible.

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Farm News from New York

Federal Farm Relief Bill Now Being Prepared for Consideration at Extra Session

THE hearings before committees of the Senate and House on agricultural relief, at which many prominent agricultural leaders testified, were concluded on April 6 and it is planned that the actual draft of a farm relief bill will be prepared prior to April 15 when the extra session of Congress will convene. The farm relief bill will be presented simultaneously in the House and Senate shortly after the receipt of President Hoover's message on farm relief and tax revision. It is planned to have both houses start promptly on a discussion of the bills in order to reach a decision as soon as possible. It is hoped that the bill will be enacted into law prior to June 1st in order to carry out the desire of the President that the program should be under way in time to help the market the next harvest.

Debenture Plan Still Favored By Some

The consensus of opinion seems to be that the bill will be much like the McNary bill presented at the last session which was similar to the old McNary-Haugen Bill except that the equalization fee was omitted. There are some indications that a group composed of both Democrats and Republicans will oppose this bill on the ground that it does not go far enough in dealing with the surplus control question. This group is sponsoring the debenture plan which has received the approval of the National Grange.

There has been some talk that it may be difficult to confine the extra session to a consideration of farm relief and tariff revision. There is some pressure to bring before the session the question of reapportionment of the House of Representatives and also to consider the question of the World Court.

It was recently announced by Newton D. Baker, chairman of the National Crimes Commission, that a new standing committee has been appointed to investigate police problems with particular reference to policing and crime detection in rural communities. It is expected that this new committee will work in close cooperation with the New York State Crime Commission which is now studying rural police methods under recommendations made by Governor Roosevelt.

Essex County Takes Honors Among Dairy Association Herds

THE high herd for milk production among all herds in Dairy Associations in New York State for the month of February is owned by W. W. Fortune, of Essex County. The herd averaged 1786 pounds of milk, and 64.1 pounds of fat for the month. Second place goes to the herd of A. J. Williams, of Otsego County, and third place to the herd owned by B. Morrison of Saint Lawrence County.

The high producing cow for the month is owned by H. F. Farrington, Lewis County, with a production of 2652 pounds of milk, and 87.5 pounds of butter fat. First place for butter fat production belongs to a pure-bred Holstein owned by W. W. Fortune of Essex County, with a record of 101 pounds of butter fat. Second place for milk production goes to an animal owned by Wooster Fruit Farm, of Wayne County, and third place to a Holstein owned by George L. True of Monroe County.

Dutchess County to Have Big Junior Calf Club

TWO hundred dollars in prizes will be awarded to calves owned by 4H Club members, who exhibit at the Dutchess County Fair next fall. A special prize of a pure-bred Holstein heifer valued at \$150 is offered by Henry Morgenthau, Jr., of Hopewell Junction, publisher of AMERICAN AGRICULTURIST, and a special prize of

\$20.00 in gold will be given by J. C. Penney of Emmadine Farms. The Poughkeepsie Trust Company will also give three prizes.

An opportunity for Dutchess County boys and girls to raise heifers is given through a special financing plan arranged by the Poughkeepsie Trust Company. The bank will loan the amount necessary, to any boy or girl between the ages of ten and twenty, on a promissory note signed by the buyer, and endorsed by a responsible person.

A Good Dairy Record from Washington County

WASHINGTON County has real producers as well as show cattle. The Southern Washington County Dairy Improvement Association was organized in November by farm bureau agent, C. M. Slack, with about 20 members. About 20 herds were tested the first month with 45 cows on the honor roll with 40 pounds of fat or 12 pounds of milk. Andrew Ashton & Sons had high cow for the month with 76.3 pounds fat, and John Rae high cow in milk, with 1860 pounds to her credit.

December brought out eighty-three cows for the honor roll, with Mr. Rae's cow, Idene Veerman Bonanza Colan-

tha, taking both honors with 97.6 pounds fat and 2440 pounds of milk. In January she came back again with 103.4 pounds fat and 2325 pounds milk. There were eighty cows that made the honor roll for January. The Association has taken on six more members so we now have 26 members. The officers of the association are: G. E. McGeach, President; Duane Brannell, Secretary and Treasurer; and Howard McNeal, tester.—G. M.

Early Crop Reports Indicate Reduced Potato Plantings

New York State Department of Agriculture has issued the following report on the potato acreage for the year.

New York State potato growers are taking account of next year's crop, according to the New York State College of Agriculture. On March 1 reports from growers indicated intentions to plant for the whole United States of 3,418,000 acres compared with 3,825,000 acres harvested in 1928, 3,476,000 in 1927, and 3,120,000 in 1926.

The largest reductions in intended acreage are in the commercial potato-growing states. New York potato growers intend to plant 281,000 acres compared with the 284,000-acre crop

harvested last year, and the 270,000 acres in 1927.

For the past five years the average yield an acre in the United States has been 116 bushels. If the intentions to plant are carried out as stated, and an average yield of 116 bushels an acre is obtained about 400 million bushels will be produced. This is about a normal crop.

The reports from growers are obtained by the United States Department of Agriculture from 50,000 producers in the United States. This statement of the farmers' intentions is not a forecast but simply an indication of what farmers had in mind at the

Attention, Dairymen!

THE Dairymen's League Cooperative Association, The Sheffield Farms Company Producers, and the Farm Bureaus are conducting a survey of the milk situation to help determine whether or not the dairymen of the New York Milk Shed are going to be able to meet the milk shortage prices next fall.

American Agriculturist urges you to give full co-operation in furnishing information for this milk survey. No matter what organization you belong to, or if you do not belong to any, all will suffer equally and disastrously if we fail to keep outsiders from breaking into our eastern milk markets. Once we lose these markets, they never can be regained.

If you have not furnished the information asked for in the survey, ask the local of your milk organization or the farm agent in your county to send you a blank on which to report the number of cows that you have and the times when they will freshen.

Remember also that now is the time to make plans to keep your production up for next summer and next fall. We are telling you earnestly that you are facing a crisis which can be met if everyone does his part.

time they made their reports, as compared with the acreage which they planted last year.

New Jersey Acreage Report

The New Jersey State Department of Agriculture has issued the following acreage report for the approaching season.

New Jersey farmers intend to cut the potato acreage from 57,000 acres in 1928 to 51,000 acres in 1929, according to the results of a planting intentions survey made by the Bureau of Statistics and Inspection, New Jersey Department of Agriculture. The intended decrease is 11% which is about the acreage decrease for the country as the intended potato planting for the United States is 10.6 per cent less compared with 1928.

The acreage of tomatoes for manufacture, according to the intentions of New Jersey farmers, will be 7 per cent or 3,200 acres less than the 1928 acreage of 33,000. New Jersey farmers plan to plant 90 per cent of the 1928 acreage of 2,040 in cucumbers. About 1,800 acres of watermelons will likely be planted compared with 2,000 last season, while 95 per cent of the 1928 onion crop of 3,000 acres will be planted.

The acreage of all other crops, according to the intentions of the farmers of the state, will be larger or the same as compared with 1928. Sweet corn with an intended acreage of 18,500; cantaloupes with 3,400 and eggplant with 1,210 show an intended increase of 115 per cent; while rye with 41,000 acres, tomatoes for market, 11,500 acres; green peas, 4,800 acres; peppers, 7,500 acres; carrots, 1,300 acres; and beets, 1,000 acres, show an intended increase of 110 per cent.

—The Producer's Price Current.

New York County Notes

Genesee County—Another severe wind storm which took the form of a twister, left a trail of havoc in this vicinity. Four brooder houses were blown away and the roof torn off of the barn of Dennis Phelps. A brooder house at Irving Scarborough's was carried as high as the telephone wires and scattered on the lawn. Whole orchards were demolished, windmills torn down and roads strewn with uprooted trees and debris. A big barn on the Halsey farm was torn in two in the middle and left standing although it is ready to fall at most any time. Farmers are now busy repairing the damage done by the storm while the weather remains unsettled. The Batavia-Oakfield Road is to be rebuilt. Because of so much traffic its macadamized surface is constantly in need of repair. Batavia has changed her traffic signs "Right turns on red" to "All turns on green." This has been a problem to tourists and rural residents alike. It was a quandary which way to turn at congested country cross roads. Some followed the city rules while others were puzzled and sometimes held up traffic.—Mrs. R. E. G.

Chautauqua County—The weather has turned cooler after a few days of almost summer heat. Vegetation is a good month ahead of the season. Last week closed a very poor sugar season. There is a light crop of syrup. The quality is good but the color is dark. We have had several bad storms that have damaged roads and washed out bridges. Also much damage has been done by high winds. Some dairymen are short of hay but the supply will probably meet the demand although the quality is mostly poor.—A.J.N.

In the Hudson Valley

Columbia County—Wonderful spring weather has been enjoyed during the past week. Sheep growers met in Chatham and planned for another wool pool. One hundred and fifteen acres were burned in a fire on Stottsville Road. Poles and wires fell but buildings were saved. The fire crew arrived just in time. A careless passerby who was smoking was the cause of the fire, it is alleged. A homemaking specialist met the 4-H leaders Saturday afternoon in East Chatham. A report from the N. Y. Light and Power Co. shows that the Hudson District Farms are ahead in the operation of electric service. They serve over 3500 farms and have 1000 miles of service wire. Eggs are only 27c a dozen "unclassified" and butter is 45c a pound.—Mrs. C. V. H.

Sullivan County—The sap season has proven very poor, only one day's run. Maple syrup will be higher this year because of poor season. Dirt roads are getting so they can be traveled again with trucks. Farmers are busy building fences and doing odd jobs. Another shipment of white rabbits arrived at Liberty and were distributed in Sullivan County. Special Easter Services were held in every church

and it was a lovely warm day. There have been several electric storms within the past week. Cattle testing is going on in the town of Mamakating.—P. E.

In Central New York

TIOGA County has suffered this March from one of the worst floods in many years. Cannawanna was all under water. The Agricultural Fair Grounds (now Recreation Park except at fair times) was submerged and pleasure parties in boats and canoes glided over the waters. Even the top of the high board fence surrounding the grounds was not visible. The waters receded quickly, in evidence only two or three days. On April 1 the high winds that prevailed all through this section, unroofing many buildings and tearing up fruit and shade trees, also took toll of the cattle sheds on the fair ground. A fire last summer burned a portion of them and they were rebuilt. All these sheds were blown down and a portion of the old ones. Several barns and houses have burned of late, causes supposed in some cases to have been sparks from passing trains. The Dexter homestead (opposite the Hiawatha) burned April 1. The high winds blew the sparks and burning embers free from the many farm buildings.

Many farms are exchanging owners and much moving is done, so spring surely is here. Many flocks of wild geese have gone north and song birds arrived here. Dirt roads, especially the hill roads, are in a very bad condition.

Many poultry meetings are being held this week. R. C. Ogle, poultry specialist of the State College of Agriculture has been so far and will be the principal speaker at these meetings. The "tractor meetings" held recently in Flensburg, were well attended and much enthusiasm and information given and received. Special Easter Services and music were given in nearly every church in the county. It is stated that the new hospital for Tioga will be built in Waverly despite the fact that less than 1/3 of the amount called for (\$3000,000) was subscribed—a deficit of over \$123,000. Some are for this project and some of the most leading minded people are not. As they state, the building of the edifice is only the beginning of the outlay. Such enterprises have to be heavily financed as the upkeep must be met and furthermore, physicians state that there is room in our neighboring hospitals for all needs and they fear for the burden on the county.

Candor has the distinction of electing a woman mayor, Mrs. Bessie Moore, but she declined to serve unless provided with a car and chauffeur and if she did take the office, she should want to personally supervise the business, and as she did not own and operate a car she could not do the work. She was the first woman to be elected mayor in this state, so it is said.—C. A. B.



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THE secret of getting full value for your money on paint is to get the kind that is known and proven to be just right for the exact locality in which you live. There are many good paints but some are more adaptable to certain climatic conditions than others. It costs no more to apply good paint than it does cheap paint; in fact, it is generally less, for it covers better and is easier to work, and labor is by far the greatest cost in a paint job. To be sure that the paint you buy is climate tested, sun tested and winter tested right in your own locality, and that it will give long wear and retain its color, buy paint from your local "Farm Service" Hardware Man, for he has had the opportunity of testing many kinds and of watching the results of local people who have used his paints.

He can, therefore, honestly recommend to you what is the utmost value in paint. He may be able to save you the entire cost of a repainting job and it is certain that he offers you more in the way of satisfaction and help in the selection of the right kinds and colors than you can get in any other way. The "tag" sign in the window means "save money here on paint!"

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Where prices are lower because you get personal help in the selection and maintenance of your purchases.



Livestock



Breeders



CATTLE

CATTLE

FISHKILL FARMS offer the following BULL CALVES

sired by that well bred bull, KING PIEBE 19TH a grandson of the great K.P.O.P.

Ear Tag No. 260, born April 3, 1929

Ear Tag No. 261, born April 4, 1929

No. 260 is out of FISHKILL ARMISTICE MAY DEKOL, whose dam, FISHKILL DICHTER INKA COLANTHA, produced 105.50 lbs. of butter and 2349.60 lbs. of milk in 30 days.

No. 261 is out of FISHKILL INKA LADY TRIUMPH DEKOL, whose sire, HENGERVELD HOMESTEAD DEKOL 4TH, has 22 A.R.O. daughters.

These fine young bulls are offered at **\$75.00** if sold within thirty days of date of birth. F.O.B.

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Extension Service

The HOLSTEIN-FRIESIAN ASSOCIATION OF AMERICA
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Wonderful individual, gentle, a sure breeder. Dam a nearly 800 lb. Class B. daughter of a 1000 lb. cow. Sire's dam a 33 lb. three-year old. Herd under State and Federal supervision.
WILLIS VAN DEWALKER, R. 2, Rome, N. Y.

FOR SALE—At all times Guernsey and Holstein cows and heifers in carload lots. **FRED JENSEN, Waupaca, Wis.**

FOR SALE One pair fancy, twin, Holstein Steers. **S. H. VAN BUSKIRK, Milford, N. Y.**

FOR SALE Six five-year old Jersey cows fresh and springers. Ten head of yearling heifers, Jerseys and Guernseys, four yearling bulls, two Holsteins, one Ayrshire, one Jersey.
EARL WHITE, ARCADE, NEW YORK

Pure Bred and High grade T. B. tested Canadian Holstein cows and heifers, fresh and near fresh. Car lots or less.
HUTCHINS & LEGGETT, MALONE, N. Y.

FOR SALE Milking Shorthorn Bull and heifer calves. Write John J. Compton, Middleport, N. Y.

He Was My Boyhood Friend

(Continued from Page 1)

beard, even if he did profess a faith which in our community was regarded with at least mild disapproval.

John was steadily employed on Hill-side Farm for a good many years. As a farm helper he had many limitations. He never learned to harness a horse or to milk a cow. Neither could he be induced to mount a ladder into an apple tree while to get him up into a hay mow, if a few feet above the floor, was a serious undertaking not to be lightly entered upon. On the other hand he was a good man with a grass scythe and an acknowledged expert in pitching hay on the wagon. He was also a pretty good man with an ax and used to get out pine stumps by digging around them until the roots could be chopped off. However, he had one definite trade and at this he was an artist. He brought with him his long Irish spade,—very heavy and long and narrow with a handle with a cross bar at the top like the letter T. We have a large garden and for many years John spaded every square inch of it right into the exact corners and close under the fence and as long as he cared for it there was never a weed. Also he threw up flower beds after the fashion he had learned on the other side making them in the shape of circles and stars and half moons with alleys between, doing it all very quickly and neatly. So, too, he sowed seeds—onion and other seeds—in mathematically straight rows guided by a string and sprinkling them through his fingers with surprising accuracy. He was a tall man but he sowed seeds and weeded beds, not kneeling at his work but bent literally double, a posture that he seemed to assume by the hour with perfect ease. Also he dug for us many miles of ditch digging it with rare judgment as to the correct location to dry wet spots and grading it by his eye with singular correctness.

Across the purple spaces of almost fifty years comes again to me the memory of certain golden October days one fall when John and I harvested the potato crop. This farm never did and does not now pay much attention to the potato crop, but we always grew enough at least for family use and for our men. In any case I feel sure that those old potato patches would have yielded abundant laboratory material for every potato disease known to science and that they contained representatives of every named and unnamed variety. John and I constituted the harvesting crew and I suppose I may have been ten years old. The big spring wagon stood in the field against the slope and a plank laid on a spoke of the wheel made an easy pathway by which I could mount high enough to dump my little peck basket of tubers. The digging of each hill had all the thrill of discovery because any plunge of the spade was likely to bring forth a different variety. For my part, I had absolute confidence in John's infallible wisdom regarding potato nomenclature. As every recognizable different sort was brought out into the sunlight, I demanded its name and it must be said that John's tongue and imagination never for an instant failed him. "What are those, John?" "Them be the Yellow Legs". "And those?" "Them be the Early Risers". And in quick succession we dug Blue Noses and Morning Stars and Early Daisies to say nothing of Peach Blows and Beauty of Hebron which were sure enough varieties and the last one especially rolled off his tongue with vast satisfaction.

I shall remember those autumn afternoons until the silver cord be loosed and the golden bowl be broken.

No one seems to have known just how old John was and at his coming among us he was not really young. On the marble slab above him you may read that his age was ninety years. I was always an admiring and spell-bound listener and when John would to me a tale unfold, he had one almost stereotyped introduction, "Long ago when I worked for your Uncle Willis and your Pap was a little boy—***". At one time when he feared that his age might be counted against him in

the matter of employment he repudiated his years and proclaimed himself as only a little older than my father.

In 1900 we celebrated the Farm Centennial with about as much ceremony as we could easily command. The gathering of the clan was not noteworthy for numbers because we Good-years and Van Wagenens have never been a numerous people. We had only two or three invited guests from outside but John was one. I took him and sat him in a chair on the lawn that August afternoon and made a little speech about him introducing him as a very aged man who had lived one lifetime in Ireland and another in America. John sat and blinked his appreciation and rose, to the occasion in wonderful shape. After that he always affected to consider a man who couldn't live at least a hundred years as a poor weakling. Once he remarked to me, reminiscently viewing his spade which was getting pretty short, "When I live another hundred years I'll have another spade". As a matter of fact I believe that to the day of his death he carried that original spade. It was not at all like the thin modern blade but very long and narrow and heavy—hardly more than a bar of steel widened under a blacksmith's hammer, and once in a half dozen years or so, Tom Purcell laid a few inches of new steel on the point and so it was perpetually renewed. He was inordinately proud of that spade and boasted that he could use it as gracefully as a fine lady could handle her teaspoon—a statement that was strictly true.

According to the testimony of my mother, John in earlier years was wont to beguile the time on summer evenings by playing on the flute but when I came to know him he had put away such frivolity. I do bear witness, however, that even in my time he would sometimes sing an Irish ditty. Very unfortunately the only one that I can remember and quote might not be quite in line with the highly correct standards maintained in the family pages of the AMERICAN AGRICULTURIST.

John was always fastidiously neat in his dress and in his earlier years something of the Irish dandy. There was wide comment on the fact that he could work all day in a muddy ditch and not get his pantaloons dirty and always at the close of the day's work he scraped and cleaned his boots with the greatest care. I am glad to record of him that he was a fairly consistent church-goer and on beautiful summer mornings sometimes appeared wearing what we now irreverently call a "plug" hat. I can never be quite sure if this rather ornate and unusual headdress represented an original purchase or a contribution from some patron.

John grew old slowly—perhaps I
(Continued on Page 24)

SWINE

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Let us suggest to you as breeders the best kind of a pig to start to raise is a good one. You save time and money. We sell all pigs with a trial of two weeks, and then if dissatisfied, return pigs and we will return your money.

7-8 wks. old, \$5.00 ea.; 8-10 wks. old, \$5.25 ea. Breeds—Chester and Yorkshire cross, and Berkshire and Chester cross. Crating free. These prices F.O.B. our depot. Will ship any number C.O.D. or send check or money order.

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P. S. No pigs sold at the farm; only by appointment.

SPRING PIGS FOR SALE

Buy where quality is never sacrificed for quantity. We sell only high grade stock from large type Boars and Sows, thrifty and rugged, having size and breeding. Will ship any amount C.O.D.

Chester & Yorkshire — Berkshire & Chester
7 TO 8 WEEKS OLD \$5.00
8 TO 10 WEEKS OLD \$5.50

Also a few Chester barrows 8 wks. old, \$6.50 each. Satisfaction guaranteed or money refunded. 10 days trial allowed. Crates supplied free. A. M. LUX, 208 Washington St., Woburn, Mass. Tel. Wob. 1415.

PIGS FOR SALE OLD RELIABLE STOCK

Heavy legged, square backed, Chester and Yorkshire crossed, Poland-China and Chester crossed, Barrows, crossed, or sows 6-8 weeks old \$5.00—8 to 10 weeks old \$5.50 each. Fancy Berkshires, also Chester Whites, 2 months old Sows and unrelated Boars, \$6.50 each. 10 days trial or your money back. Shipped C. O. D. Crating free of charge. Yours for quality hogs.

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With the A. A. Poultry Farmer



A Program for the Poultryman

(Continued from Page 3)

3. Use the Cornell mash feeders.
4. Place one-half of one per cent cod liver oil in laying ration during fall and winter months or year round if hens are confined.

No recent discovery in the poultry business is more important than the effect of cod liver oil in the ration. More and more scientists are coming to see the need of sunlight to maintain the health and efficiency of all living creatures. Cod liver oil is sunlight preserved and when fed to poultry has some of the same effect as plenty of outdoor sun.

5. Provide artificial light during fall and winter months.

a. On early pullets from September 15 to April 1.

b. On hens as layers from September 1 to November 1—December 15 to April 1.

c. On hens as breeders one month before eggs are saved for hatching to April 1.

d. Give birds 13 hours of daylight unless evening lunch method is followed.

6. Feed regular dry mash moistened to hens during summer and early fall (to November 1). Feed wet mash to pullets to prevent molt or increase egg yield during winter when necessary.

7. Have oyster shells always available.

8. Provide clean fresh water twice daily when running water is not supplied. Heated fountains are advisable in cold weather to keep the water from freezing.

9. During winter months provide leafy green food unless milk is included in ration.

VI. Keep Laying House Dry by Proper Ventilation.

1. Use the rafter system wherever possible.

2. Use about 35 square inches of muslin covered window space per hen.

3. Never close window curtains except when the temperature drops to 15 degrees above zero or it is storming or blowing.

4. Never close all the window or cloth space unless the rafter ventilation is open.

5. Be sure there are sufficient ventilator openings at the highest points in the pen if rafter ventilation is impossible.

6. Provide for summer ventilation by taking out front windows and having rear ventilator under eaves.

7. Allow 3.2 square feet floor space for Leghorns and like breeds; 4 square feet for heavy breeds.

VII. Practice Culling During Summer Months.

1. Beginning July 1, cull the hens at least three times during the season to September 15.

2. Secure services of paid culler at least once during the season if unable to do culling.

VIII. Follow Business Methods.

1. Keep a flock record of egg production and losses on the Cornell Poultry Calendar (pullet and hen records should be kept separate).

2. Keep a complete record of the farm business in the Cornell Poultry Account Book.

IX. Secure Better Prices for Market Eggs.

1. Collect eggs twice daily in warm weather.

2. As soon as collected place eggs in a clean, cool, ventilated place, usually a cellar.

3. Prevent dirty eggs by screening the dropping boards, by keeping clean material in nests, (shavings are preferred), by frequent changes of litter, by preventing hens from roosting in nests at night and by keeping hens indoors during early spring when ground is muddy outdoors.

4. Wash only the dirtiest eggs. Clean those moderately dirty with as little moisture as possible.

5. Candle eggs to detect blood spots, cracked and thin-shelled eggs.

6. Grade for size and quality (three grades).

Large—Nearby Fancy or Grade A—doz. ave. 24 oz.; indiv. min. 23 oz.

Medium—Nearby Fancy or Grade A—doz. ave. 22-24 oz.; indiv. min. 20 oz.

Small—Nearby Fancy or Grade A—doz. ave. 18-20 oz.; indiv. min. 16 oz.

7. When shipping eggs by express, follow directions of American Railway Express Company.

8. Never hold eggs longer than one week.

9. Use your own copyright trade mark or a state brand.

10. Be regular in shipping and grading.

X. Hatch More and Better Chicks.

1. For best hatches feed milk in some form, cod liver oil and leafy green food.

2. Do not save eggs for hatching longer than 10 days.

3. Keep eggs in a fairly moist room where the temperature does not register below 40 degrees or above 60 degrees F.

4. Follow manufacturer's direction in operating all incubators.

5. Disinfect all incubator trays between hatches.

Formaldehyde gas may be used to disinfect cabinet incubators while eggs and chicks are in the machine.

Number of Eggs to Set

On the average it will take six hatching eggs, or three baby chicks, to produce one good pullet ready to lay. With good management there will be a surplus of pullets which can be disposed of at a good profit. This estimate is based on the following:

Fifty per cent hatch of all eggs set.

Twenty per cent mortality of chicks.

Fifty per cent pullets; 50 per cent cockerels.

Twenty per cent culls.—Farmingdale State School.

How They Raise Chicks At Farmingdale

THERE are a great many plans used in raising chickens successfully. A majority of these plans are complicated and impractical for the busy poultryman to put in operation. A well balanced ration is the first consideration and the next is intelligent management. The following describes briefly a plan that is simple and one that has given satisfaction, both at the Institute and on many commercial poultry farms.

The Farmingdale Chick Starting and Growing Mash.

400 lbs. No. 2 Yellow Corn Meal

150 lbs. Wheat Bran

100 lbs. Red Dog Flour

100 lbs. Ground Rolled Oats

100 lbs. Alfalfa Leaf Meal

100 lbs. Dried Milk (skim or butter)

50 lbs. Meat Scrap (50% protein)

10 lbs. Salt

2½ quarts of Cod Liver Oil

The average analysis of this Mash mixture is: Protein 17.4%; Carbohydrates 59.7%; Fat 4.3%; Fiber 6.0%; Ash 6.6%.

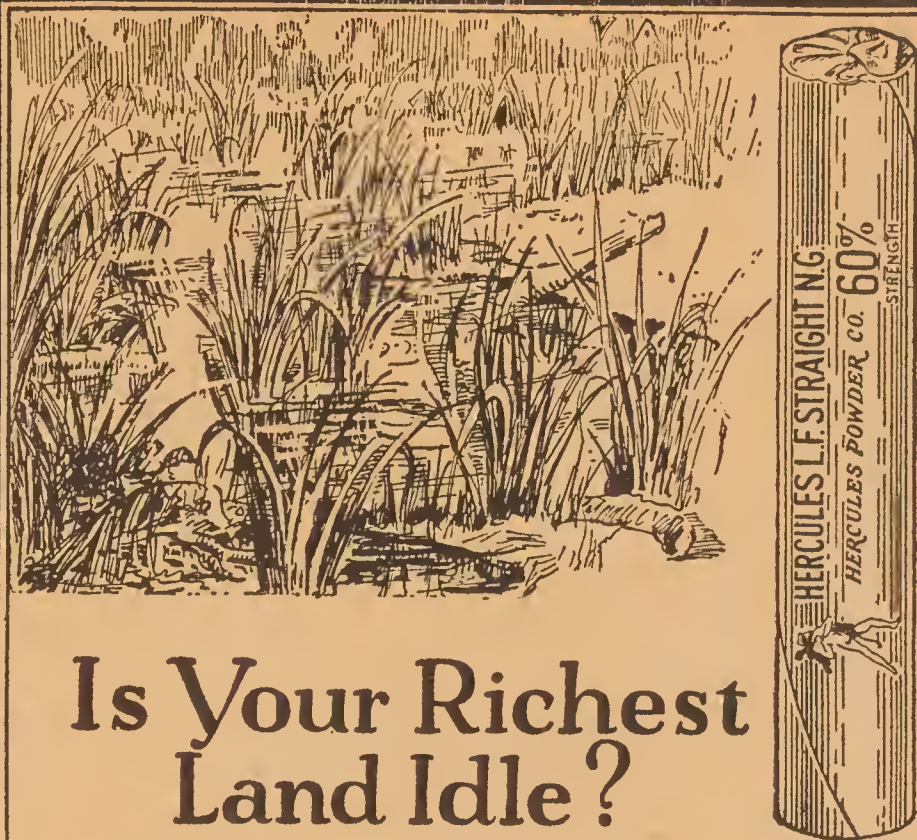
Observations indicate that the chick's growth is satisfactory if scratch grain is omitted for the first month. After that time the birds will eat intermediate scratch feed, medium cracked corn or a mixture of cracked corn and wheat. Three feedings a day should be provided.

Feed on Newspapers for Sanitation.

Chicks should be fed mash on newspapers or egg case covers for the first two days. After that time there should be no difficulty in using shallow boxes. Enough hopper space should be provided for one-half the flock to eat at one time. Mash should be available at all times.

Chick size oyster shell provides lime

(Continued on Page 18)



Is Your Richest Land Idle?

THE land on your farm that is idle because it is low and wet may be the richest soil you have. You can drain it quickly and easily with Hercules Straight Nitroglycerin Dynamite 50% or 60% strength.

Let us send you a booklet, "Hercules Dynamite on the Farm", that tells you how to do the work.

You can probably get Hercules Dynamite from a dealer in your town. If not, write us and we'll tell you where to get it. Don't accept any other.

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American Agriculturist, 461 Fourth Ave., New York City.

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For only 7 cents a word you can place your story of your wants or what you have to sell in nearly 150,000 homes.

BABY

CHICKS

ATHENEON CHICKS

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Big—Husky—Vitality Chicks

From Healthy Bred-To-Lay Flocks

Atheneon Chicks are from Selected Eggs that hatch 12 to 13 pounds per hundred boxed for shipment. CHICKS YOU CAN RAISE and that will grow into SURE PROFIT meat and egg production.

Special Matings from the World's Finest Exhibition and Egg Laying Strains

Consider these high quality strains which we have established in our matings: White Leghorns—IMPORTED and PEDIGREED TOM BARRON. Barred Rocks—PARK'S BRED-TO-LAY. OWEN'S S.C. Reds. HOLTERMAN'S ARISTOCRAT PEDIGREED LINE Barred Rocks. FISHEL'S White Rocks. DILLINGHAM'S Buff Rocks. MARTIN'S 200 EGG LINE White Wyandottes. Similar dependable quality in 14 Popular Varieties.

Mr. Moody of Connecticut orders 7600 White Leghorns for March shipment—his third year with

ATHENEON HIGH EGG PRODUCTION LEG-HORNS. He writes Dec. 14, 1928: "In my first lot of 3300 chicks from you last March 15, the mortality was just 200 chicks or 6%. There were very few culls, and we housed 1450 pullets at 5 months of age. At 6 months they laid 690 eggs and on Dec. 13th, 815 eggs. The cockerels were all gone at 12 weeks, the last 800 weighed 1896 lbs., topped the New York market 3c bringing 35c. They were a nice lot."

ATHENEON VITALITY CHICKS ARE BRED FOR PROFIT

Long experience in flock breeding and scientific incubation is a guarantee of protection to our customers that few hatcheries can equal. ORDER NOW—direct from this ad. or write for FREE ILLUSTRATED CATALOG and IMPORTANT INFORMATION ON RAISING CHICKS, also complete prices on our Special Pedigreed matings. Ref. Athens National Bank. I. B. C. A.

PRICES ON GRADE A CHICKS

	50	100	500	1000
S. C. White, Buff, Brown Leghorns; Anconas	\$7.00	\$13.00	\$62.00	\$120.00
Barred and White Rocks; S. C. and R. C. Reds	8.00	15.00	72.00	140.00
White Wyandottes; Buff Rocks; Wh. Minorcas; Campines	8.25	16.00	77.00	150.00
Buff Orpingtons; Sil. L. Wyandottes	8.75	17.00	82.00	160.00
Selected Heavy Breeds; Odd Lots	6.50	12.00	60.00	115.00

For Greater Profits Buy Hatchery Chicks from

ATHENS CHICK HATCHERY, BOX 96, ATHENS, OHIO

20TH CENTURY "MARVEL" CHICKS

from Special Mating Imported Barron White Leghorns

This Superb Mating consists of 350 Yearling hens, imported from TOM BARRON, of England.

The hens weigh not less than 4½ pounds and up to 6 pounds, and produce better than 250 eggs per year, per hen

BIG HEALTHY CHICKS FROM THE WORLD'S BEST STRAINS

14 varieties. Matings sired by pure-bred Males from the World's finest Trapped Egg Strains. Dams of high production, 250 to 302 egg lines. Park's, Burroughs, Fishel, Sheppard, Dustin, Pape and others of similar famous breeding.

1 Guarantee Satisfaction and give you personal service. Prices reasonable. 100% Live Delivery Guaranteed. Ref: Commercial Bank, Dun or Bradstreet.

	50	100	500	1000
S. C. White, Br. Buff Leghorns; Anconas	\$7.00	\$13.00	\$60.00	\$115.00
Barred and Wh. Rocks; S. C. and R. C. Reds; Blk. Minorcas	8.00	15.00	70.00	135.00
Wh. Wyandottes; Buff Orpingtons; Buff Minorcas	8.50	16.00	75.00	145.00
Imported Barron Leghorns; Wh. Minorcas; Park's Rocks	9.50	18.00	85.00	160.00

Heavy Mixed, \$12.50 per 100; Light Mixed, \$9.00 per 100.

Ship C. O. D. if desired (pay postman on delivery). FREE Illustrated Catalog tells all about our big size Winter Laying Chicks and profits you can make with them. Send for your copy.

20th CENTURY HATCHERY Box R NEW WASHINGTON, OHIO

PINE TREE CHICKS

DEPENDABLE APRIL CHICKS FOR FALL LAYERS

April is the last month for starting early fall layers. Get your chicks from the original pioneer hatchery, 37 years under the same ownership.

SHIPMENTS THIS WEEK AND WEEK OF APRIL 29th.

	25	50	100	500	1000
R. I. Reds and Bd. Plymouth Rocks	\$4.75	\$8.75	\$16.00	\$77.50	\$155.00
White Leghorns, A. P. A. Certified	3.75	7.00	13.50	65.00	125.00
Wh. Wyandottes	5.50	10.50	20.00	97.50	190.00
White Rocks	5.25	10.00	19.00	95.00	185.00
Br. Leg. and Anconas	4.75	8.75	16.00	77.50	155.00
Jersey Black Giants	7.75	14.75	28.00	137.50	275.00
Mixed Chicks	3.50	6.75	11.00	55.00	110.00

SPECIAL MATINGS, 4c a chick higher. Some of the country's finest bloodlines.

We prepay postage and guarantee safe arrival. No shipments C. O. D.

S. C. White Leghorn Pullets, 10 weeks old, May delivery, \$1 each, express collect.

From A. P. A. Certified matings.

PINE TREE HATCHERY

Box 55 Stockton, New Jersey

Jos. D. Wilson, Founder and Owner Since 1892

THE OLDEST HATCHERY IN THE U.S.

WOLF SELECTED CHICKS

CHICKS C. O. D.

Send only \$1.00 and pay Postman the balance.

Special pen mated and extra high bred chicks at slightly higher prices. Shipment made any time you wish.

	25	50	100	500
S. C. Wh. Br. & Buff Leghorns, S.C.M. Anconas	\$3.25	\$6.50	\$12.00	\$57.50
Bd. & Wh. Rocks, S.C. & R.C.R.I. Reds, Bl. Minorcas	3.75	7.25	14.00	67.50
White Wyandottes, Buff Orpingtons	4.25	8.00	15.00	72.50
Jersey Black Giants	5.00	9.50	18.00	87.50
Assorted Odds and Ends Mixed Chicks	3.00	5.00	9.50	47.50
Assorted Heavy Mixed Chicks	3.50	6.25	11.50	57.50

WOLF HATCHING & BREEDING COMPANY, BOX 1, GIBSONBURG, OHIO

CHIX FROM LARGE BREEDERS

	100	500	1000
Ferris Strain White Leghorns	\$12	\$57.50	\$110
Everlay Brown Leghorns	12	57.50	110
Basom's Barred Rocks	14	67.50	130
Owens' R. I. Reds	14	67.50	130
Mixed Chicks	9	42.50	80

Our breeders are selected for size, type and egg production. The kind that lay and pay. Send for literature. It is free. Tells all about our great egg machines.

Juniata Poultry Farm, BOX 1, RICHFIELD, PA.

BABY CHICKS

100% live delivery guaranteed. Order from this ad. or write for free circular.

C. P. Leister, McAlisterville, Pa.



(Continued from Page 17)

for bone building and should be available in open dishes. It does not seem reasonable to put all the minerals in the mash and to force every bird to eat a definite proportion of any one mineral element.

Clean water is just as important as good feed.

The use of dim lights on chicks, all night, is a practice that has distinct advantages. It prevents crowding and encourages the chick to eat and drink during the night.

The above feeding plan which contains 10% of dried milk may be used until the broilers are disposed of. After that time, the laying mash may be used.—D. H. Horton.

How to Preserve Eggs at Home

Limewater and Salt Solution.

The method of making this preservative is as follows: Slake four pounds of good quicklime in a small quantity of water; mix with four gallons of pure water; add two pounds of salt. Stir the mixture thoroughly several times, then allow it to settle. Pour off the clear liquid. The clear liquid is the part in which the eggs are to be preserved. There is about enough of this mixture when made by this rule to preserve thirty dozen eggs. The number, however, depends somewhat on the shape of the vessel used. This is one of the oldest methods employed, and is usually recommended as reliable.

Water-Glass Solution.

The water-glass preservative is prepared as follows: Mix one and one-half quarts of commercial water-glass solution with eighteen quarts of pure water; water that has been boiled is preferable. Stir the mixture until the ingredients are thoroughly mixed. An earthen jar is the most suitable vessel for the mixture, although a tight odorless tub may be satisfactory. Two eight-gallon jars are sufficient for thirty dozen eggs, using the quantity of solution prescribed above. After the water glass is thoroughly mixed, pour it into the different vessels to be used, being sure that the vessels are absolutely clean. It is expected that in the near future a convenient form of water-glass powder will be on the market, thus avoiding the use of commercial solutions varying greatly in strength. If more water is needed in order to cover the eggs sufficiently, this may be safely added to the amount of five quarts of additional water to each one and one-half quarts of the original commercial water-glass solution used.

YOUNG'S 8x8 Ft. "Amherst" House \$45

Portable Poultry Houses

Follow Prof. Lewis in Buying Houses

Many times during the last 10 years, Prof. H. R. Lewis, noted Poultry authority, has purchased Young's Houses for his own plant. YOU can safely follow his lead. Our Houses are easy to put up—no carpentering.

FREE CATALOG of Poultry and Pigeon Houses, Rabbit Hutches and Dog Kennels. Write today.

E. C. YOUNG CO. 97 Depot Street, Randolph, Mass.

MAY PRICES

	100	500	1000
S. C. White Leghorns	\$9.00	\$42.50	\$80.00
Barron & Wyckoff Leghorns	10.00	47.50	90.00
Barred Rocks & R. I. Reds	12.00	57.50	110.00
Light Mixed	8.00	40.00	80.00

Our chicks are properly hatched, strong and vigorous. 100% live delivery. Postpaid. Circular free giving full details of all breeds. CLEAR SPRING HATCHERY, McAlisterville, Pa. R. D. No. 2. F. B. Leister, Prop.

WENE Blood-Tested CHICKS

They're Worth a Lot More Than the Prices We Ask

A million blood-tested chicks a year! First we boost the quality to top notch; then we push for quality production. You get the benefit in prices 'way below those usually asked for blood-tested stock. And our Leghorns are State-Supervised!

	50	100	500
Immediate Delivery			
S. C. White Leghorns	\$8.50	\$16.00	\$77.50
Rock-Wyandotte Cross Bred	7.00	13.00	60.00
Straight Rocks, Reds, Wyandottes	13.00	25.00	122.50

All chick shipments prepaid—100% live delivery guaranteed.

S. C. White Leghorn Pullets, Blood-Tested, 8-10 weeks, \$1.05 each, f.o.b. Vineland, N. J. Immediate delivery.

Free Folder and Mating List Mailed on Request.

WENE CHICK FARMS, Dept. D, VINELAND, N. J.

STOP! LOOK! LISTEN!

	25	50	100	500	1000
Cash or C.O.D.					
Wh. Wyandottes	\$4.50	\$8.50	\$16.00	\$77.50	\$150
Rocks or Reds	4.00	7.50	14.00	67.50	130
Wh. Leghorns	3.50	6.50	12.00	57.50	110
Heavy Mixed	3.50	6.50	12.00	57.50	110
Light Mixed	2.75	5.00	9.00	42.00	80

From carefully selected free-range flocks. 100% arrival. Postpaid. Valuable illustrated 96-page booklet FREE. Telling all about poultry.

The Commercial Hatchery, Box 75-A (The dependable plant) Richfield, Penna.

HIGH GRADE CHICKS

Immediate and April delivery

	100	500	1000
White & Brown Leghorns	\$13	\$62.50	\$120
Bd. Rocks, R. I. Reds, Anconas	15	72.50	140
Wh. Rocks, Wh. Wyan. Bl. Minorcas	16	77.50	150
Assorted: Light 10c, Heavy 12c; Pekin Ducklings 32c each, \$30 per 100. All chicks for May delivery 1c less.			

Also special mating blood tested chicks and two and six weeks old chicks. 100% Live delivery guaranteed. Order direct from adv. or write for circular. 10% books order, balance cash or C. O. D.

TAYLOR'S HATCHERY, BOX 12, LIBERTY, N. Y.

Green Forest Husky Chicks

English and Tancred Strain

	25	50	100
Ship C. O. D.			
S. C. White Leghorns	\$3.25	\$6.25	\$12
S. C. Barred Plymouth Rocks	3.75	7.25	14
Mixed Chicks	2.75	5.25	10

Leghorns are out of hens with trapnest records of 291-300 eggs. We pay parcel post and guarantee 100% good, strong chicks on arrival. Free circular.

GREEN FOREST POULTRY FARM J. W. Amig & Son, Props. Star Route Richfield, Pa.

BABY CHICKS

From Heavy Laying Free Range Flocks

	25	50	100	500	1000
S.C.W. & Br. Leghorns	\$3.50	\$6.00	\$12	\$57.50	\$110
S.C.B. and Wh. Rocks	4.00	7.50	14	67.50	130
Buff Orpingtons & Reds	4.00	7.50	14	67.50	130
White Wyandottes	4.00	7.50	14	67.50	130
Assorted Chicks	3.00	5.00	9	42.50	80

100% prepaid safe delivery guaranteed. Order from this ad. or write for circular

J. N. Nace Poultry Farm RICHFIELD, Pa.

SINGLE COMB

White Leghorns Exclusively

3000 breeders on free farm range, Pure Barron English Strain, with trapnest records up to 314 eggs in a year. The large vigorous Leghorns that lay large white eggs. Now booking orders for hatching eggs and baby chicks Mar., Apr., & May delivery. Special feeding directions with all orders. Circular free Cecil Sherow and Olive Briggs-Sherow successors to EDGAR BRIGGS, SUNNY BROOK FARM Box 50 Pleasant Valley, N. Y.

Chick Bargain

FREE IMMEDIATE DELIVERY of SHO-ME CHICKS if desired. Direct from Missouri's Great \$100,000 Hatchery. World's Lowest Prices for quality offered—low as 7½c each. \$1.00 per 100 books order. Guaranteed, vigorous chicks from big-type, heavyweight flocks. Same strains that win at famous egg laying contests, with secrets of poultry raising. FREE to customers. Write now for FREE CATALOG & BARGAIN PRICES. SMITH BROS. HATCHERIES, Box 410, JAMES, MO.

BARRED ROCK CHICKS

A large modern Breeding Farm and Hatchery devoted exclusively to the production of BARRED PLYMOUTH ROCKS. MARVEL POULTRY FARM, GEORGETOWN, DEL.

When Writing Advertisers, Be Sure to Mention American Agriculturist

BABY

CHICKS

SIEB'S GUARANTEED CHICKS
from CERTIFIED HOGAN TESTED
HEAVY LAYING FLOCKS
SEE OUR LOW PRICES WHY PAY MORE?
Sieb's OVERSIZE CHICKS all Pure Bred from V. J. J. Famous Bloodlines. Will grow larger, mature quicker, lay better, pay higher profits. 100% live delivery. Immediate shipment. Catalog Free.

PRICES PREPAID	25	50	100	500
Wh. Bf. Br. Leg. Anconas	\$3.00	\$5.75	\$11.00	\$52.50
R. C. Reds. Wh. & SL. Wyn.	3.75	7.25	14.00	67.50
Br. Wh. & Buff Rocks	3.50	6.75	13.00	62.50
Wh. Min. S. C. Reds.	3.50	6.75	13.00	62.50
Wh. Orps.	3.75	7.25	14.00	67.50
Bf. Orps.	3.75	7.25	14.00	67.50
Black Min.	3.25	6.25	12.00	57.50
H. & L. Asst'd.	3.00	5.75	11.00	52.50
H. & L. Asst'd.	2.75	5.25	10.00	47.50
Lt. Asst'd.	2.50	4.75	9.00	42.50

SIEB'S HATCHERY,
Box 225, Lincoln, Ill.
Members I.B.C.A.

Hall's Chicks
Leghorns-Reds-Rocks-Wyandottes
"WELL BRED FROM WELL BREEDERS"
New England Accredited stock. All breeders 100% White Diarrhea free

	S. C. W. LEGHORNS	S. C. R. I. REDS	BARRED ROCKS	WHITE WYANDOTTE
Week of April 22	Grade A.....\$20.00 Special Matings.....23.00	\$24.00 27.00	\$26.00 30.00	\$28.00 33.00
Week of April 29	Grade A.....18.00 Special Matings.....21.00	22.00 25.00	24.00 28.00	27.00 32.00

Prices are per hundred. For orders of 25 chicks add 75c. For orders of 50 chicks add \$1.00.

We ship Prepaid and guarantee safe delivery

Everyone answering this advertisement will receive FREE our suggestions for brooding, feeding and rearing chicks.

FINGER LAKE REGION BABY CHICKS
with an official record. Ask for our Baby Chick Book describing our Pedigreed Cornell Chicks from stock that has laid from 200 to 312 eggs in their pullet year and mated to breeders that have averaged over 200 eggs in their pullet year. Also describes our 144,000 egg hatchery with 22 years' experience in hatching Baby Chicks. Leghorns, Reds, Rocks, Wyandottes, Minorcas, and Giants.
The home of better Chicks at lower cost.
THE DERBY TAYLOR CO.,
NEWARK, NEW YORK

5 Lb. Leghorns
The old reliable Heavyweight stock. Produced High Up on Pennsylvania's healthy mountain top. Get your chicks from certified record strains above 300 eggs. R.O.P. Hollywood, Tanager, Barron Matings. Hatch weekly pure white eggs up to 24 ounces per dozen. Beautiful Color Plate Leghorn Catalogue Free.

FARM SERVICE
ROUTE A10 TYRONE, PENNA.

Hall Bros.
POPLAR HILL FARM
BOX 50 WALLINGFORD CONN.

BABY CHICKS hatched by the best system of Incubators from high class bred-to-lay stock. White, Brown, Buff Leghorns, Anconas \$14.00 per 100; Barred, White Rocks, Minorcas, Reds \$16.00 per 100; White Wyandottes, Buff Orpingtons \$17.00 per 100; Giants \$20.00 per 100; Heavy Broilers \$12.00 per 100; Light Broilers \$10.00 per 100; Pekin Ducklings \$30.00 per 100. Add 25c on orders for less than 100. Safe delivery guaranteed by parcel post.
Nunda Poultry Farm, Desk H, Nunda, N. Y.
Member of the International Baby Chick Ass'n. and the N. Y. State Co-Operative Chick Producers Ass'n.

CHERRY HILL CHICKS
100
S.C.W. Leghorns—Wyckoff Strain.....\$12.00
S.C. Everlay Brown Leghorns.....12.00
Barred Rocks—Wm. Nace's select.....14.00
S.C. Rhode Island Reds.....15.00
Mixed or Broiler Chicks.....9.00
1/2c less in 500 lots. 1c less in 1,000 lots.
25 chicks add 2c, 50 chicks add 1c. Full count. 100% live arrival guaranteed. Parcel Post prepaid. Bank reference. Order direct from this ad or write for free circular.
CHERRY HILL POULTRY FARM,
WM. NACE, Prop. McALISTERVILLE, PA.

EIGENRAUCH FARMS
RED BANK, NEW JERSEY
breeding White Leghorns for size, vigor and heavy production of large White EGGS.
8,000 LAYERS are housed on our farm.

Our Chick Guarantee
100% satisfactory arrival on the exact date we promise shipment. Every chick sold by us is hatched from eggs laid by breeders on our own farm.
Write for Free Folder and Prices on Pullets and Chicks
EIGENRAUCH FARMS Dept. G, Red Bank, N. J.

TAKE NOTICE 75,000 CHICKS for APRIL DELIVERY

	25	50	100	500	1000
S. C. Wh. Leghorns.....	\$3.50	\$6.50	\$12.50	\$57.50	\$110
Rocks or Reds.....	4.00	7.50	14	67.50	130
Silver Laced Wyandottes.....	4.50	8.50	16	75.00	
Light-Mixed.....	3.00	5.00	9	42.50	80
Heavy Mixed.....	3.50	6.50	12	57.50	110

From carefully selected free range flocks. 100% arrival Postpaid. Write for illustrated catalogue.
The Richfield Hatchery, Box 80, Richfield, Pa.

BABY CHICKS THIS IS MY 11TH YEAR OF EXPERIENCE

	25	50	100	500	1000
Cash or C. O. D.....	\$3.25	\$6.50	\$12	\$57.50	\$110
Barred Rocks.....	\$4.00	\$7.50	\$14	\$67.50	\$130
Tanager Strain S.C.W. Leghorns.....	3.50	6.50	12	57.50	110
heavy Mixed.....			11	52.50	
Light Mixed.....			10	47.50	

These chicks are from free range and heavy egg producing flock. 100% live delivery guaranteed to your door. Write for Special Mating prices.
FRANK NACE, Cocolamus, Pa., Box No. 120

200,000 CHICKS 1929
Goodling's Super Quality. Healthy, Strong and Vigorous

	50	100	500	1000
Single Comb, White Leghorns.....	\$6.50	\$12.00	\$57.50	\$110
Barred Plymouth Rocks.....	7.00	13.00	62.50	120
S.C. Rhode Island Reds.....	8.00	15.00	75.00	
Broiler Chicks, Heavy Breed.....	5.50	11.00	52.50	100
Broiler Chicks, Light Breed.....	5.00	10.00	47.50	90

Order direct. Prepaid 100% live delivery guaranteed. Circular Free.
THE VALLEY HATCHERY Box A, R. No. 1, RICHFIELD, PA.

National "Superbred" Chicks
Insure your future poultry profits by ordering
NATIONAL "SUPERBRED" CHICKS NOW

	50	100	500	1000
S. C. White, Brown and Buff Leghorns.....	\$6.75	\$13.00	\$62.00	\$120.00
Tanager & Hollywood White Leghorns.....	7.25	14.00	67.00	130.00
Barred & White Rocks, R. I. Reds.....	7.75	15.00	72.00	140.00
Wh. Wyandottes, Buff Orpingtons.....	9.00	17.00	82.00	160.00

Light Mixed—\$9.00 per 100. Heavy Mixed—\$10.00 per 100.
Also Black Minorcas, White Minorcas, Anconas, Blue Andalusians and Jersey Black Giants. Send for our free catalog and prices on our Special Mated Chicks. We guarantee 100% live delivery. Member International Baby Chick Association.
NATIONAL CHICK FARMS, BOX 408, MIFFLINTOWN, PENNA.

BABY CHICKS

	25	50	100	500	1000
S.C.W. Leghorns.....	\$3.25	\$6.50	\$12	\$57.50	\$110
Bd. Rocks & S.C. Reds.....	3.75	7.25	14	67.50	130
Heavy Mixed.....	3.25	6.50	12	57.50	110
Light Mixed.....	2.50	4.75	9	42.50	80

A Special Discount on orders placed in advance.
Will ship C. O. D.
PINECREST POULTRY FARM & HATCHERY
Herbert Miller, Prop. Box 12, Richfield, Pa.

PENNA. "State Supervised" CHICKS
Flocks inspected by officials from the Penna. Dept. of Agriculture. Our 19th year. Get our low prices on Reds, Rocks, Leghorns and Minorcas. Member I.B.C.A.
Catalogue free.
THE KEYSTONE HATCHERY,
(The old reliable plant) RICHFIELD, PA.

Fairport Quality Chicks
are bred to make money for you. Strong, healthy, vigorous from the world's best and heaviest laying strains such as—Tanager, Ferris, Owen Farms, Daniels, Thompson, Martin, Shepard, Fishel and others. Free range flocks, scientifically culled and supervised. Smith Hatched. 100% live delivery guaranteed. 16 breeds 9c and up. Postpaid. Members International Baby Chick Association. Send now for free poultry book and prices. Buy Hatchery Chicks for Greater Profits.
FAIRPORT HATCHERIES Box 44 Fairport, N. Y.

BABY CHICKS ORDER DIRECT from this ad. and save time.

	25	50	100	500	1000
Wh. & Brown Leghorns.....	\$3.25	\$6.25	\$12.00	\$58.75	\$115
Ancona & Black Leghorns.....	3.25	6.25	12.00	58.75	115
White & Barred Rocks.....	3.75	7.25	14.00	68.75	135
Rhode Island Reds.....	3.75	7.25	14.00	68.75	135
Heavy Mixed Broilers.....	3.25	6.25	12.00	58.75	115
Light Mixed Broilers.....	2.25	4.25	8.00	38.75	75

Full count and quality guaranteed. Catalogue free.
For Greater Profit **ULSH POULTRY FARM & HATCHERY**
Hatchery Chicks. Port Trevorton, Penna.

BETTER BABY CHICKS
\$12 to \$25 per 100
Barred and White Rocks, White and Columbian Wyandottes, R. I. Reds, Jersey Black Giants, Black Minorcas, White and Brown Leghorns, Mottled Anconas, 20,000 Weekly. Finest purebred, heavy producing, free range stock, under State inspection. 100% Safe delivery guaranteed. Catalog free.
ULSTER POULTRY FARMS, Box 40, WALDEN, N. Y.

AMERICAN CHICKERIES
Here: Nearly Everyone Raises Full Blooded "AMERICAN" Quality Chicks
Write now for our new low prices. Your opportunity to get our special flock mating chicks at utility prices. Chicks shipped C. O. D. Catalogue and prices on request. 100% live arrival guaranteed 15 breeds. Write now.
American Chickeries, Box 214, Grampian, Pa.

LOOK—Chester Valley Chicks
(FOR MAY DELIVERY)

	25	50	100	500	1000
S.C. Wh. and Brown Leghorns.....	\$3.00	\$5.50	\$10	\$47.50	\$90
Barred Ito.....	3.50	6.50	12	57.50	110
Tanager Str. Wh. Leghorns.....	3.25	6.00	11	52.50	100
Light Mixed.....	\$8.00				\$10.00

100% live delivery. P. O. paid. Write for free literature.
CHESTER VALLEY HATCHERY, Box 51, McAlisterville, Pa.

BABY CHICKS
13 Leading Varieties—White Leghorns, Black Minorcas, Rocks, Reds, Wyandottes, Hamburgs, Speckled Sussex, Buff Orpingtons.
\$9.00 per hundred and up.
Free Catalog and Price List
Lantz Hatchery, Tiffin, Ohio

Schwegler's "THOR-O-BRED" BABY CHICKS
"LIVE AND LAY"
THEY LIVE because they are bred from healthy, free range breeders that have thrived and gained in vigor for generations. They LAY because they are from selected and tested high egg power stock. White, Brown and Buff Leghorns, Barred and White Rocks, R. I. Reds, Anconas, Black Minorcas, Buff Orpingtons, White Wyandottes 12c and up. 100% live delivery guaranteed. Postpaid. Member International Chick Assn. Write today for FREE Chick Book.
SCHWEGLER'S HATCHERY, 204 Northampton, BUFFALO, N. Y.

GOLD MEDAL CHICKS
Choice Chicks at Popular Prices. 50 100 500 1000
Wh., Br., Buff Leghorns, Anconas.....\$7.50 \$14 \$67.50 \$130
Barred, Wh., Buff Rocks, Reds.....8.50 16 77.50 150
Wyandottes, Orpingtons, Minorcas.....9.00 17 82.50 160
Mixed Chicks, \$12, 100. All shipments Postpaid. Finest Stock, Greatest Profit Makers. 100% Safe Delivery.
Gold Medal Chickeries, Box 444, Wallkill, N. Y.

BOS QUALITY CLASS A CHICKS
From healthy heavy layers. Several varieties. Low prices. Special discounts. No money down. Pay 10 days before shipment or C.O.D. 100% live delivery postpaid. Catalogue free.
Bos Hatchery, Zeeland, Mich. R. 2A

BABY CHICKS

	25	50	100	500
White Leghorns.....	\$2.75	\$5.25	\$10.00	\$47.50
Barred Rocks.....	3.25	6.25	12.00	57.50
Rhode Island Reds.....	3.25	6.25	12.00	57.50
Heavy Mixed.....	2.75	5.25	10.00	47.50
Light Mixed.....	2.50	4.75	9.00	42.50
Peking Ducklings.....	7.50	14.50	28.00	
Mixed Ducklings.....	6.50	13.00	25.00	

McAlisterville, Pa. Route 2.
John Shadel Hatchery

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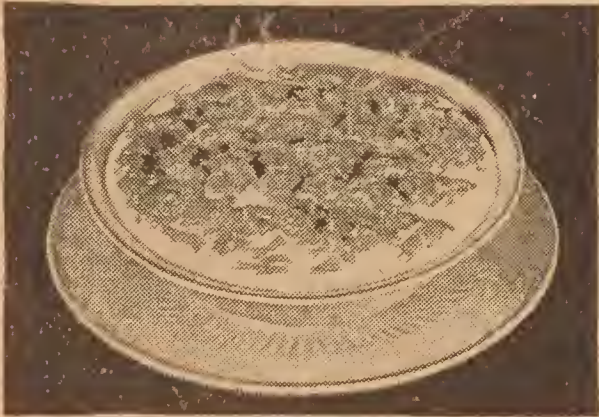
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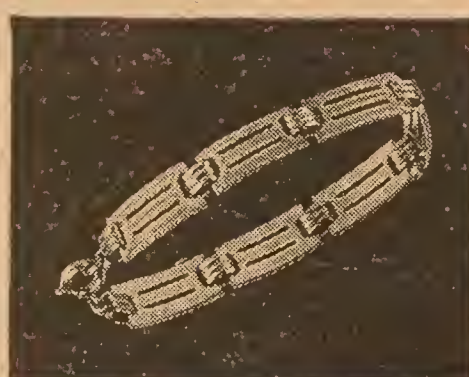
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Delectable Mushrooms

Be Sure You Are Right--Then Go Ahead

MUSHROOMS belong among the things the farmer or country person can enjoy without money and without price. Up they spring in the night and we have only the trouble of picking them. Great cooks esteem them highly as a flavoring agent and there are few meat or fine dishes that they do not improve.

Mushrooms do not keep long after they are gathered, but if they are scalded and then rinsed with cold water they will keep from morning until evening. If untreated they are often wilted and poor inside of two hours. Salt in the scalding water helps. Careful cooking is very important if we do not want them to taste like a shingled roof as one person put it. Every precaution must be taken not to dry them in the cooking. The reason for this is that the juice contains a large part of the flavor and if we allow this to escape in steam we have little left but a rubbery bulb or disc. Therefore in baking mushrooms in the oven we must cover them and in frying do the same, after a certain point is reached in the cooking.

Italian Mushroom Sauce

Put into a saucepan equal parts of unsalted butter and water, the amount depending on the quantity of mushrooms. Mince some onion finely and cook in the butter and water till the water has evaporated and the onion is browned nicely. The prepared mushrooms are now added and a tin of tomatoes or fresh tomatoes. This makes a very tempting sauce. A little chop-

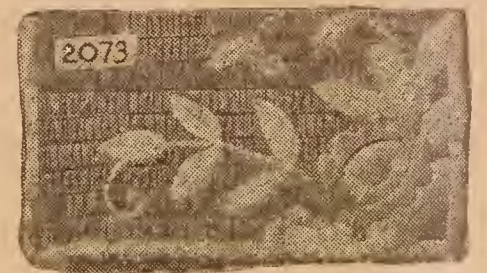
ped parsley or celery is a further improvement. Some jars of the sauce canned in the usual way are a wonderful help when company comes.

Fried Mushrooms

Wash and peel the mushrooms. If they are large cut them into even slices. Drop into melted butter and then watch them until they look as though they were about to melt. After that cover them closely and cook very gently for five minutes. They can be used as a garnish for steak, or added to a cream sauce or meat gravy. Adding a little hot cream and serving them on toast with a slice of bacon makes a delightful breakfast dish.—Mrs. T. T., Canada.

For Little Cooks

THE second collection of Little Recipes for Little Cooks is appearing in this issue ready to be clipped and pasted in its proper order in your scrap book—provided you have been wise enough to get one. The first



POCKETBOOK No. 2073 has an attractive flower design which is to be charmingly executed in soft shades of tan and brown wool against a delightful dark green background. You will find it very easy to make for only simple darning stitches are needed. The soft colored yarns, the imported stamped Penelope canvas foundation, interlining and working chart are all in a neat envelope for 85c. Address Embroidery Department, American Agriculturist, 461 Fourth Ave., New York City.

Bloomer Frock



2787



BLOOMER FROCK PATTERN No. 2787 is popular for play hours. Cotton broadcloth, chambray, printed pique, linen or gingham would be sturdy enough for such use and all may be had in such charming colors. The pattern cuts in sizes 2, 4 and 6 years. Size 4 requires 2½ yards of 40-inch material with ¾ yard of 36-inch contrasting. PATTERN PRICE 13c.

recipe for little cooks appeared on page 2 of our March 30th issue. It is also printed inside the beautiful scrap book in case you failed to clip it from the paper. But not all the little recipes are printed in the scrap book to begin with. You will have to watch the issues closely to make sure you don't miss any. See page 2 of this issue which tells all about it.

Useful Pamphlets

The following booklets can be secured by addressing Household Department, AMERICAN AGRICULTURIST, 461 Fourth Avenue, New York City.

- How to Make Crepe Paper Costumes—10c.
- How to Make Crepe Paper Flowers—10c.
- How to Decorate Halls, Booths and Automobiles—10c.
- Weaving with Paper Rope—10c.
- Sealing Wax Craft—10c.
- Betty's Scrapbook of Recipes for Little Cooks (to be filled as recipes appear each month in AMERICAN AGRICULTURIST)—10c.
- Fashion Catalogue—12c.
- Catalogue of goods stamped for embroidery—10c.

The following can be secured by sending 2c postage:
 Old-fashioned recipes.
 Reviving in case of drowning or gas poisoning.
 Learning to crochet and knit.
 Knitting the new sweaters.
 Free Pamphlets:
 Health Pamphlets for Mothers and Young Children.
 Talks on sex to older children.

Straighten the fingers in your kid gloves as soon as you remove them. Mend as soon as a rip appears. Place a thimble inside the hole at the tip of the finger, and see how nicely the rips can be repaired.—M. F. M., Ark.

Mother's Oats

Aunt Janet's Counsel Corner

Man Reader Responds to Query of "Rebellious" in Previous Issue

Here is the way one man feels about the part a woman has in the fifty-fifty partnership of marriage. Perhaps you have a different idea on the subject. One purpose of the Counsel Corner is to have a place where personal matters and opinions may be brought.—AUNT JANET.

In Response to Rebellious:

The apostle Paul writing to his friend Timothy exhorted saying, "Let the woman learn in silence with all subjection—for Adam was first formed, then Eve." That was in the days when men ruled the home and the world, and women accepted their domestic position and urged on to higher success the men they loved and mothered.

But slowly and surely the curtain of progress has rolled aside and we husbands trying to play the game square have allowed our mates to become partners.

I will not go on the defensive in response to "Rebellious" as it is not fair to the hundreds of wives and husbands who are laboring hand in hand for the benefit of both.

The fair question to ask is why do many wives trespass into the affairs of their husbands and why does hubby overstep his bounds into those of his wife?

The answer is simply individualism.

A wife and mother may be nervous and tiny things seem large and cruel to her and so she rebels. She may not be a loving wife and so the husband feels that he must use authority to preserve peace, or, she has a complex inferior to her husband's and while

loving him for it she is jealous and rebels to try and conquer him.

Men feel that they were created to me the head of the home and champion for their mate. Why should our wives wrest that sacred position from us. Why argue and nag us when a loving word and suggestion will accomplish far more?

So, "Rebellious," cry off your vexation as only a woman may and smile and love for a man cannot weep away his cloudy sky but must bear it and try to learn and forget. Help him and that will be your part of the fifty-fifty partnership.
MALE READER.

My System of Housecleaning

SOMEHOW I don't dread housecleaning time as I used to before I learned a good routine to follow. Late winter is the ideal time to rearrange dresser and bureau drawers and all movable storage space that may be brought into warm rooms. About the



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Address Embroidery Department, American Agriculturist, 461 Fourth Ave., New York City.

next move is, to clean all cupboards and closets. Of course the sewing is already caught up and somewhat ahead of the season.

By this time there will be a warm day or two for washing windows on the outside—but if by any means there isn't, don't try it on a cold day. I like to do it first but that point is non-essential; it may be done last if need be.

If there is no inside painting or papering to do the cleaning process is comparatively very simple. But we all love a touch of something new so when I don't need new paper I try to have new curtains or some other article "so I shall know I have cleaned." I think I shall content myself by mending and redecorating old furniture rather than buy anything new.

Before attacking the real housecleaning the oil-stoves and ovens should be repainted with a good metal paint which not only effectively prevents any particle of rust but makes them look like brand new. This is also a good time to blacken and polish all wood stoves, coal stoves, etc. For some years we have left our heating stoves up the year around. They don't look bad if properly polished and a fire on cold mornings feels fine all summer.

When all these preliminary tasks are done it is like sweeping out the corners and around the furniture—the rest is plain sailing. The day before you start cleaning (preferably on Monday) prepare plenty of food that will keep well for three or four days, thus simplifying the future preparation of meals. Some good standbys are a big kettle of beans, mince pies or ginger cookies.

The following morning begin cleaning one room and if it doesn't involve more than one day's work, finish it and replace the furniture—but don't try to crowd two rooms into one day. It may do for the cleaner who does nothing else but not for the only home maker who must prepare meals and do many other things.

Don't clean till Saturday night and

be "all in" till Monday morning either. Stop Friday night and devote Saturday to baking for Sunday, and seeing that the Sunday clothes are in order. By all means plan not to be too tired to go to church on Sunday.

Laundry work should never be mixed with housecleaning because either is all-sufficient in itself. If washing must be done at this time it should not be by the woman who does the cleaning. Four days in the week, however,

A One-Piece Undersuit



2766

UNDERSUIT PATTERN 2766 is practical and comfortable for boys of 2, 4, 6, 8, 10, and 12 years. It can be made in either of two lengths, and with long or short sleeves. The pattern may serve also for pajamas if sleeves are put in. Cross-barred dimity or muslin is often used for such garments in summer weight. PATTERN PRICE 13c.

TO ORDER: Write name, address, pattern sizes and numbers clearly and correctly and inclose with remittance in stamps or coin (although coin is sent at own risk). Add 12c for one of the new fashion catalogues and send to Pattern Department, American Agriculturist, 461-4th Avenue, New York City.

are plenty for the average woman to spend on as hard work as housecleaning. Mondays are needed to "cook up" for the following cleaning days and Saturday is just as much needed to prepare for Sunday. Probably this method won't finish the cleaning quite as fast as a general upheaval plan but it is far more comfortable. Really a fairly sane and not over-tired woman can often do more in four days than a physically exhausted one can in six or even twelve. By the way, if you want to go to the club in housecleaning times, go on; you'll work more easily afterwards.—Mrs. E. M. A.

How do you tell when eggs are good? Put them in cold water, if the large end turns up, they are fresh. This is a never failing way. Another way, of course, some one says is to break it.—M. F. M., Ark.



Prevents Rust
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Stove and Nickel Polish

Absolutely Fireproof, Dustless ~
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Luster ~ Only 15¢ per can ~
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A beauty-treatment for old rooms!

During Spring-cleaning time, you can bring added cheerfulness to every room in the house simply by washing all the paint with Fels-Naptha. It is easier than you think with the extra help of this golden bar. For Fels-Naptha brings you two effective cleaners—good golden soap and plenty of naptha, blended by our special process. Working together, they loosen dirt and wash it away. That's why, from the annual Spring-cleaning to your regular weekly wash

Nothing can take the place of

FELS-NAPTHA

BUY IT BY THE TEN-BAR CARTON



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500 Dissatisfied Farmers
and Sons to Stop Renting

And begin retailing Rawleigh's Good Health Products to Consumers. Start your own business. Make from \$100 to \$400 a month or more clear profit. Be your own boss. No selling experience required. We supply everything—Products, Outfit, Sales and Service Methods. Profits increase every month. No lay off. Steady year-round. Lowest prices. Best values. Most complete Service. Rawleigh Methods get the most business everywhere. For particulars write,

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A standard veterinary and human liniment or blister. Sold only in black and white package—a strictly American made product. Make sure you ask for and get Caustic Balsam—all druggists or direct \$2.00.

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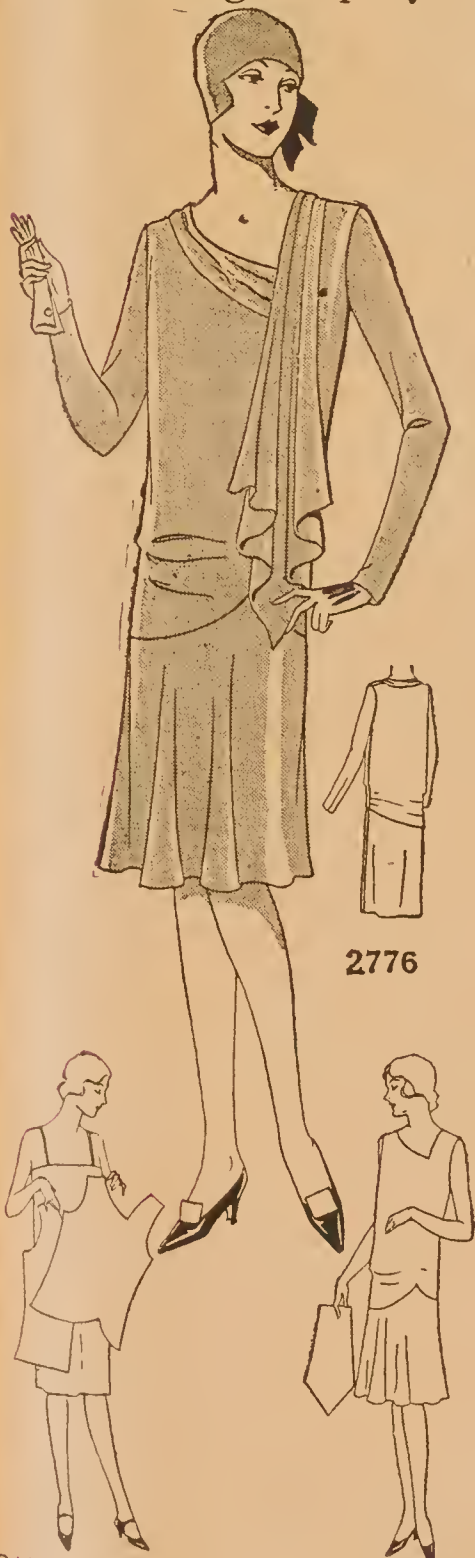
restores the normal action of the pores by its wonderfully effective cleansing and purifying qualities.

Fifty Years of Service

Soap 25c. Ointment 25c. and 50c.

WOOL BLANKETS, and Colonial Coverlets, BATTING, Made from your own wool. ROBES. Also sold direct from the mill if you have no wool. Beautiful goods that gives satisfaction and long wear. Write for catalog and samples. Prices reasonable. WEST UNITY WOOLLEN MILLS, DEPT. G, WEST UNITY, OHIO.

Charming Drapery



2776

PATTERN No. 2776 with its distinctive scarf at neckline is a lovely style for all-day wear. It has a molded bodice and the flaring skirt has an up-in-the-side movement. Printed silk crepe, georgette, chiffon, or crepe Elizabeth adapt themselves to this softly flowing treatment. The pattern cuts in sizes 16, 18 years, 36, 38, 40 and 42 inches bust measure. Size 36 requires 3½ yards of 40-inch material. PATTERN PRICE 13c.

The Little Shepherd of Kingdom Come *By John Fox, Jr.*

AGAIN the scarlet of her tattered Agown flashed before his eyes. At the bend of the river they parted from the giant twins. Faithful Jake's face was foolish when Chad took him by the hand and spoke to him, as man to man, and Rebel Jerry turned his face quickly when Dan told him that he would never forget him, and made him promise to come to see him, if Jerry ever took another raft down to the capital. Looking back from the hill, Chad saw them slowly moving along a path toward the woods—not looking at each other and speaking not at all.

Beyond rose the smoke of the old Turner cabin. On the porch sat the old Turner mother, her bonnet in her hand, her eyes looking down the river. Dozing at her feet was Jack—old Jack. She had never forgiven Chad, and she could not forgive him now, though Chad saw her eyes soften when she looked at the tattered butternut that Dan wore. But Jack—half-blind and aged—sprang trembling to his feet when he heard Chad's voice and whimpered like a child. Chad sank on the porch with one arm about the old dog's neck. Mother Turner answered all questions shortly.

Melissa had gone to the "Settlements." Why? The old woman would not answer. She was coming back, but she was ill. She had never been well since she went afoot, one cold night, to warn some Yankee that Daws Dillon was after him. Chad started. It was Melissa who had perhaps saved his life. Tad Dillon had stepped into Daws's shoes, and the war was still going on in the hills. Tom Turner had died in prison. The old mother was waiting for Dolph and Rube to come back—she was looking for them every hour, day and night. She did not know what had become of the school-master—but Chad did, and he told her. The school-master had died, storming breastworks at Gettysburg. The old woman said not a word.

Dan was too weak to ride now. So Chad got Dave Hilton, Melissa's old sweetheart, to take Dixie to Richmond—a little Kentucky town on the edge of the Bluegrass—and leave her there, and he bought the old Turner canoe. She would have no use for it, Mother Turner said—he could have it for nothing; but when Chad thrust a ten-dollar Federal bill into her hands, she broke down and threw her arms around him and cried.

So down the river went Chad and Dan—drifting with the tide—Chad in the stern, Dan lying at full length, with his head on a blue army-coat and looking up at the over-swung branches and the sky and the clouds above them—down, through a mist of memories for Chad—down to the capital.

And Harry Dean, too, was on his way home—coming up from the far South—up through the ravaged land of his own people, past homes and fields which his own hands had helped to lay waste.

XXIX

MELISSA AND MARGARET

THE early spring sunshine lay like a benediction over the Dean household, for Margaret and her mother were home from exile. On the corner of the veranda sat Mrs. Dean, where she always sat, knitting. Under the big weeping willow in the garden was her husband's grave. When she was not seated near it, she was there in the porch, and to it her eyes seemed always to stray when she lifted them from her work.

The mail had just come and Margaret was reading a letter from Dan, and, as she read, her cheeks flushed.

"He took me into his own tent,

mother, and put his own clothes on me and nursed me like a brother. And now he is going to take me to you and Margaret, he says, and I shall be strong enough, I hope, to start in a week. I shall be his friend for life."

Neither mother nor daughter spoke when the girl ceased reading. Only Margaret rose soon and walked down the gravelled walk to the stile. Beneath the hill, the creek sparkled. She could see the very pool where her brothers and the queer little stranger from the mountains were fishing the day he came into her life. She remembered the indignant heart-beat with which she had heard him call her "little gal," and she smiled now, but she could recall the very tone of his voice and the steady look in his clear eyes when he offered her the perch he had caught.

Our Next Serial

"The Plains of Abraham"

FOR some time, the entire editorial staff has been reading books, in an attempt to find a serial that would meet the high standard of American Agriculturist. We have found the serial—it is "The Plains of Abraham" by James Oliver Curwood. Many of our subscribers are intimately acquainted with the section in which the scene is laid. To these readers the story will have an especial appeal but we assure everyone that "The Plains of Abraham" is one of the best serials which has appeared in American Agriculturist in years.

It is the story of a family who lived, in early colonial times, near the border line between New York and Canada. "The Plains of Abraham" portrays in a vivid manner the jealousies between the early French and English colonists. Long before war was formally declared between England and France, there was fighting among the colonists.

The hero of the story is a son of a French colonist, but his mother is English. His allegiance is therefore divided for a time, until events decide his course for him. He is finally captured by Indians, and lives with them for some time. The story is intensely interesting. The first installment will appear in the May 4th issue. Do not fail to read it.

Even then his spirit appealed unconsciously to her, when he sturdily refused to go up to the house because her brother was "feelin' hard towards him." How strange and far away all that seemed now! Up the creek and around the woods she strolled, deep in memories. For a long while she sat on a stone wall in the sunshine—thinking and dreaming, and it was growing late when she started back to the house. At the stile, she turned for a moment to look at the old Buford home across the fields. As she looked, she saw the pike-gate open and a woman's figure enter, and she kept her eyes idly upon it as she walked on toward the house. The woman came slowly and hesitatingly toward the yard. When she drew nearer, Margaret could see that she wore homespun, home-made shoes, and a poke-bonnet. On her hands were yarn half-mits, and, as she walked, she pushed her bonnet from her eyes with one hand, first to one side, then to the other—looking at the locusts planted along the avenue, the cedars in the yard, the sweep of lawn overspread with springing bluegrass. At the yard gate she stopped, leaning over it—her eyes fixed on the stately white house, with its mighty pillars. Margaret was standing on the steps now, motionless and waiting, and, knowing that she was seen, the woman opened the gate and walked up the gravelled path—never taking her eyes from the figure on the porch. Straight she walked to the foot of the steps, and there she stopped, and, pushing her bonnet back, she said, simply:

"Are you Mar-ga-ret?" pronouncing the name slowly and with great distinctness.

Margaret started.

"Yes," she said.

The girl merely looked at her—long and hard. Once her lips moved:

"Mar-ga-ret," and still she looked.

"Do you know whar Chad is?"

Margaret flushed.

"Who are you,"

"Melissy."

Melissa! The two girls looked deep into each other's eyes and, for one flashing moment, each saw the other's heart—bared and beating—and Margaret saw, too, a strange light ebb slowly from the other's face and a strange shadow follow slowly after.

"You mean Major Buford?"

"I mean Chad. Is he dead?"

"No, he is bringing my brother home."

"Harry?"

"No—Dan."

"Dan—here?"

"Yes."

"When?"

"As soon as my brother gets well enough to travel. He is wounded."

Melissa turned her face then. Her mouth twitched and her clasped hands

the stone wall and sobbed, while Margaret put her arms about her and waited silently.

"Come now," she said, "let me help you over. There now. You must come back and get something to eat and lie down." And Margaret led Melissa back across the fields.

XXX

PEACE

IT was strange to Chad that he should be drifting toward a new life down the river which once before had carried him to a new world. The future then was no darker than now, but he could hardly connect himself with the little fellow in coon-skin cap and moccasins who had floated down on a raft so many years ago, when at every turn of the river his eager eyes looked for a new and thrilling mystery.

They talked of the long fight, the two lads, for, in spite of the war-worn look of them, both were still nothing but boys—and they talked with no bitterness of camp life, night attacks, surprises, escapes, imprisonment, incidents of march and battle. Both spoke little of their boyhood days or of the future. The pall of defeat overhung Dan. To him the world seemed to be nearing an end, while to Chad the outlook was what he had known all his life—nothing to begin with and everything to be done. Once only Dan voiced his own trouble:

What are you going to do now, Chad—now that this infernal war is over? Going into the regular army?"

"No," said Chad decisively. About his own future Dan volunteered nothing—he only turned his head quickly to the passing woods, as though in fear that Chad might ask some similar question, but Chad was silent. And thus they glided between high cliffs and down into the lowlands until at last, through a little gorge between two swelling river hills, Dan's eye caught sight of an orchard, a leafy woodland, and a pasture of bluegrass. With a cry he raised himself on one elbow.

"Home! I tell you, Chad, we're getting home!" He closed his eyes and drew the sweet air in as though he were drinking it down like wine. His eyes were sparkling when he opened them again and there was a new color in his face. On they drifted until, toward noon, the black column of smoke that meant the capital loomed against the horizon. There Mrs. Dean was waiting for them, and Chad turned his face aside when the mother took her son into her arms. With a sad smile she held out her hand to Chad.

"You must come home with us," Mrs. Dean said, with quiet decision.

"Where is Margaret, mother?" Chad almost trembled when he heard her name.

"Margaret couldn't come. She is not very well and she is taking care of Harry."

The very station had tragic memories to Chad. There was the long hill which he had twice climbed—once on a lame foot and once on flying Dixie—past the armory and the graveyard. He had seen enough dead since he peered through those iron gates to fill a dozen graveyards the like in size. Going up in the train, he could see the barn where he had slept in the hayloft the first time he came to the Bluegrass, and the creek-bridge where Major Buford had taken him into his carriage. Major Buford was dead. He had almost died in prison, Mrs. Dean said, and Chad choked and could say nothing. Once, Dan began a series of eager questions about the house and farm, and the servants and the neighbors, but his mother's answers were hesitant and he stopped short. She, too, asked but

(Continued on Page 24)

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SCOTCH COLLIE PUPPIES, Sable with white markings, Males \$7.00; Females \$4.50. P. HAMILTON, Cochranville, Pa.

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40 BROODER STOVES Magic Reliable Queen Imperial Blue Hen \$10 apiece. Crated complete. 390 egg Prairie State Incubators, fine \$20. PAUL KUHLE, Flemington, N. J.

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RHODE ISLAND RED Chicks S. C. \$16 per 100. L. HAMBLIN, Wilson, N. Y.

CHICKS, S. C. WHITE Leghorns, special mating, \$15 per 100. L. HAMBLIN, Wilson, N. Y.

CHICKS S. C. W. Legs, \$11.00-100; Barred Rocks, and Reds, \$13.00-100; W. Rocks \$14.00-100; Mixed, \$10.00-100. I pay postage. 100% live delivery guaranteed. JACOB NIEMOND, McAllisterville, Pa. Box A.

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WHITE WYANDOTTE: MAMMOTH PEKIN Duck eggs. Pearl Guineas eggs. LAURA DECKER, Stam-

POULTRY

Turkeys—Ducks—Geese

MAMMOTH WHITE PEKIN Duck eggs for hatching, ten cents apiece, delivered, satisfaction guaranteed. JOS. KENNEL, Atglen, Pa.

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HIGH GRADE SEED Potatoes—Russets. Green Mountain, Gold Coin, Cobbler, Banner, Walter Raleighs and Carman No. 3. Prices right. Catalog free. THE KEYSTONE POTATO FARMS, Richfield, Pa.

C. O. D. FROST PROOF Cabbage plants. Leading varieties now ready. 500, 65c; 1000, \$1.00; 5000, \$4.50. FARMERS PLANT CO., Tifton, Ga.

SEND NO MONEY. C.O.D. Frost proof Cabbage and Onion plants. All Varieties now ready. 500, 65c; 1000, \$1.00; 5000, \$4.50. STANDARD PLANT CO., Tifton, Ga.

CABBAGE PLANTS, NOW Ready. My frost proof Cabbage plants will head three weeks earlier than home grown plants. Varieties: Jersey and Charleston Wakefield, Succession, Flat Dutch, Golden Acre and Copenhagen Market. Prices by parcel post postpaid: 500, \$1.25; 1000, \$2.25. Express: 1000, \$1.00; 5000, \$4.50; 10,000, \$7.50. Bermuda Onion plants same prices as Cabbage plants. Roots wrapped in moss and shipped promptly. Satisfaction Guaranteed. P. D. FULWOOD, Tifton, Ga.

RAISE BEARLESS BARLEY. New two rowed, stiff strawed, heavy yielder. Also Burbank Oats and Gold Nugget Corn. Descriptions and samples free. LONG-ACRE FARM, Route 2, Geneva, N. Y.

SEEDS—NURSERY STOCK

PAY ON ARRIVAL—Frostproof Cabbage Plants immediate shipment. 75c-1000. EMPIRE PLANT CO., Albany, Ga.

FROSTPROOF CABBAGE PLANTS. Order today. Pay postman, 500-60c, 1000-\$1. POSTAL PLANT CO., Albany, Ga.

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OLD FASHIONED HARDY Flower Plants. Hollyhocks, Delphiniums, Bleeding Hearts, Anemones, Blue Bells, Canterbury Bells, Columbines, Monkshoods, Hardy Carnations, Hardy Chrysanthemums, Hardy Lilies, Hardy Phloxes, Lupines, Hardy Pinks, Oriental Poppies, and 240 other Perennials that will bloom this summer; Pansies, Asters, Salvias, Petunias, Zinnias, Snapdragons and other annuals; Roses, Vines, Shrubs, Hedge Plants; Berry plants, Asparagus roots. Catalogue free. HARRY E. SQUIRES, Hampton Bays, N. Y.

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Additional Classified Advertising

On Page 24

HANDY ANDY Says "Here's How"

To Insure a Good Pig Crop

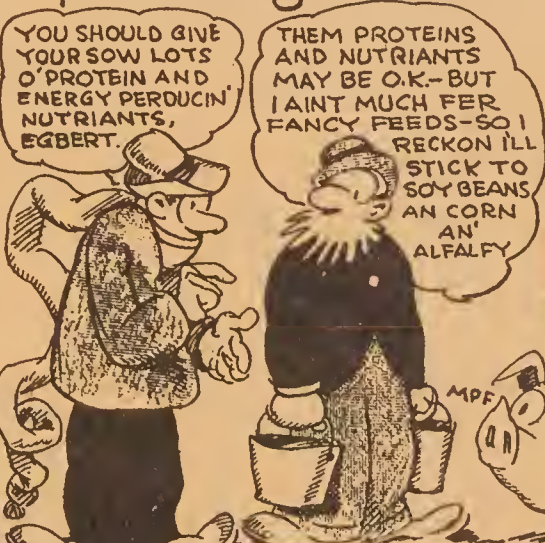
By Ray Inman

next spring's pig crop depends upon the care you give the BROOD SOW this winter



CARVING FROM AN OLD BARREL HOUSE WALL SHOWING HOW THE ANCIENT BA-BALONY-ANS PUT AWAY THE SPRING PIG CROP. IT'S ESPECIALLY INTERESTING BECAUSE IT SHOWS HOW WELL THESE ANCIENTS COULD HANDLE A CROP WITHOUT THE AID OF MACHINERY

the rations should contain bulk—but be well supplied with protein, minerals, & heat and energy producing nutrients

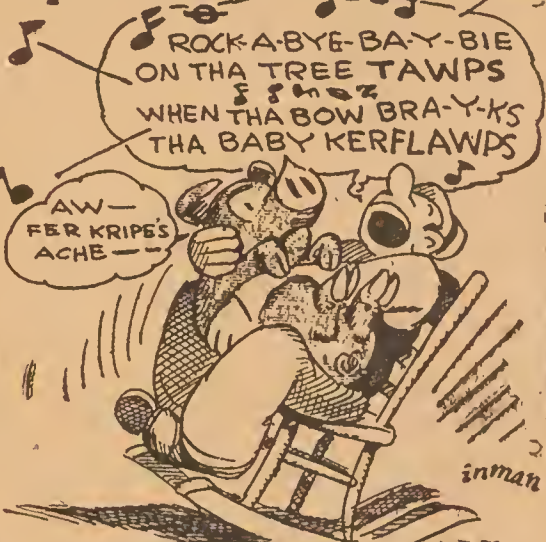


HAVE PATIENCE WITH A BIRD LIKE THIS. SOME DAY HE'LL HEAR THE WAR'S OVER.

a good mineral mixture should be fed in a self-feeder Give sow plenty of exercise; don't let her get too FAT



clean, comfortable, well ventilated sleeping quarters should be provided



ROCKING THE PIG TO SLEEP IS A CAPITAL IDEA. IT DEVELOPES AN INTIMATE RELATIONSHIP BETWEEN YOU AND THE HOG THAT YOU WILL NEVER FORGET (TRY AS YOU MAY)

Additional Classified Advertising

SEEDS—NURSERY STOCK

DAHLIAS. ASSORTED not labeled. \$1. a dozen prepaid. ANER L. SMITH, Sodas, N. Y.

MILLIONS. CABBAGE, ONIONS, and Tomato Plants \$1. 1000. Pepper and Potato Plants \$1.75 1000. Gladiolus Bulbs \$1. 1000. CLARK PLANT CO., Thomasville, Ga.

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CERTIFIED BERRY PLANTS. Columbian purple also Kansas, Cumberland, Plum Farmer, Black Caps. Prices 60c doz. \$3 hundred delivered. CHAS. WHEELER, Mansville, N. Y.

COOK'S CERTIFIED POTATOES. Cobblers and Russets. Better than ever. Attractive prices. We pay freight. IRVING E. COOK, Munnsville, N. Y.

FREE GLADIOLUS BOOK—36 pages, 45 illustrations. Describes 171 exquisite varieties, many new. Tells how to grow. It's free! The famous beautiful Rainbow Collection of thirty bulbs, all different, \$1. postpaid. HOWARD GILLET, Gladiolus Specialist, Box J, New Lebanon, N. Y.

SPECIAL LOW PRICES on pedigreed Green Mountains, Russets and Cobblers. Catalogue. ROY HASTINGS, Malone, N. Y.

PAY THE POSTMAN. Send No Money. Frostproof Cabbage and Onion plants. Leading varieties, 500, 65c; 1000, \$1.00. ALBANY PLANT CO., Albany, Ga.

EARLY VEGETABLE PLANTS. Frostproof Cabbage. Wakefields, Copenhagen, Golden Ace, Flat Dutch, Bermuda Onions, Beets, Lettuce. Postpaid: 100, 40c; 500, \$1.25; 1000, \$2.25. Collect: 1000, \$1.00; 5000, \$4.50. Tomato Plants: Earliana, Bonny Best, Baltimore. Postpaid: 100, 50c; 500, \$1.50; 1000, \$2.50. Collect: 1000, \$1.75; 5000, \$7.50. Write for prices on Potato, Pepper and Egg Plants. Carefully Packed. Varieties Labeled. Delivery Guaranteed. PIEDMONT PLANT CO., Albany, Ga.

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FREE PLANTS—By C. O. D. mail or express, and charges: 500, 65c; 1,000, \$1.00; 5,000, \$3.75. Free onion plants with every order for Frost Proof Cabbage Plants. EUREKA FARMS, Tifton, Ga.

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MILLIONS OF OPEN field grown tomato plants, Baltimore, Stone, Earliana, Bonnie Best, Chalk Early Jewel, Matchless, \$1—1000, Ruby King Pepper plants \$2—1000, Potato plants \$1.75—1000, Cabbage plants 75c—1000. Safe arrival guaranteed, all plants ready. SIMS POTATO PLANT CO., Pembroke, Ga.

LORDS GOLDEN AGE extra early yellow sweet corn. Good size, productive, tender, deliciously sweet. The originator has grown it ready for the table 57 days from planting. \$1. quart; \$1.70, 2 quarts; \$2.50, 4 quarts; \$4.50, peck; \$6.50 half bushel; \$12.00 bushel. JAMES E. LORD, Stonington, Conn.

VEGETABLE PLANTS: Cabbage, Collards, Beets, Onions, \$1.00 per 1000. June Pink, Clarks Early, Redfield Beauty, Bonny Best and Stone 500-75c, 1000-\$1.50, 5000-\$6.50. Ruby King, Ruby Giant, Chinese Giant, Pimento and Hot Peppers, 100-50c, 500-\$1.50, 1000-\$2.50. Cauliflower and Egg Plants same price as pepper plants. Potato plants \$2.50 per 1000. Good plants and prompt shipment guaranteed. RELIABLE PLANT FARM, Valosta, Ga.

STRAWBERRY PLANTS: Senator Dunlap, 100, 90c; 300, \$2.25; 500, \$3. Premier—Gibson—Big Joe—Cooper—Stevens Late Champion, 100, \$1; 300, \$2.50; 500, \$3.50; 1000, \$6. Everbearing, Champion, 25, 75c; 50, \$1; 100, \$1.50; 500, \$5; 1000, \$10. Mastadon, Everbearing, 25, \$1; 50, \$1.75; 100, \$3; 200, \$5; 500, \$8; 1000, \$16. Figure each variety separate. Write for prices on Black, Purple and Red raspberry plants. Our plants are strictly fresh dug, from new fields. F. G. MANGUS, Maple View, N. Y.

SEEDS—NURSERY STOCK

APPLE TREES, BALDWIN, Cortland, Delicious, Greening, McIntosh Red, Northern Spy, Wealthy, 2 year, 4 to 6 ft., 25c each, \$20 per 100. Elberta, Hale, Rochester, St. John Peach trees, 3 to 4 ft., 20c. Concord Grapo vines 2 years, \$8 per 100, one year \$5 per 100. Hardy Hydrangea 25c each. Evergreens, Shrubs, Roses at special prices. A dollar saved is a dollar made. Send for Catalogue and let us tell you more about our products. THOMAS MARKS & CO., Wilson, Niagara, County, N. Y.

FINE PLANTS ready, open field grown, well rooted, selected, 50 to bunch, varieties labeled separate, packed careful to arrive safely. Cabbage: Early Jersey, Charleston, Wakefield Copenhagen and Flat Dutch postpaid 50, 25c; 100, 35c; 300, 80c; 500, \$1.00; 1000, \$1.75. Express collect, 70c, 1000. Tomato plants: Earliana, June Pink, John Baer, New Stone, Greater Baltimore and Redfield Beauty. Postpaid 50, 30c; 100, 40c; 500, \$1.25; 1000, \$2.25. Express collect \$1.25, 1000. Genuine Marglobe, tomato 5c hundred higher. Peppers: Ruby King, Pimento, and hot Cayenne. Postpaid 50c, 30c; 100, 50c; 500, \$1.50; 1000, \$2.50. Express \$2.00 thousand. Cauliflower plants postpaid: 50, 40c; 100, 75c; 500, \$3.00. E. A. GODWIN, Lenox, Ga.

SCHROERS BETTER PLANTS: Cabbage, Collard, Onions, Beets. Prepaid 500-\$1.00; 1000-\$1.75. Express 1000-\$1.00; 5000-\$4.00. Tomatoes: June Pink, Marglobe, Bonny Best, Florida Special, John Bear, Beefsteak, Stone and Baltimore. Prepaid 100-60c; 200-\$1.00; 500-\$1.75; 1000-\$2.50. Express 1000-\$2.00; 5000-\$3.75. Peppers: Ruby King, Ruby Giant, Pimento, Red Cayenne. Prepaid 50-50c; 100-75c; 250-\$1.50; 500-\$2.50; 1000-\$4.50. Express 1000-\$3.50. Early Snowball Cauliflower and Black Beauty Egg Plants same price as peppers. Potatoes: Porto Rico, Early Triumph, Pumpkin Yam, Jersey Sweet and Big Stem Jersey. Prepaid 500-\$1.75; 1000-\$3.50; Express 1000-\$2.50; 5000 and over \$2.25 per 1000. Our guarantee: Good plants and prompt shipment. SCHROER PLANT FARMS, Valdosta, Ga.

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DO YOU NEED FARM HELP. We have Jewish young men, able-bodied, some with, but mostly without experience, who want farm work. If you need a good, steady man, write for an order blank. Ours is not a commercial agency. We make no charge. THE JEWISH AGRICULTURAL SOCIETY, Inc., Box A, 301 E. 14th Street, New York City.

POULTRYMAN, GERMAN BORN, single, good habits, age 28, college graduate, years of experience, desires position on large commercial farm near New York. Available April 25. ADDRESS M. M., care American Agriculturist.

EXPERIENCED GARDENERS, FARMERS, Milkmen, laborers supplied immediately. INTERNATIONAL LABOR AGENCY, 153 Bowery, N. Y. C.

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WANTED: A Man to work a large equipped dairy farm on equal shares. Address V. D., American Agriculturist.

AGENTS: SELL TROUSERS, Overalls, Dry Goods, Etc. Some advertised brands. Write FREEMAN E. HUNTER CO., Riverton, N. J.

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SIXTY ACRES—Fertile. Nearly new house. Twenty acres timber. Good barns, near school. J. I. PHILLIPS, Delmar, Delaware.

WANTED. RESPONSIBLE PARTY to live free of rent on 60 acre farm in New Jersey, not under cultivation, to take care of property. Situated on main roads, farm house in good condition. Large chicken coops, vegetable garden. Willing to make lease. Apply, giving all particulars to E. H. care of AMERICAN AGRICULTURIST.

DESIRABLE DAIRY FARMS for sale in Erie County, Penna., for a trifle more than the original first mortgages. From 80 to 260 acres in each. Good buildings. Near improved highways, good markets, churches and schools. These farms are bargains as they must be sold this spring. Terms: one-fifth cash, balance in long time mortgages with low interest. THOS. W. SPOFFORD, Agent, 512 Masonic Temple, Erie, Pa.

DEL-MAR-VA—THE PENINSULA OF PLENTY. Three to ten hours by motor truck to markets supplying twenty millions of people. Pennsylvania Railroad permeates entire Peninsula. Low-priced farms, town and waterfront homes. Very little snow and freezing. Finest concrete highways. Good schools, low taxes. Hand-some descriptive booklet, FREE. Address 164 Del-Mar-Va Building, Salisbury, Md.

FARM OF 275 acres, 100 river flat; located ¼ mile from R. R. station; ½ mile from creamery, church, bank, post office, stores; barn will stable 75 head of cattle. Buildings in good condition. 8 miles from County Seat on through macadam road. One of the best farms in the county. HAMILTON J. HEWITT, Agent, Delhi, N. Y.

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62 ACRES—Under good cultivation, 7 acres timber. Good buildings, near school, just off improved road, gas lights. EUGENE SINCEBAUGH ESTATE, Route 4, Ithaca, N. Y.

WANTED TO BUY

WANTED—HAY, GRAIN, Potatoes, Apples, Cabbage, Carloads. Pay highest market prices. TILL HAMILTON CO., New Castle, Pa.

WANTED TO BUY old bags. We pay excellent prices. Write for prices. We pay freight. OWASCO BAG CO., Rochester, N. Y.

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PURE GOLDEN COD LIVER OIL FOR POULTRY animal feeding. Richest known anti-rachitic and growth promoting food. Five gallons \$6.75, 10 gallons \$13., at New York, Special prices on barrels. CONE IMPORT COMPANY, 624 Kent Avenue, Brooklyn, New York.

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SUPERIOR GRAFTING WAX for Successful grafting. 1 lb. 50c; 3 lbs. \$1.25 postpaid. D. VICTOR MFG. CO., So. Weymouth, Mass.

USED CIVIL WAR ENVELOPES with flags, designs, etc., \$1 to \$15 paid. Other stamps on envelopes before 1871 bought. Three-face lamps and old glassware bought. W. RICHMOND, Cold Spring, N. Y.

BALSAM PILLOWS filled with fresh Adirondack Balsam \$1.25 postpaid. Makes an ideal gift. Fill your own pillow; enough balsam in bulk for two pillows. \$1.00 postpaid. WONDER GIFT SHOP, Box 24, Newcomb, N. Y.

FARMERS. End crow pests and replanting. Treat corn seed with guaranteed formula costing few cents per bushel. Same mailed on receipt of \$1. R. WHEELER, Marathon, N. Y., R. D. 1.

CASH PAID for old pictures published by Currier & Ives or N. Currier or others. Send description, condition, size and price wanted. Write today. NOVAL STEWART, Binghamton, N. Y.

BUY YOUR AUTO, Camp and Bed Blankets direct from Mill. All wool Khaki Camp blankets 3 lbs. 66x90, \$3.25 each. Two for \$6.35; 4 lb. \$4.25, two for \$8.35. Postpaid. Also Auto, Steamer Rugs and Bed Blankets. Satisfaction or money back. ASHWORTH BLANKET MILL, Westbrookville, N. Y.

DE LAVAL CREAM SEPARATOR 650 lb., capacity. Write for particulars. H. B. EVANS, Friendship, N. Y.

HONEY. Fine quality clover Autumn flower blend \$5.00 per 60 lbs. J. G. BURTIS, Marietta, N. Y.

FOR SALE—Complete Creamery Equipment, 25 H.P. engine and boiler. New double copper vat, Pump vats, Scales, Shafting, Refrigerator, Glass ware, Testing tools. \$900. W. W. HOTCHKISS, 131 Forest Ave., Jamestown, N. Y.

TOBACCO

LEAF TOBACCO—Good sweet chewing, 3 lbs., 90c; 5, \$1.25; 10, \$2.00. Smoking, 3 lbs., 60c; 5, 90c; 10, \$1.50. UNITED FARMERS, Mayfield, Kentucky.

GUARANTEED CHEWING or Smoking five lbs. \$1.50; Ten \$2.50; Fifty Cigs \$1.85; pay when received. KENTUCKY TOBACCO CO., West Paducah, Kentucky.

NATURAL LEAF TOBACCO—Best grade, guaranteed. Chewing, 5 pounds, \$1.00; 12, \$2.00. Smoking, 10, \$1.50, pipe free. Pay when received. VALLEY FARMERS, Murray, Kentucky.

CIGARS FROM FACTORY—Trial 50 large Perfectos postpaid \$1.00. SNELL CO., Red Lion, Pa.

HOMESPUN TOBACCO—Guaranteed. Chewing, 5 lbs., \$1.25; 10, \$2.00. Smoking, 5 lbs., \$1.00; 10, \$1.50. Pay when received. FARMERS UNION, Mayfield, Kentucky.

PRINTING—STATIONERY

250 BUSINESS ENVELOPES printed postpaid \$1. 50 calling cards 10c. WALTER G. COLLINS, Cohocton, N. Y.

WOMEN'S WANTS

20 YARDS DRESS GOODS, Percales, Gingham, Voiles, etc., \$1.90. 3 lbs. Silks \$1. Pay postman plus postage. Large package Silks or Velvets 25c postpaid. NATIONAL TEXTILE CO., 661 Main St., Cambridge, Mass.

PATCHWORK 7 pounds Percales, Gingham \$1. 4 lbs. creton samples \$1. 3 lbs. woollens \$1., suitable for Boy's Knee Pants. 3 lbs. White Flannel \$1. 3 lbs. Chambray Remnants \$1. 3 lbs. Corduroy Remnants \$1. Nile Green only. Pay postman plus postage. NATIONAL TEXTILE CO., 661 Main St., Cambridge, Mass.

BEEES AND BEEKEEPING

A TREMENDOUS CHANGE IN BEEKEEPING has come about in the last half dozen years. It is an entirely new beekeeping that is just ahead. Honey production can be doubled in the average apiary in the United States by a new system of management, without new equipment and with less cost. We want to write you about this revolution in beekeeping, how you can learn all about it and begin it this season. A. I. Root Co., 233 Liberty St., Medina, Ohio.

WANTED

Your old and new address if you are moving this Spring.

AMERICAN AGRICULTURIST
461 Fourth Ave. New York

He Was My Boyhood Friend

(Continued from Page 16)

may say gracefully—becoming stooped and slow and somewhat feeble but always sturdily loyal to the farm and to my father. I think I can distinctly remember when I last held speech with him. It must have been the autumn just preceding his death. I came on him in his garden where he was patiently digging his potatoes—the last of many, many crops. He was bent and feeble and almost tottering but his speech was not less racy or his comment on men and things less illuminating than of old. I think he realized that he was very near the end but he meant to depart as he had lived—unafraid and unshamed.

The next January (it was in 1904) I found it possible to leave the Farmers' Institute work just for a Sunday at home, and on arrival learned that John had left upon a very long journey. It was bitter weather with deep snow. That afternoon I went to his little house and there in the tiny best room the worn body lay wrapped in an austere dignity which perhaps the gentle old philosopher had never borne in life. Next morning I had to return to my work by an early train and so it came to pass that I was unable to stand in the snow by the graveside of my early friend.

Almost two thousand years ago there was another man named John and he too was full of days and memories and he waited for the end on a sunny island set in a summer sea. And because in his youth he had seen and been a part of wonderful events, in his age he mused upon them until he had visions such as none other man ever saw.

And he dreamed of a New Jerusalem and saw it as a strange place of almost barbaric magnificence—a vast city that lay four-square with towering walls and gates of pearl and precious stones and long, long streets of lofty mansions and a thronging citizenry that no man could number. And he saw there a crystal sea and a great White Throne ringed about by choirs with blowing trumpets and sounding harps.

Yet I think that my boyhood friend would not be happy there because within the gates he would find nothing that he ever knew or any task to which he could set his hand.

But it must be that outside the gleaming walls there is a pleasant rolling country with lush meadows and rustling cornfields and bright brooks slipping with a murmur under wooded banks and arched over by ancient trees. Then some where in that country (perhaps near to the mystical river) there must be gardens with graveled walks and prim formal flower beds such as he used to make. So perhaps they will let him keep the grassy borders of the garden neat and trim or even prune and dig about and keep the Tree of Life and then I hope—I hope—there may be at least one little boy to attend his footsteps and hang upon his words and grow round-eyed with wonder at his tales.

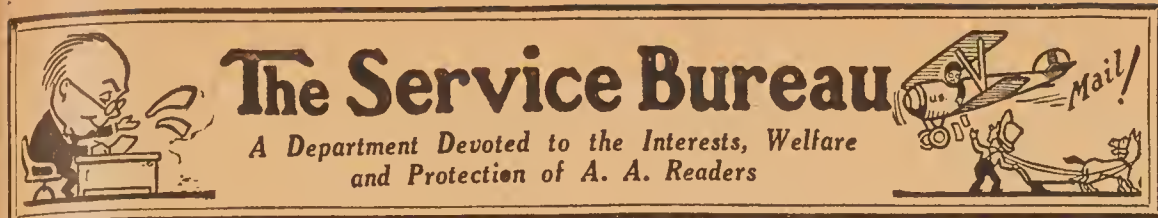
The Little Shepherd of Kingdom Come

(Continued from Page 22)

few questions, and the three were quiet while the train rolled on with little more speed than Chad and Dixie had made on that long ago night-ride to save Dan and Rebel Jerry. About that ride Chad had kept Harry's lips and his own closed, for he wished no such appeal as that to go to Margaret Dean. Margaret was not at the station in Lexington. She was not well, Rufus said; so Chad would not go with them that night, but would come out next day.

"I owe my son's life to you, Captain Buford," said Mrs. Dean, with trembling lip, "and you must make our house your home while you are here. I bring that message to you from Harry and Margaret. I know and they know now all you have done for us and all you have tried to do."

(To be Continued Next Week)



Collects For Territory Rights

Collects for Territory Rights

"An agent by the name of Hall came here about January 1, with two salesmen and sold a number of Adex Systems which are simplified farm account systems. They also started to give sole selling rights on certain territories and in order to hold this territory they demanded a small deposit on each set contracted for. Several men here signed up for territory rights and now we get information that these men have misrepresented certain facts. What can you tell us about them?"

THE Better Business Men Bureau of Kansas City reports that they have received many complaints from farmers who have made deposits on quantities of systems and then were unable to sell them. Apparently it is merely a case of high pressure sales methods. It is a common practice for salesmen to get the first deposit as their commission. Consequently, many are ready to use any methods to make a sale. Although the American Agriculturist Service Bureau is thoroughly in sympathy with the idea of keeping farm accounts, we believe that most state colleges of agriculture put out very practical farm account books free of charge or at a very nominal charge.

Company Fails to Reply to Complaint

We recently sent a check to the Master Phone Company, of Iowa City, Iowa, for some repair parts for a radio which we purchased from them two years ago. They have had the check cashed, and wrote they were having the parts sent, but up to the present time they have not been received.

WE have written the Master Phone Company calling attention to our subscriber's complaint, but up to date they have not favored us with a reply, and we are giving this information for the protection of our subscribers.

Watch Out for Tipster Sheets

"For some time I have been getting a paper called, 'The Trend Of The Market'. I wonder if you could tell us whether the financial advice given in this paper is reliable?"

IN recent years a new method of selling worthless stocks to investors has been developed. Some publications of which "The Trend Of The Market" is one, give some good advice on financial matters, but mix in with it other advice which is absolutely unreliable. These publications are commonly known as "tipster sheets" and we earnestly recommend that our subscribers take no advice on financial matters from them. The following is a partial list of papers which have been classified as "Tipster Sheets", by the Pennsylvania Securities Commission in its recent annual report:

Pratt's Stock Trends; Wolf's Market Forecast; Wright's Market Forecast; Stock Market Trader; The Wall Street Indicator; The Market Reflector; Market Financial Service; The Financial Debater; Financial Criterion; Stock Market Reporter; Trend of the Market; Market Forecaster; The Investors Guide.

About Licensing and Bonding Commission Men

LETTERS frequently received from subscribers indicate a haziness in their understanding of the New York State Law concerning licensing and bonding of commission men. In the first place, any man who sells farm produce on commission is required by the State Department of Agriculture and Markets to take out a three thousand dollar bond, which in the event of failure of the firm, is used to pay the money due to shippers. Unfortunately, it is possible to avoid taking out this bond by buying farm products direct

from producers. There is often confusion in the minds of shippers, incurred by the fact that many of these men who are not commission men according to the law, because they buy farm products direct from the producer, frequently call themselves commission men.

It is, of course, possible that a man may buy farm products direct, and be financially responsible, and at the same time it is relatively difficult for shippers to check up on their reliability. At the same time it is evident that all commission men who are licensed and bonded have not equal financial resources. But in shipping to a licensed and bonded commission man there is some certainty of getting some returns in case the firm shall fail in business, and also there may be less danger that the firm will be involved

in a failure. Many buyers who solicit shippers are small operators who may be in one locality one day, and in another the next, so that it is practically impossible even to locate them in case they fail to make returns on shipments. We will be glad to send a list of licensed and bonded commission men to anyone, upon request.

Gas Savers Fail to Make Good On Claims

"I was recently advised to buy some gasoline saving tablets. It was claimed that if one of these tablets is put in a tank of gasoline, that it increases the mileage secured and prevents carbon. Can you tell us whether these claims are reliable?"

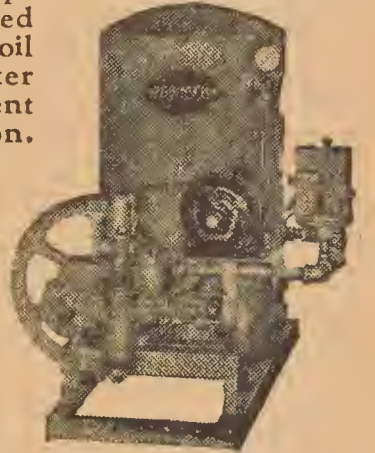
TESTS made by the U. S. Bureau of Standards on so-called gasoline improvers and carbon removers show that these materials have no noticeable effect on saving fuel. In some cases common salt was shown to be the principal ingredient.

This, of course, is not applied to ethyl gasoline and anti-knock fuels which have been tested under scientific methods and have been shown to give the results claimed for them.



There's HEALTH for Farm and Home in RUNNING WATER!

Present day standards of living on the farm require fresh, pure running water! That's why thousands of farmers are using HOOSIER Water Systems. Running water means family health. It means health of farm stock and poultry. The HOOSIER Systems furnish water from any source of power—electricity, gasoline, wind—and pump equally well from wells, springs, or lakes. Economical to operate. The famous GalVAZink coating, inside, and out, prevents entrance of rust. HOOSIER pumps are designed so that no oil enters water supply. Silent in operation.



A Free BOOK!

Send for this FREE BOOK: "How to Have Running Water." It will show you how easy it is! Drop us a post card TODAY.

FLINT & WALLING MFG. COMPANY
29 OAK ST., KENDALLVILLE, IND.



SAVE HALF Your Paint Bills USE INGERSOLL PAINT

PROVED BEST by 87 years' use.

ONLY Paint endorsed by Grange for 50 Years. Made in all colors for all purposes at WHOLESALE FACTORY PRICES

INGERSOLL PAINT BOOK tells all about Paint and Painting for Durability. FREE TO YOU with Sample Cards and our PREPAID FREIGHT OFFER. WRITE US. DO IT NOW and SAVE MONEY.

PATRONS' PAINT WORKS, Inc.

Oldest Ready-Mixed Paint Factory in America. Est. 1842
252 Plymouth Street, Brooklyn, N. Y.

FENCING We manufacture a ready made Cedar Picket and Galvanized Wire Fence—interwoven—Painted Green—Red—or Plain—made in 3 to 6 ft. heights. For chickens, farms, yards and lawns.



Used extensively for snow protection along Highways. Write for prices and catalog.
NEW JERSEY FENCE CO., Burlington, N. J.

A LIFETIME ROOF

Here is a guaranteed pure iron roof that resists rust. Our catalog explains why it is lightning proof and fire-proof.
ARMCO IRON ROOFING
Most economical you can buy and easily put on. Write today for free catalog.
American Iron Roofing Co., 44 Middletown, Ohio
PURE IRON NOT STEEL

PATENTS Booklet free. Highest references. Best results. Promptness assured.
WATSON E. COLEMAN, Patent Lawyer
724 9th Street, Washington, D. C.

Money Paid to A. A. Subscribers During Mar., 1929

Insurance Indemnities

To March 1, 1929.....	\$125,288.25
During March 1929.....	2,854.25
	\$128,142.50
Geo. D. Wait, Owego, N. Y.....	20.00
Auto accident—injured him.	
Warren B. Taylor, Allentown, N. J.....	20.00
Auto collision—sprained arm.	
Samuel Zeller, N. Collins, N. Y.....	15.00
Struck by auto—sprained knee, cut eye.	
Stanley Rutger, Riverhead, L. I.....	34.28
Auto overturned—fractured rib.	
Frank C. Burt, Jamestown, N. Y.....	40.00
Auto hit pole—injuries.	
Alex Randons, Bridge Hampton, N. Y.....	65.71
Auto collision—fractured arm.	
Alex Nicewie, Blairstown, N. J.....	40.00
Auto collision—fractured leg.	
Ray Fulford, Bath, N. Y.....	30.00
Auto accident—fractured ribs.	
Clarence Holmes, Howes Cave, N. Y.....	20.00
Team ran away—lacerated head.	
Orbert G. Walker, Greene, N. Y.....	130.00
Auto hit pole—fractured leg.	
Raffaele Pugliano, Croton Falls, N. Y.....	30.00
Travel accident—injured skull.	
Ellis Grinolds, Troupsburg, N. Y.....	30.00
Struck by auto—contused leg.	
Edwin Riordan, Freehold, N. J.....	84.28
Travel accident—sprained ankle.	
Henry W. Olsen, Penn Yann, N. Y.....	40.00
Auto overturned—fractured arm.	
Lester Clark, Newburgh, N. Y.....	94.28
Travel accident—fractured shoulder blade.	
Hilda M. Wheeler, Boston, Mass.....	20.00
Auto collision—strain of left arm.	
Leon L. Hills, Hermon, N. Y.....	30.00
Travel accident—contusions.	
Leon Lorber, North Branch, N. J.....	30.00
Wagon struck by auto—contusions.	
A. J. Wynn, Smyrna, N. Y.....	50.00
Auto collision.	
Owen F. Slein, Troy, N. Y.....	30.00
Travel accident—fractured rib.	
Rose Lusignan, Norwich, Ct.....	100.00
Auto collision—fractured nose, sprained knee.	
Roy L. Stainbrook, Saegertown, Pa.....	60.00
Auto accident—fractured clavicle, contusions.	
Geo. Maguire, Bradford, Vt.....	20.00
Travel accident—sprained back, shoulder.	
Herbert Anderson, W. Chazy, N. Y.....	20.00
Travel accident—contused legs.	
Grant S. Milks, DeRuyter, N. Y.....	40.00
Travel accident—fractured ribs.	
	\$2,854.25

Service Bureau Claims Settled

Milton Brown, Red Rock, Pa.....	\$ 11.50
(Refund on returned merchandise).	
Harry A. Hatfield, Ithaca, N. Y.....	15.00
(express claim settled).	
William V. Weaver, Munnsville, N. Y.....	9.00
(Returns on feed bags sold).	
George Wakefield, Johnson City, N. Y.....	33.23
(Balance due on seeds sold).	
Harvey Gransbury, Unadilla, N. Y.....	7.25
(Express claim settled).	
W. Lempher, Morris, N. Y.....	3.75
(Refund for goods not received).	
I. W. Mallory, Owego, N. Y.....	27.27
(Returns on poultry shipment).	
R. A. Carlton, Vineland, N. J.....	130.50
(Refund on returned merchandise).	
A. S. Patnode, Cherubusco, N. Y.....	11.10
(Refund from mail order company).	
Joseph H. Signs, Owego, N. Y.....	15.00
(Refund on money paid agent).	
Miss M. L. Gilbert, Richford, N. Y.....	9.18
(Refund on unsatisfactory merchandise).	
Charles Edwards, Canton, N. Y.....	13.36
(Returns from commission merchant).	
	\$551.72

General Claims Adjusted Where No Money is Involved

G. E. Aldrich, Campbell, N. Y.....	
(premium received for selling).	
Herbert Saunders, Allamuch, N. J.....	
(Merchandise order filled).	
Clyde E. Rowe, Otego, N. Y.....	
(Order filled).	

Total Paid to Subscribers **\$3,405.97**

Tax Relief for New York Farmers

(Continued from Page 5)

on a mileage basis (one-fifth of the \$6,000,000, or \$1,200,000 to go to New York City, the remainder to the localities). In other words, here is \$4,800,000 more State aid which will relieve local road taxes in the counties and towns.

Direct State Tax Eliminated

In addition to all of this extra help which will be reflected directly in the farmers' tax bills, the legislature is to be congratulated for the elimination of the direct State tax on real estate, an estimated saving of \$13,000,000. Of course, this last sum will help real estate everywhere, both in the city and in the country, but it will mean at least a few dollars' saving in your State taxes to all of you farmers who own real estate.

There was a number of other important bills which the legislature and the Governor have placed on the statute books. Among these was the bill introduced by Senator Kirkland which provides that the cost of retesting accredited herds will hereafter be borne by the State. Heretofore, the cost has been paid by the individual dairyman.

The new features of the dog law sponsored by Assemblyman Witter provide that sheep owners will now receive full indemnity for damage done by dogs. The tax on females has also been increased.

Reforestation Given a Boost

Two important reforestation bills were passed. The first of these provides that the Conservation Department may acquire for the State tracts of land containing not less than five hundred adjacent acres to be reforested by the State. The second reforestation bill allows the county board of supervisors to acquire land in their county for reforestation purposes. If the acres so acquired are approved by the Conservation Department, the State will pay a sum equal to that appropriated by the supervisors but not to exceed \$5,000 in any one year in any one county. These two laws are expected to do much toward increasing reforestation work in the State.

Another important bill passed and signed by the Governor amends the tax law to remove franchise taxes from agricultural cooperative associations.

There is \$13,000 appropriated to the Geneva Experiment Station for the investigation of certain destructive moths and insects.

Still another act makes an appropriation for research and investigation by and construction for the New York State College of Agriculture. This includes provision for study of muck land problems, investigating potato diseases, and putting the Dairy Husbandry Department at Cornell in position to do effective work for the dairy and stock interests of the State.

Every rural resident will also be much interested in the law just signed by the Governor which reduces the county expense in grade crossing elimination from ten percent to one percent, the State and railroad companies involved bearing the balance.

This, in brief, is an explanation of the most important new legislation for lifting and adjusting farm taxes and for the general relief of the agriculture of the State. We expect to publish again in coming issues more details showing just how the new school and road tax laws will work out in your own school districts, towns and counties.

While we are very optimistic and enthusiastic over the outcome, we all understand of course that there is much yet to be done. The State itself has certainly gone a long way to give farmers a square deal. The biggest tax problem yet remains to be solved in the towns and counties. It will do no good for the State to take over a large amount of the localities' share of maintaining roads and schools if local officers use up these savings by increasing local expenditures in other ways or by inefficiencies. Here is where your responsibility comes in.

We wish we might see a committee

of farm people in every locality to make a study of the local tax situation and have it discussed in local meetings of farmers. A big start has been made this year toward real farm relief. Let us all do our part to keep the ball rolling.

Can You Help Us?

THE New York State Agricultural Society is now making plans for its exhibit in connection with the State Fair. It is proposed that, even more fully than in former years, the Society shall attempt to exhibit the farm implements and the household utensils of the Homespun Age. It is also expected that there will be a still more comprehensive demonstration of the farm and home handicrafts as actually carried on in that era.

Again we expect to have a cooper, cobbler, shingle shaver, spinner, cloth weaver,—just as many A. A. readers

have seen during recent years. In addition we plan to add an old-time potter with his wheel—a man who will take a formless lump of wet clay and in a very few moments make it grow into a jug or jar. In addition, we expect to be able not only to prepare flax and spin it into yarn, but also to weave it into the rough linen cloth of three generations ago. We also plan on bullet moulding, candle dipping and domestic dyeing.

There are certain articles which as yet we have not been able to gather for our collection and which we are trying to locate through the columns of the AMERICAN AGRICULTURIST. One is a log house still in good shape which can be taken down and erected at Syracuse. Another thing we especially want is the "Wooden Nigger," that primitive threshing device that filled the gap between the period when the grain was trodden out under the hoofs of horses

American Agriculturist, April 20, 1929 and that of the first rude cylinder threshing machine. Also, at present we have no good flail, nor any very early primitive harrow.

We shall be very grateful for any information regarding the cabin or implements, and we are eager for suggestions as to how to make this exhibit a still more worthy revival of a bygone and almost forgotten era. If you can help us, please address Jared Van Wagenen, Jr., Lawyersville, N. Y.

Institute of Cooperation Plans Annual Meeting

THE summer session of the American Institute of Cooperation will be held at Louisiana State University beginning July 21. It is expected that persons from every state in the Union will attend, and the program will consist of nearly 100 speakers. The session will last for four weeks.

ICE, 2¢ a cake!

The proper preservation of food prevents the growth of disease germs and bacteria.

The harvesting or cutting of natural ice is costly. In many parts of the country natural ice is not available and the cost of transporting makes it prohibitive. Artificial ice is also expensive.

The electric household method of refrigerating is very efficient, but its first cost and cost of operation is so expensive that it is prohibitive to many homes. A large percentage of homes in the United States do not have the necessary electric current supply for the operation of electric refrigerators.

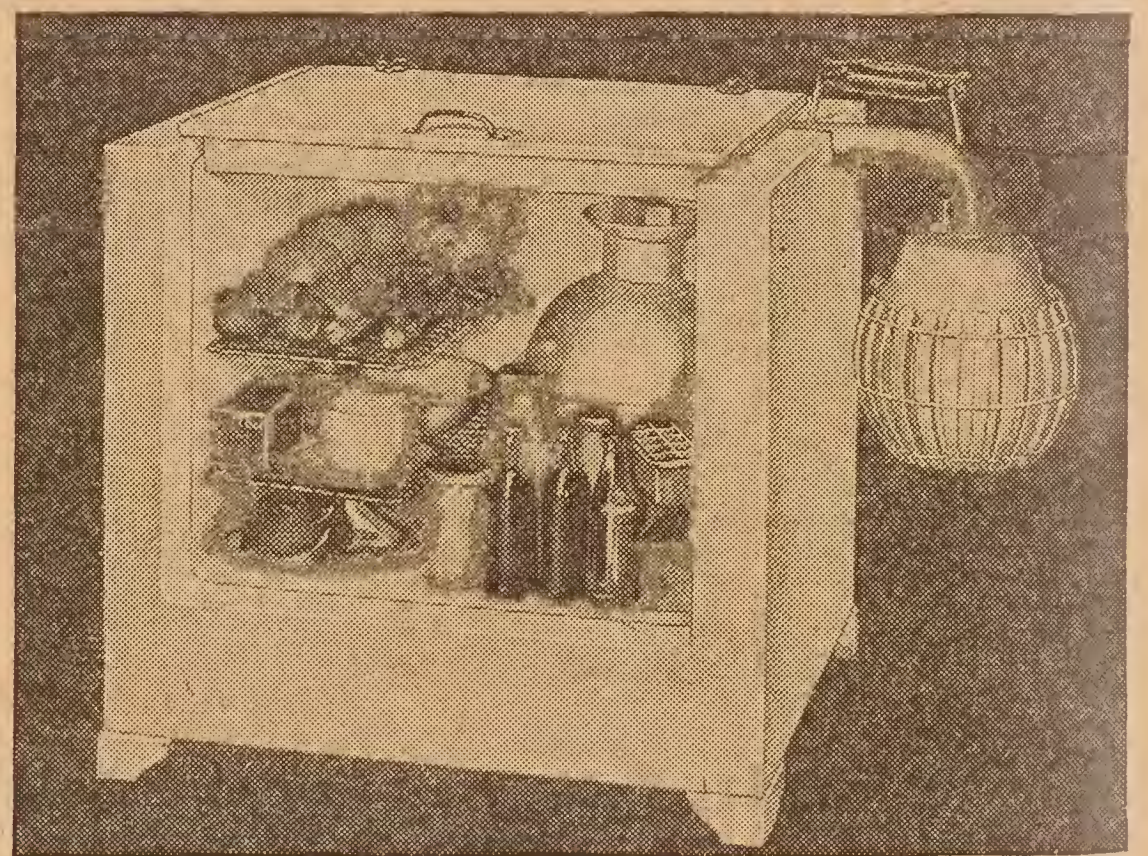
There are also many homes not close enough to the thickly populated districts, to be served with the regular deliveries of artificial ice. Up to the present time, for these homes, there existed no efficient refrigeration.

Now comes a revolutionary invention. A device known as the Crosley Icyball Refrigerating Unit, which in combination with a refrigerator cabinet of attractive design becomes a Crosley Icyball Refrigerator. The Crosley Icyball Refrigerating Unit keeps the contents of the refrigerator cabinet cold, preventing the formation of dangerous germs or bacteria, protecting the health of babies and children as well as the more hardy grown-ups. The Crosley Icyball Unit keeps the refrigerator cabinet cold so that foods which in ordinary room temperature would quickly spoil, can be preserved indefinitely. Bacteria and germs do not develop rapidly in a cold temperature.

The Icyball Refrigerator unit will freeze desserts and chill salads. In fact, it will do anything that any other modern refrigerator will do. The Icyball unit is made operative by removing the unit from the cabinet and heating it for one and a half hours on a gas or oil stove. This period is known as cooking.

After the cooking operation, the unit is placed in refrigerator cabinet where it immediately goes to work removing the heat from the cabinet interior, producing a clean, dry, cold temperature which cools the foodstuffs and preserves them. Water placed in the ice cube tray in the lower part of cooling unit, is frozen into ice cubes.

Over twenty-two thousand of these devices have been sold. Some of them have been shipped to most every nation of the globe. Most of the twenty-two thousand have been sold, however, in the United States, where they were in use all last



summer. Witness this testimonial from an owner:

"We are milking seven cows and have been able to deliver Grade One cream all summer. This has averaged \$2.20 more per week than I would have received in the past for Grade Two or Three."

Since last summer several definite improvements have been made in the Crosley Icyball Refrigerator, making it even better than it was a year ago. One of these improvements is the addition of the stabilizer which prolongs the cycle of clean, dry cooling, extending the life of each cooking.

The Crosley Icyball Refrigerating Unit in operation needs no renewing of the liquid it contains. The cost of the complete device is low, surprisingly less than any other device for the purpose of refrigeration ever offered.

The price of \$85 includes the unit, the refrigerator cabinet, a cooling tub, and the stabilizer. Nothing else to buy if you use your regular oil or gas cooking stove for heating it. The amount of fuel consumed in cooking the device daily is approximately the same as that which would be used to boil a tea kettle for one hour and a half—

about two cents worth of kerosene or gas a day. One two-cent cooking of the Icyball is equivalent in refrigeration to the use of about 35 pounds of ice. It is, therefore, equivalent to the purchase of a 35-pound cake of ice for two cents.

The Crosley Icyball brings the lowest cost refrigeration into any home anywhere. It is adaptable to many uses—homes everywhere, camps, farms, dairies, stores, restaurants and road side stands. Special models are shown by Crosley dealers for dairy use—cooling soft drinks and cooling water in stores and offices.

The Crosley Icyball Refrigerator is made by one of the largest radio manufacturers in the world. It is sold by the distributors and dealers who handle Crosley radio receiving sets in all parts of the world. There is a Crosley dealer near you who will be glad to demonstrate this device to you and show you why you should have one in your home. Use the coupon for further information about the Crosley Icyball Refrigerator.

\$85

COMPLETE WITH
CABINET
F.O.B. FACTORIES

The Crosley Radio Corp.,
Dept. 65 Cincinnati, Ohio.

Gentlemen: Please send me all information about your Icyball Refrigerator, without any obligation on my part.

Name _____

Address or R.F.D. Route No. _____

City _____ State _____

CROSLEY ICYBALL REFRIGERATION

AMERICAN AGRICULTURIST

C
S1
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\$1.00 Per Year

April 27, 1929

APR 24 1929

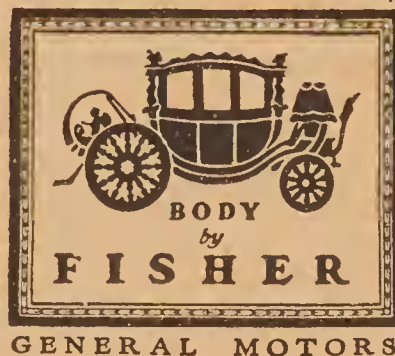
Published Weekly



*Either for Beauty or Usefulness, What Is Better Than
Good Old Red Clover, the Foundation of Good Farming?*

What New York's New Laws Will Mean to You -- Page 5

WHY FISHER uses Wood with Steel in every Body which it builds



Why Has an Axe a Wooden Handle?

As a matter of fact, it would cost less to equip an axe with a handle of some other material—steel tubing, for instance. But the steel tubing, lacking the resiliency of wood, cannot absorb shocks as does wood. In fact, the shocks would be transmitted to the hands. For the same reason Fisher uses wood in its bodies so that the wood will absorb the real shocks and eliminate "drumming" both of which are increased when wood is not used.

THERE is no substitute for wood, because nothing else combines durability, resiliency and strength—no other material will eliminate "drumming" and absorb noise and road shock—to nearly the same degree. That is why Fisher uses wood-and-steel construction in every body that it builds. ☞ In building bodies for Chevrolet, Fisher employs the same basic structural principles as in building bodies for Cadillac. This also holds true for Pontiac, Oldsmobile, Oakland, Viking, Buick and La Salle. Fisher and General Motors could save many millions of dollars every year by adopting cheaper body con-

struction—especially in the lower price field—but Fisher and General Motors are committed to the policy of quality construction in every price field ☞ That is why, when you buy a car with Body by Fisher, you are certain of better body quality. This quality is so far above anything else offered in that car's immediate price field that, when you go outside the Fisher Body group, you must go to cars costing several hundred dollars more to obtain anything comparable. ☞ In your next car, make sure of this greater value and better quality by buying a General Motors car with Body by Fisher.

Cadillac • La Salle • Buick • Viking • Oakland • Oldsmobile • Pontiac • Chevrolet

Body by FISHER

A Vermont Farmer Who Made a New Start

By JEANIE HAHN

IN 1891 twenty-four-year old Martin Jenkins said, "I've been a railroad section hand long enough. I'll make a new start." So he took a wife and his one hundred dollars and went to work as a farm hand.

Four years later he said, "I've been hired help long enough. I'll make a new start." So he took his wife, two children and three hundred dollars' savings and bought a small brook farm for thirteen hundred dollars. It was unstocked. He went into debt sixteen hundred dollars.

All Share in the Profits

Nine years later, in 1904, he said, "I've been on this one horse farm long enough. It isn't big enough to hold my boys here when they're older. I'll make a new start." So he took his wife, nine children, fifteen hundred dollars, ten milking cows, one horse, young stock and tools and moved onto a thirty-five hundred dollar Vermont hill farm of two hundred acres. He went into debt three thousand dollars. He raised strawberries and poultry for sidelines, enlisting his family's sympathetic aid by giving each member a share in the profits. He and sons kept two teams busy drawing lumber or working on the town roads when the farm didn't need them. That household was always busy and happy.

Fifteen years later he said, "This farm is not big enough for me and the boys. I'll mortgage it to my son, Renfrew, and make a new start for myself." So, with his wife and twelve children,—or, rather, seven children, for the two oldest girls were teaching school, the oldest son was on a farm of his own, the second son had been killed in France, and the third was left on the hill farm,—he went away. He moved onto a sixteen thousand dollar river farm; it was equipped with four thousand dollars' worth of stock and tools. He took his fourth and fifth sons, then nineteen and eighteen years old, into partnership with him. He went into debt ten thousand dollars.

Raising Chickens Now

This spring, 1929, Mr. Jenkins was sixty-two years old. His girls, except the youngest who is in normal school, are all teaching or married to farmers and his sons, except the two oldest who are not living and the youngest who is still in high school, are farming. After taking his farm inventory this January, he said, "I've been bossed around by those two boys long enough. Let them run this place by themselves. What say, Marm, let's build that bung-alow and go into chickens? I'm not too old to make a new start and show these Vermont poultrymen a thing or two about hens!"

Mr. Jenkins always made a success of the old start but, when he had exhausted its possibilities, he was never afraid to make a new start.

"OUR FARM WORLD" by FRED T. ULLRICH, Director of Agricultural Education at the state teachers college of Platteville, Wisconsin, is designed especially for teachers of agriculture in presenting their subject matter to their classes. It handles the subjects which properly classify in a course in agriculture in grammar or junior high schools, soils and fertilizers, potatoes and potato culture, corn and corn culture, small grains, forage crops, fruits and fruit growing, poultry husbandry, dairying, beef production, pork production, sheep and horses and mules. The book is well illustrated and referenced, a great help to teachers.

In addition to the chapters devoted to actual subject matter on agriculture, there are two chapters dealing with methods of teaching. Special attention is given the "problem" method of teaching which the author regards as particularly adaptable to training in agriculture. He also points out that the local crops and resulting interest of the people should determine which phase of agriculture should receive the most time and study of the classes. The book is published by Longmans, Green and Company and sells for \$4.00.

Making the Old Barn New

All the Advantages of Modern Equipment at a Low Cost

MANY dairymen find themselves severely handicapped today with an old-style, poorly arranged, badly equipped barn and are dreaming of the day when they will be able financially to build a new structure to carry on more effectively and economically their every day work. Quite often they are working in barns which have possibilities for being remodeled and brought up-to-date at a very nominal cost compared to the outlay required for an entirely new structure. It would prove highly profitable for such dairymen to take time to

cut B may develop. Let us study it for a moment and make comparisons with the original layout.

Cut B discloses a plan with two rows of cows facing a central feed alley. While there is some difference of opinion as to whether cows should face in or out and although the question is largely one of personal preference it must be admitted that the face in plan makes it very convenient to do the work connected with feeding. A silo of proper capacity for winter feeding has been added, with a new feed room lo-

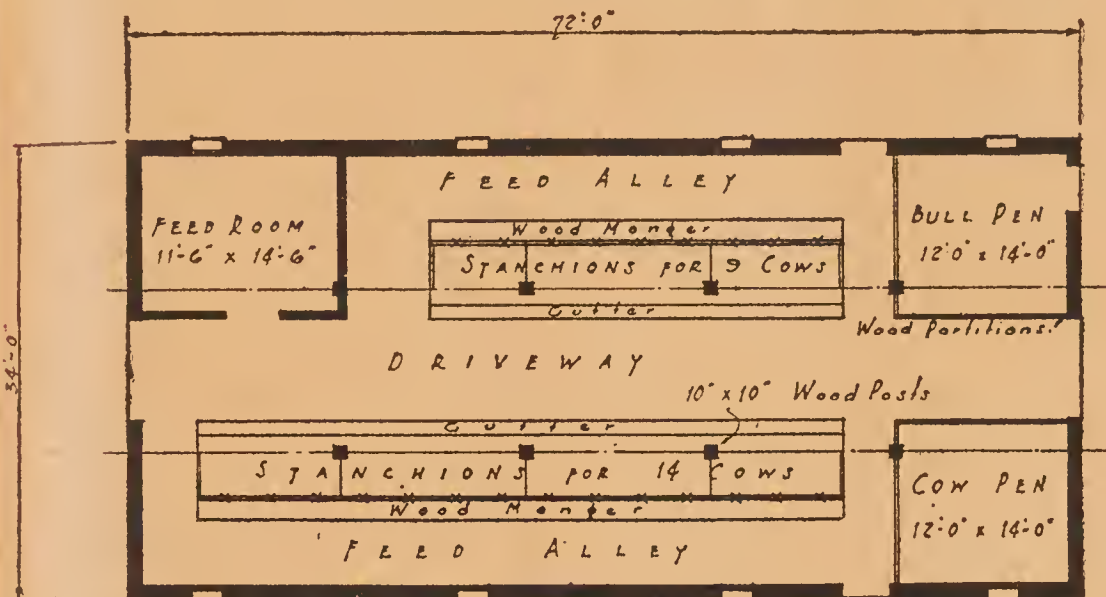
By FRED J. KREUTZER

duction as will individual drinking cups and these are shown in the new plan. There is no item of stable equipment that so greatly reduces labor as the litter carrier and one can be installed in a barn such as this at surprisingly small cost. Special attention is called, also, to the abundance of windows and this is an item of importance.

Ventilation and proper insulation of walls to retain the heat generated by the stock housed, are factors that deserve special consideration. It should be borne in mind, however, that the owner can equip his barn a little at a time, if circumstances do not warrant completing the entire job at once. The first step, of course, is to work out a definite plan for carrying out the work and then doing as much of it at the start as appears warranted. The concrete floor and stall equipment will, of course, come first. Carriers, pens, ventilation and other items can be added from time to time as the dairyman feels able.

It will be observed that the revised plan herewith suggested, provides for more animals than the original barn housed, and it may be necessary to take steps to increase the hay storage capacity. Cross section C gives an idea of how this particular barn was originally constructed. It was built in the days when timber was plentiful and

this suggestion has particular merit and will appeal to the practical dairyman. In most cases the rafters of the old barn can be utilized in the new



Floor plan before remodelling (A)

make a careful analysis of existing structures to determine their possibilities for remodeling. Every dairy worker wants a stable in which the arrangement and equipment is such that he can accomplish the most work with a minimum expenditure of man labor. Present day demands for sanitation and other factors that promote cleanliness and efficiency are also worthy of serious consideration.

The present cost of building has perhaps caused many dairymen to examine closely their existing barns for hidden remodeling possibilities. Very often such studies have been instrumental in the abandonment of new building plans. There are many simple and not too costly things that can be done in the way of remodeling that do not present themselves to the farm owner, busy as he is with his routine problems.

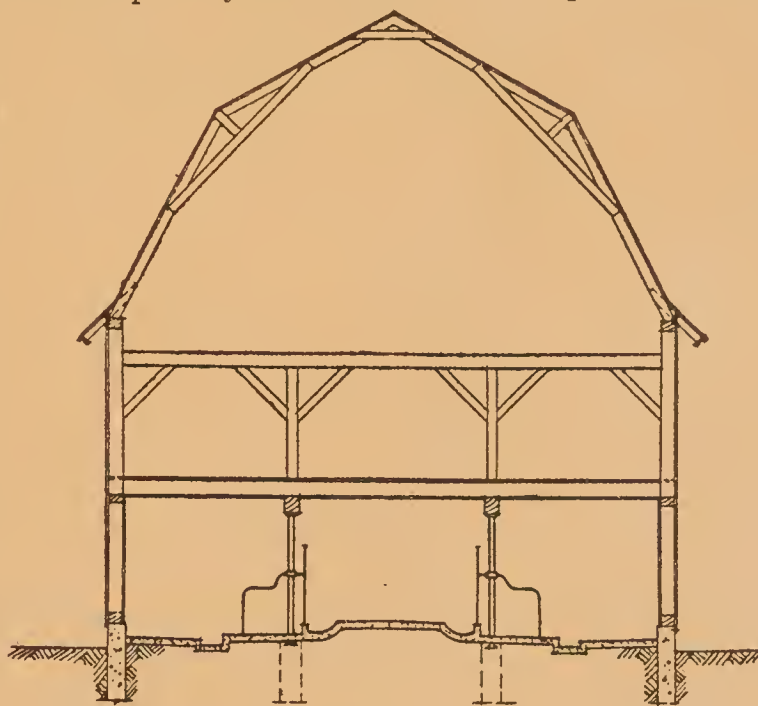
In a brief article such as this, it is not possible to cover in anything but a general way the ways and means of modernizing old barns but to give a concrete illustration of what might be done in a specific case we will take a fairly typical barn such as is shown in the floor plan, cut A, designated "before modeling". In this case we have a structure of the old fashioned timber frame type which is in good condition, as to the foundation, framework and siding. It has at present a plank stable floor, gutters and mangers and provides stanchions for 23 cows with a cow pen, bull pen and a feed room. The arrangement, besides being somewhat "unhandy", does not make use of the stable floor area to the best possible advantage. The wooden floor, pens and equipment are difficult to keep in a sanitary condition and are showing signs of rotting. As is the case in many old barns there are far too few windows to admit sunlight and the awkward 10 in. x 10 in. wood posts interfere with the comfort of the cows and attendants. The width of the structure, fortunately, is about right to assure proper proportioning in a re-arrangement so let us see what simple measures can be taken to make an efficient milk factory of this old stable.

Certain well established measurements are in general use as to the proportioning of stalls, mangers, gutters, alleys, walks, pens, etc., and with these in mind we pick up a piece of paper and work out a rough sketch, to scale, of what in our minds would be a more convenient, practical arrangement. The ideal plan may not suggest itself immediately to the layman but after making such sketches a plan somewhat like that shown in

cated in the space separating the silo from the barn. This is a very inexpensive way to build a feed room as the silo and barn form a large part of the wall. This feed room is a two story structure with storage space and hopper bins above. A stairway leading to the feed room and loft is another feature not included in the original plan. With the feed and ensilage at one end, feeding is made easy with an ordinary feed truck.

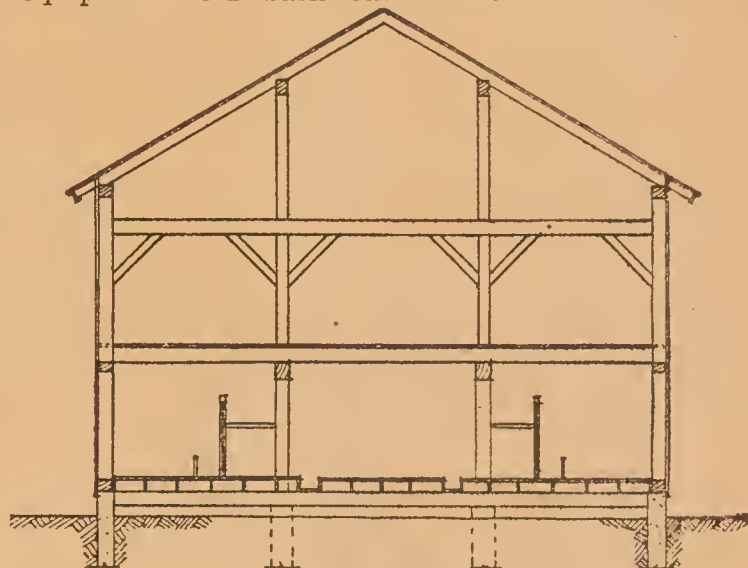
At the end opposite the silo are three good sized pens. They provide accommodations for a bull, cow and calves. In the old barn it will be noted that no special calf pen was provided. There are stalls of ample width for 28 large cows. It will be noted that the measurements of walks, alleys, stalls, gutters, etc., are all that could be desired for an ideal layout. Slender steel columns, interfering in no way with the cows or workers are shown to replace the clumsy wood posts. Simple, substantially constructed steel stalls add to the comfort of the cows and these with the steel pens, reduce labor cost because of the ease with which they are kept clean.

Perhaps no item of equipment will so quickly and so surely add to milk pro-



Cross section of barn showing increased storage space (D)

could be secured from the wood lot on almost any farm. The condition of the frame work is such that the owner would be justified in reconstructing the roof to provide the more modern gambrel type with its greatly increased storage room and the greater ease of mowing the hay which it assures. If the old roof needs replacing anyway,



Cross section of old barn (C)

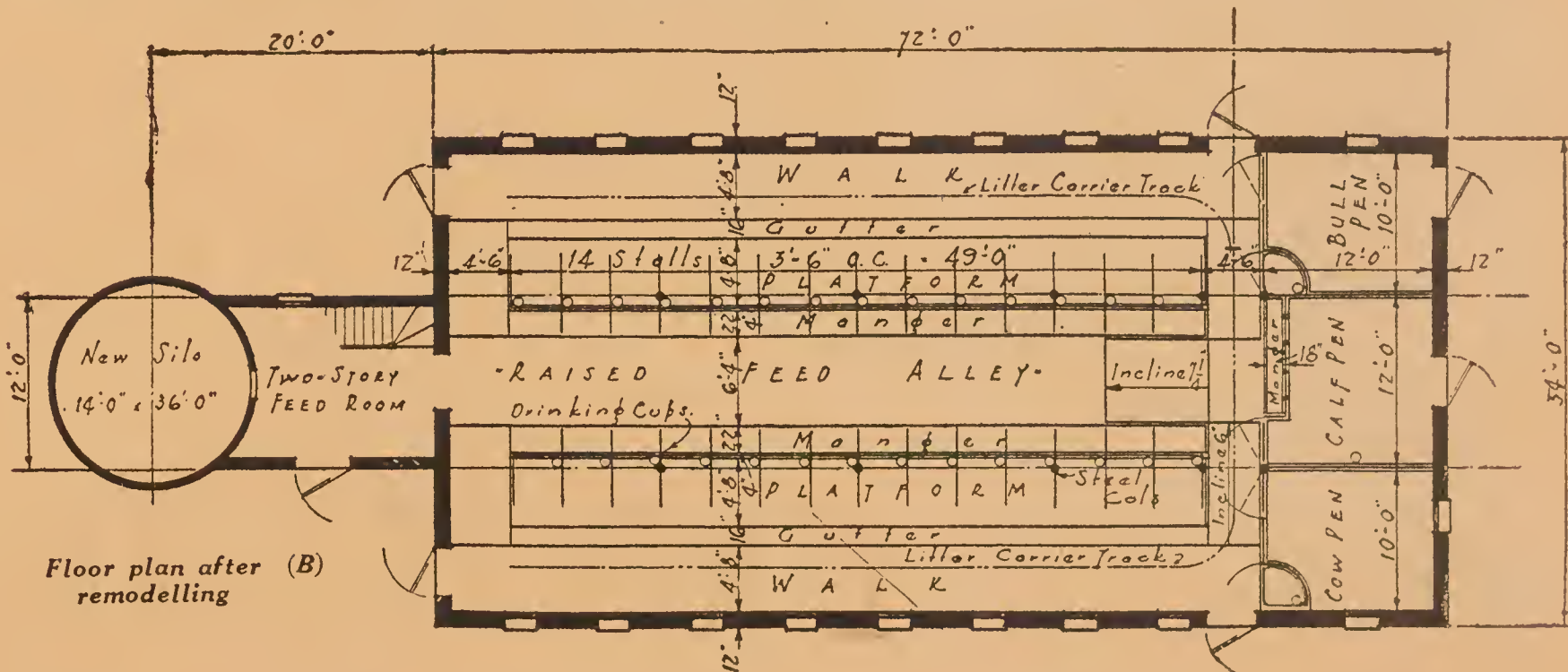
work, thus materially reducing the cost. The proposed gambrel roof for the barn in question is shown in cut D. Note the greatly increased storage capacity and the apparent ease with which the hay can be handled. The frame work of the barn is not disturbed and the new roof is self supporting. No purlin plates or posts are required.

Summarily, I have attempted to show just a few of the possibilities that exist in all barns. All that is necessary is to bring them to the light. The help of one who is well versed in the theory of structures and barn building practice will be found very useful in discovering hidden possibilities in the barn that served so well for a long period of years. There are plenty of agencies thru which help of this kind can be secured without charge or obligation. An outsider usually has a better perspective of your own problems than you yourself might have. You may be too close to the picture to view your buildings from the right angle.

Truly, there are many ways in which the old barn can be made new.

"THE FARMER'S STANDARD OF LIVING" (\$2.00), one of the Century Company's new books on rural life, is the result of six years of painstaking scientific study in the field of family living. Dr. Ellis Lore Kirkpatrick, agricultural economist of the U. S. Department of Agriculture, is the author. He has tackled this subject not only from the angle of actual material investments and returns but also from the human relationships involved.

Income, housing, food, schools, religion and education as they affect the farm standards of today constitute Mr. Kirkpatrick's analysis. The book is packed full of helpful information, not only for teachers, research workers, and students, but for the farmer himself. Furthermore, the book is interestingly written and in a painless way educates while it entertains. This book could furnish enough material for a year's program of discussions of their problems by farm people themselves and any grange or study club would do well to make it a part of their library.



Floor plan after (B) remodelling

Editorial Page of the American Agriculturist

AMERICAN AGRICULTURIST

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Vol. 123 April 27, 1929 No. 17

Only a Few Pounds Per Dairy Needed

IN November 1928 the average daily production per dairy in New York State was 3.4 pounds below that of the preceding November, according to M. C. Bond of the New York State College of Agriculture. The production in December was 6.7 pounds, in January 10.1 pounds and in February more than 12 pounds below the production of the preceding year.

Thus you have the reason why there was such a shortage in this milk shed during the past year. If you multiply all of the dairies in this section by the shortage per dairy, the result runs into large figures.

On the other hand, if each dairyman will do his part by making plans to increase his average production next November only just a few pounds per day, there will be no shortage. Unless this is done, dairymen can be assured that the city will go outside of the present territory for some of its milk and cream. When this outside buying once starts it will never stop.

Name Your 1929 Master Farmers

SOMEONE has well said that farming is a life as well as a living. This is just another way of saying that farming is much more than a business of dollars and cents. There is, and should be, something more in life than hard work and the making of money. If financial returns were the only reward, then there would be few farmers left; but, thank God, farming returns far greater and more rewards than can be measured in gold.

So a real Master Farmer is he who not only has proven his financial ability as a farmer, but one who is a living example of bigger and better things. In making the final selections last year, the Master Farmer judges asked themselves these questions: What has this man done with his life? Has he had time to be a good husband and father, and a good citizen? Has he had time for others? Is he unselfish? Is his life an inspiration to the young people around him? Has he added dignity to the great trade or occupation of farming?

We are now ready for nominations for Master Farmers of New York State for 1929, and in making such nominations we ask you to consider carefully the above mentioned qualifications. Announcement of plans for other A.A. states will be made later. Any friend, neighbor or relative may send in the nomination of a Master

Farmer, but before doing so, and in order to avoid extra work and disappointment, be very sure that your candidate meets all of the very high qualifications. All nominations for 1929 Master Farmers will be closed June 1st.

A man and his wife who started with little or nothing and made a success in farming will have much more consideration than those who had money to start with. It is not possible either for a man to have demonstrated his qualifications of a Master Farmer until he has attained some years, and remember in making your nomination that your candidate must have made good financially. His farm and buildings should look neat and progressive. More than this, he must be a leader in his community and a man noted as a kind husband and father, and a real homemaker.

Only ten or twelve Master Farmers will be finally named by AMERICAN AGRICULTURIST this year, so we ask you again to make your selections very, very carefully.

When the nominations are received, each nominee will be sent a detailed work sheet which he will fill out, in which he will answer confidentially many questions. From these answers, a smaller number will be chosen to be visited personally by representatives of the Board of Judges. After these visits are made, reports with all of the information available will be laid before the judges for their final selections.

The Master Farmer movement, conducted by the Standard Farm Papers of America, is doing more than any other single project to emphasize to the public the great dignity and the high quality of the men and women who till the soil.

School Funds for Organizations Not Legal

"Is there any way of getting at the books of the Rural School Improvement Society?"—E. R., New York.

SO far as we know, no public accounting has ever been made of all the money raised by this society to pay the salaries and expenses of its officers. So far as we know, also, no benefit has ever been returned by the officers of the society for the hard-earned money which they have collected.

As this is approaching school meeting time, we again repeat the information that it is illegal and unlawful for any school district or school trustee to make appropriations of public funds for the use of the Rural School Improvement Society, or for any other organization. It is illegal to make such appropriation even though it is voted unanimously at the school meeting.

Any trustee using public moneys raised by the school district or appropriated by the State for school purposes to make contributions to any organization may be held personally liable. Such trustee can be removed from office and required to return out of personal funds any money so contributed.

A Modern Pied Piper

THE Pied Piper of Hamelin led all of the 130 children of the town to the hill called Koppenberg in 1284, according to the legend, and they were never seen or heard from again.

John Ringling, one of the last old time showmen and proprietor of Ringling Brothers, Barnum and Bailey Circus, led more than 14,000 of New York City's orphans and crippled children into his big show the other day and gave them free the time of their young lives. Fourteen thousand children! Think of it; a whole city of boys and girls under one tent, and what a pathetic lot. Nearly all of them were orphans and the rest were cripples. Many had to be carried into the show on cots, and thousands of others were maimed in one way or another.

How those performers did extend themselves to make their audience laugh and shout. The human catapult, whose business it is to be shot from a cannon every day, said that he just could not stand it to put on an extra performance, but

when he was told that it was for the children, he replied: "If that's what it is, I'll do it ten times over!"

If happiness is measured in terms of what we can bring to and do for others, then John Ringling and all of his performers must have been very happy when that particular performance was over. Some men preach religion; others practice it.

Watch for Our New Serial

THE combined judgment of the whole editorial staff of AMERICAN AGRICULTURIST is used every time we choose a new serial story. Dozens of stories are submitted and are read before we can find the right one.

Our qualifications for a serial are very exacting. We want a story that first of all is clean, and worthy to grace the columns of AMERICAN AGRICULTURIST and the thousands of farm homes in which the A. A. is a weekly visitor. Next, our serial must be full of action, one that is alive, in which the actors move upon its stage as they do upon the Stage of Life.

We certainly are happy in getting all of these qualifications for you in our next serial, "The Plains of Abraham", by James Oliver Curwood. Here is an historical novel, largely true, with its setting mostly in New York State where thousands of our readers now live, a story of the French and Indian Wars in the virgin forests of the old New York frontier.

In the introduction, the author says: "It is probably a deeper satisfaction to me than it is to my readers to know that Marie Antoinette Tonteur and her fierce old father lived and loved as I have described; that Catherine Bulain and her valiant son were flesh and blood of their day; that Tiaoga and Shindas, Silver Heels and Wood Pigeon and Mary Daghlen, the Thrush, are not creatures of fancy, and that "The Plains of Abraham", like "The Black Hunter", is largely a romance of life as it was lived and not as it might have been lived."

This story will grip your interest from the start. Watch for the first large instalment in our May 11th issue.

Let Us Work Together

"The longer I read AMERICAN AGRICULTURIST the better I like it, especially for the reason that it does not condemn everything and everybody."—L. R.

WE happened to run across the above statement in a January issue of AMERICAN AGRICULTURIST printed way back in 1893, more than thirty-six years ago.

As this has always been the policy of the "Old Reliable" so will it always continue to be, at least while the present administration has anything to say about it. Agriculture is a many-sided business with many problems, and there is enough for everyone to do without tearing down the work of somebody else who may be working differently but toward the same end.

Eastman's Chestnut

HERE is a chestnut that I heard years ago. So perhaps it is old enough to be new again, at least to most of you.

A young fellow was fond of two sisters. One was very beautiful, but dumb; the other was extremely homely, but had a very beautiful voice. The young man could not make up his mind as to which one he wanted to marry. When he looked at the beautiful sister, he was sure she was the one, until she began to talk; but when he heard the other one sing, he was equally sure that he wanted her for his wife.

Finally, one evening, the beautiful voice of the homely sister raised in song carried him away and he proposed to her and was accepted.

One morning after the marriage, he awoke before his wife and, fascinated and at the same time horrified, he gazed upon her terrible countenance as she slept. Then suddenly he shouted:

"Mary, Mary, for heaven's sake, wake up and sing!"

What New York's New Laws Will Mean to You

More State Aid to Reduce Road Taxes in Your County

LAST week we explained in some detail the farm tax relief laws just put on the statute books of New York State and told how these bills came to be started and passed. On this page this week we are giving you a table just issued by the State Highway Department showing the really tremendous savings that the new laws will make farmer taxpayers. Study this table carefully. Look up what will be saved in your own county and you will see the reason for our conservative statement that these are the most important set of laws so far as farmers are concerned ever passed by the state of New York. They are real, practical farm relief.

All of this legislation is based on right principles, because everybody uses and receives benefit from the roads and the schools, and therefore the charges should be carried by everybody in the State and not by a few real estate taxpayers in the localities. The principle of more State aid works out especially well for farmers because their heaviest taxes are local and their State taxes are not heavy, for most of the expense of carrying the State government is borne by the rich cities and by indirect taxation.

The four columns in the table represent the savings to the counties and towns of the three different laws just passed. In the first column is shown the State aid that each county will receive by the new law, which provides that the State shall take over 35 per cent of the cost of building new State highways, which has formerly been borne by the counties. It is estimated that the State will build about 2800 more miles of new State highways during the next ten years. According to the old law, the counties would pay 35 per cent of this cost of building these new State highways, or approximately \$54,000,000 in the next ten years, or \$5,400,000 per year. All of this county cost has now been taken over by the State, and the immense savings to most counties per year is shown in the first column of the table. The total savings to your county for completing the State highway system is shown in the second column.

A Hard Road to Every Good Farm

Now let us look at the third column of figures. One of the new laws provides for a tax of two cents a gallon on gasoline. This law will take effect on May 1st. New York State was the last state in the Union to levy a gas tax. It is collected by the State from the large distributing wholesalers of gasoline who must make regular reports and payments to the State.

An important provision in the law exempts all gasoline not used for road purposes from being taxed. Therefore, if you are using gasoline for a tractor or for any other farm purpose, you can get a rebate from the State for the tax you pay on it. Write to the New York State Tax Commission at Albany to get the proper forms on which to ask for rebates.

The gasoline tax made it possible, through increasing revenues to the State, to give farmers the decided relief from their local road taxes.

One provision of the gasoline tax law provides that 20 per cent of all the revenue collected by the State from the tax on gasoline must be returned to the counties to be used in building county roads. If you consult column 3, you will see the great sums which the State is going to return to your county yearly under this provision to give you better

local roads and at the same time to keep down your local road taxes.

There are three sets of roads to keep in mind. First, there are the State highways. The expense of building these has now all been taken over by the State. The second are the county roads, and here again the State is using a part of the gasoline tax to help you build more of these county, or, as they are sometimes called, lateral roads. The third system is the dirt roads. These did not get any extra help this year, and it is a problem that we must all go after next year. Of course, every new county road that it built does away with that much dirt road, so even

some farmers living on dirt roads will get help and all will get tax savings.

It is estimated that with these large sums from the gasoline tax coming back to build county roads every year, in twenty-five years or less, if a careful plan is followed, there will be a hard road in front of nearly every good farm in New York State, and the best of it is that these roads will be built without a back-breaking local tax system.

Help for Towns and Villages

Another road law of considerable importance just passed in the one making

a yearly appropriation from the State, for maintenance purposes for roads in towns and villages, of \$550,000 a year. These towns and villages have heretofore been required to make their contribution toward maintaining State highways. They are now relieved of this extra local taxation. If you consult the fourth column of the table, you will see what the total saving is to the towns and villages of your county under this new act.

Still another new road statute reduces the county's share in the participation of grade crossing elimination costs from 10 per cent to 1 per cent. This is not shown in the table. This provision applies to crossings eliminated during the past three years. Under the old law, if very many grade crossings were eliminated in your county in any one year, it would give you an almost ruinous tax rate. This burden has been practically taken off of the shoulders of the localities and represents a total saving to all counties of \$1,372,096 for the past three years. This saving will increase each year as more crossings are eliminated.

All of the State aid shown in the table does not, of course, take in the great sums of new financial help which the State will give to the schools. We hope a little later to give you tables showing just what the school savings will mean to you. In the meantime, you can figure it approximately for yourself.

How Small Schools Are Helped

The new one-room school law provides that there shall be \$1300 raised next year for running your school. Of this, your own district shall raise only a four-mill tax on your true valuation. All of the rest of the \$1300 will be paid by the State. Suppose you have an assessed valuation of \$80,000 and that your true valuation is \$100,000. A four-mill tax would give you \$400, to be raised locally by your district. The remainder of the \$1300, or \$900, will be paid by the State. Even rich districts will receive some help because the law provides that no matter what the valuation is, the State will give you \$425 aid anyway.

New York will not levy the direct State tax on real estate this year, and this will constitute another saving to farmers. The direct tax last year levied by the State was half a mill, so if you multiply a half mill by your assessed valuation, you can easily find your saving by the elimination of this direct tax.

So we say again that you cannot begin to realize what all of this State aid is going to mean to you until it is actually working.

This practical farm relief is on the statute books today because everybody worked together to secure it. Governor Roosevelt proposed it as soon as he was elected. The Agricultural Advisory Commission which he appointed drew up eight fundamental principles for helping New York State farmers, chiefly with their taxes. Of these eight principles set forth by the Governor's Commission, seven were finally enacted into law. Members of the New York State legislature, particularly those from the rural districts, were also determined to give New York State agriculture a square deal. Their suggestions differed in details from those of the Governor's Commission, but not in fundamental principles. And finally there was substantial agreement which resulted in legislation.

TABLE SHOWING EFFECT OF NEW HIGHWAY LAWS ON FINANCES OF YOUR COUNTY

County	County Saving, 1929 Program	County Saving in Completing System 000 Omitted	Gasoline Tax, County Share	1929 Maint. Tax, Towns including Villages—Saving
Albany	\$	\$ 404	\$ 55,900	\$ 11,935.63
Allegany	4,100	892	108,200	10,833.00
Broome	187,700	479	79,300	10,435.16
Cattaraugus	162,300	1,134	113,100	10,157.22
Cayuga	111,500	1,400	81,500	11,358.79
Chautauqua	280,300	1,007	109,000	14,312.75
Chemung	89,800	354	49,200	5,535.75
Chenango	146,300	504	97,200	11,753.74
Clinton		737	76,200	10,093.92
Columbia	96,300	2,466	78,200	8,183.53
Cortland		747	57,700	6,614.82
Delaware	177,700	1,523	133,700	14,678.08
Dutchess	95,100	1,411	88,000	12,496.84
Erie	142,700	901	121,900	23,191.56
Essex	5,100	933	66,400	11,424.78
Franklin		1,531	73,800	11,839.85
Fulton	181,800	314	40,900	6,157.79
Genesee	137,100	1,197	50,200	6,686.97
Greene		759	58,200	7,693.49
Hamilton		443	19,800	6,493.74
Herkimer	120,600	616	81,400	12,640.15
Jefferson	134,800	959	119,800	18,875.33
Lewis		716	84,400	6,502.28
Livingston		1,344	70,300	10,540.82
Madison	147,900	370	80,800	8,684.40
Monroe	55,900	657	65,100	18,730.86
Montgomery	100,100	827	44,800	8,152.63
Nassau	20,800	376	88,700	5,748.12
Niagara	147,900	657	48,000	9,400.20
Oneida	20,800	1,545	125,200	19,333.80
Onondaga	94,600	1,906	86,300	14,637.83
Ontario	44,300	549	72,900	10,282.53
Orange	109,800	599	81,700	16,559.92
Orleans	200,200	714	37,800	7,304.02
Oswego	137,300	1,232	95,700	12,012.23
Otsego	9,900	859	123,900	11,009.88
Putnam		376	27,200	3,980.27
Rensselaer	19,300	630	68,900	11,719.17
Rockland	88,600	474	19,000	5,897.00
St. Lawrence		1,608	169,900	22,118.18
Saratoga		512	83,700	10,715.83
Schenectady		318	20,300	5,691.77
Schoharie		593	71,700	6,759.28
Schuyler	58,400	233	42,700	5,003.49
Seneca	114,200	893	38,200	6,257.32
Steuben	80,700	1,477	178,600	15,173.83
Suffolk	109,800	2,289	108,600	13,364.79
Sullivan	207,900	2,266	112,100	7,473.98
Tioga	92,400	945	61,600	5,973.42
Tompkins	16,600	412	60,100	7,750.07
Ulster	115,500	1,270	103,600	11,696.56
Warren	403,300	1,182	56,000	5,982.44
Washington	45,700	1,398	86,600	9,365.72
Wayne	127,700	622	75,800	8,604.50
Westchester	{ 400,000 } { 50,900 }	1,313	47,000	16,658.29
Wyoming		1,131	59,300	7,580.21
Yates		1,211	43,900	4,246.60
Totals	\$5,093,700	\$54,215,000	\$4,400,000	\$594,365.66

This table is furnished through the kind cooperation of Arthur W. Brandt, Commissioner of Highways of New York State.

Heed the cry of your HUNGRY Fruit Trees

THEY can't work for you to their full capacity until you feed them. They need nitrogen that is quickly available, and that means Chilean Nitrate of Soda.

An application of Chilean Nitrate will send a stream of new vigor through their branches that means larger fruit, and better quality than you ever had before.

Chilean Nitrate is the only natural nitrate fertilizer—not synthetic—not artificial. It goes to work as soon as you put it out. It costs only a few pennies per tree, and you measure its results in dollars.

Makes 25 trees Beat 50!

"From 50 trees without Chilean Nitrate I harvested just 100 bu. My son, Charles H. Clifton, gets as much growth on young trees in one year with Chilean Nitrate, as we get in two years without it.

"In 1928 I used two lbs. Chilean Nitrate per tree on my Mc Intosh trees and harvested 105 bu. from 25 trees."


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Our new 44-page book "How to Use Chilean Nitrate of Soda" tells how to fertilize apple and fruit trees of all kinds. It is free. Ask for Book No. 1, or tear out this ad and mail it with your name and address written on the margin.

Chilean Nitrate of Soda

EDUCATIONAL BUREAU

57 William Street  New York, N. Y.

In writing please refer to ad No. J-18

Spraying Turns Loss Into Profit

Following is an actual example:

One potato grower in Minnesota spent \$35 per acre for seed and labor. His yield was 100 bushels per acre. At 20c per bushel, his gross return was \$20 per acre—Loss—\$15 per Acre. His neighbor spent \$55 per acre for seed, labor, fertilizer and spray materials. His yield was 360 bushels per acre. At 20c per bushel, his gross return was \$72 per acre—Profit—\$17 per acre.

REPORTED BY "BETTER CROPS"

Avoid blight and shrinkage from rot by frequent spraying with freshly mixed Bordeaux, made with

Nichols Triangle Brand Copper Sulphate

The Standard of Quality—
99% Pure

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USED FROM OCEAN TO OCEAN FOR 50 YEARS
Destroys Mexican Bean Beetle and Army Worm
Saves Currants, Potatoes, Cabbage, Melons, Flowers, Trees and Shrubs from Insects. Put up in popular packages at popular prices. Write for free pamphlet on Bugs and Blights, etc. to /

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To benefit by our guarantee of ads, say

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A.A.'s Western New York Farm and Home Talk

The Outlook for Beans

By M. C. BURRITT

ONE morning in early April, those of us who do the work on Beechwood Farm took a walk over the farm, together, to see how over winter crops



M. C. Burritt

were looking, and to look over the land with a view to the coming season's plans. We found wheat, alfalfa and clover seedlings looking exceptionally well, with practically no winter killing. I do not remember a more even, better stood out stand of wheat, and I was astonished to find a growth of two to four inches in this season's alfalfa shoots. There are even good stands of volunteer clover in fields where none was sown. It is a cheerful prospect.

In early spring, the fresh fields seem to have such promises for the year ahead! The land is clean from rains after the dormant season. The potential weed growth, and insect and disease pests have not yet appeared. One can so easily conjure up the possibilities of crop production. For once in the year it is easy to make money. Here are so many acres, which ought to yield so much. That is a total which at such price should yield so many hundred dollars. The budded plants, the very smell of the fresh earth and the spring air are encouraging, even inspiring. Now, if ever, a farmer should love his farm and his occupation.

And yet those of us who have had sufficient experience, know that only by the wisest planning, timely and skillful carrying out of those plans and plenty of good weather and market luck will we be able to make these crops yield us a profit. Hence, the need of careful planning in the first place. As I have pointed out before, unless one plans an adequate cropping system, he cannot expect an income sufficient to make a profit. Even if he does so plan he may not get the income, but without the plan he certainly cannot.

In planning crops for 1929, many Western New York farmers are seriously considering beans and cabbages. In these notes I want to point out some of the probabilities in the case of the bean crop and some of the factors which appear to make for, and some which seem to limit, success. In later notes we may also do this for cabbages.

Bean Acreage Will Be Heavy

In the first place there is a strong probability that beans will be overplanted. The March "intentions to plant" report indicates a 40 per cent increase in acreage in New York, 25 per cent in Michigan, and 60 per cent in Idaho. The total increase in the U. S. bean acreage is estimated in this report to be 20 per cent which, with average yields, will give 2,000,000 bushels in excess of domestic consumptive needs. Apparently the basis for this increase is the relative good prices, yields, and consequent good total income from the crop in 1928, the prospective increase in the tariff on beans, the tendency to increase bean consumption, and relatively poor returns from other cash crops. Not all of these factors may be operative in 1929. Particularly would it be unfortunate if bean growers should increase their acreage and production to such an extent as to exceed domestic needs and put the marketing of the crop on an export basis because of the surplus. A 10 per cent rather than a 20 per cent increase would appear to be all that is reasonably safe.

An increase in the pea bean acreage would appear to be safer than one in the kidney acreage. The increases in

kidney beans in recent years have been large. Moreover, we have lost our old market for red kidneys in Cuba to local producers there, and to South America. On the other hand, the local supply of pea beans has not been sufficient for two years, and there was practically no carry-over. Our per capita consumption of beans has increased from 6.3 pounds to 8.9 pounds from 1914 to 1928. Michigan and Western New York are the big pea bean producing areas, and they should stick to this crop, but increase the acreage only moderately.

An Expensive Crop to Grow

The production of beans is relatively expensive. Careful cost accounts on quite a number of New York farms show an average cost of \$53 per acre, with a yield of 15 bushels per acre. This would amount to \$3.30 per bushel, even after crediting roughage at \$3.50 per acre. This means that to produce beans at a profit, a grower must either obtain yield of more than 15 bushels or a price of more than 5½ cents per pound. As it is unlikely that the price of 8 to 10 cents per pound which was obtained in 1928 will hold, in 1929, and as he can influence prices very little, it will pay the individual grower to plan his methods so as to obtain the largest possible yield.

Well-drained, fairly open, warm soils are essential for the best growth of this legume. A clover or alfalfa sod to turn under with manure is desirable. In their absence, 300 to 500 pounds of a good grade of commercial fertilizer high in acid phosphate should be made. Early plowing of the land and thorough and frequent tillage are very important. Good seed pays. As 44 per cent of the total cost of production is labor, any saving in this item without sacrificing necessary work and yields, counts heavily. A reduction in cost of one cent per pound on a 15 bushel average yield, would yield a profit of nine dollars per acre. An increase in yield of five bushels per acre would, at 5 cents a pound, assure a profit over average costs, of \$15.00 per acre. On the right soils with proper methods and within limits in acreage the bean crop looks like a good one for Western New York for the season of 1929.

Applying Fertilizer When Setting Trees

Is it advisable to add fertilizer when setting out shade or fruit trees?

It certainly helps the growth of any kind of tree to add either fertilizer or manure. Yet there is a chance that considerable damage will be done if some precautions are not taken. Especially where high analysis fertilizer is used, care should be taken not to add too much and at the same time, it should be mixed very thoroughly with the soil. Care should also be taken that fertilizer does not come in direct contact with the roots or the result may be that the trees will be killed.

Geneva Red Kidney Bean Proves Worth

Last year I read something about the Geneva red kidney bean. Have you any information as to how this variety yielded last season, and whether it is still recommended?

RESULTS last summer showed that the red kidney is a heavy yielder, and that it is resistant to disease. Reports indicate that it consistently out-yielded other varieties of red kidney.

Kill the corn borers by putting the corn in the silo. If the insect escapes the knives of the cutter, it will die of suffocation.

The Easy Way to Kill Lice on Poultry



No matter how big the flock or how lousy, only a small paint brush, a can of "Black Leaf 40" and a few minutes time for "painting" it on top of the roosts are required to rid an entire flock of body-lice. Do away with old laborious and disagreeable methods of dusting, dipping and greasing!

Just Paint the Roosts with "Black Leaf 40"

About a half hour before fowls perch, "paint" "Black Leaf 40" on top of roosts. When fowls perch upon roosts that have been so "painted", fumes are slowly released that permeate the feathers, killing the lice. The treatment is so easy, effective and cheap that poultry owners need never be bothered by lice on their flocks. Think of the time, labor and expense that this method saves! There is no individual handling of fowls. "Black Leaf 40" is sold by poultry supply dealers, druggists, hardware and seed stores, etc. Ask your dealer or write us.



"SAFETY FIRST"



"Come away! That's no place for a little bug like you! Can't you see those vines are sprayed with Pyrox?"

PYROX, the scientifically prepared triple-duty plant spray **KILLS BUGS**, prevents the development of blight and disease, and stimulates plant growth. Users report \$25, \$35, and \$50 **EXTRA PROFIT** per acre from potatoes and other vegetables sprayed with **PYROX**. Safe, quick, and easy to use—and sticks. All sizes from 1 lb. jars to barrels. Now priced lowest in 30 years' successful use. Write us or ask your dealer for new Spray Guide—free. Bowker Chemical Company, 419 Fourth Avenue, New York.



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Set plants NOW. We Will Send You
50 Premier best early
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All for \$2.50 postpaid. 25 plants of each \$1.50 or 100 of each \$4.00, all postpaid. Berry-Book Free.
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Green Mountains, Irish Cobblers, Smooth Rurals and Russet Rurals—College inspected. Satisfaction upon arrival guaranteed. Write for prices. We pay the freight.
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Be sure to say you Saw it in
AMERICAN AGRICULTURIST

Seneca County's First 4-H Sheep Club

ON the evening of March 15th five boys met in Romulus, N. Y., and organized the first 4-H sheep club in Seneca County. This meeting was held in connection with a meeting of the Seneca County Sheep Breeders Association. W. G. Jack of Canisteo, N. Y., and president of the New York Sheep Breeders Association, who was present to speak to the Seneca County sheep breeders, also spoke to the sheep club members. In addition to giving the boys some good advice he announced that regularly enrolled 4-H sheep club members were eligible to pool their wool at membership rates through the New York Sheep Breeders Association.

The boys chose Ward Newman as their president, and B. Van Nostrand as their secretary. D. M. Dalrymple, the Seneca County Agricultural Agent, will act as local leader. He will meet with the boys at their regular meetings and will assist them with their projects. When the club was organized the boys owned a total of 12 sheep. Probably their flocks have increased somewhat by this time. Several of their ewes were due to lamb this spring.

In addition to taking care of, feeding and managing these sheep the boys also will keep accurate cost of production records on their projects. They intend to show their sheep at a county round-up and probably one or two of the boys will show a few of their best lambs at the next New York State Fair.—J. P. Willman.

"We Will Meet You in St. Louis"

DO you remember the old song published at the time of the St. Louis World's Fair:

*We will meet you in St. Louis, Louie,
We will meet you at the Fair.*

Well, the dairymen of the New York Milk shed, some of them at least, are going to repeat history and meet dairymen from all over the country at the National Dairy Show to be held in St. Louis from October 12 to 19. They are going on the big American Agriculturist excursion train, announced in our columns a short time ago. Already letters are beginning to come in asking for information, so that there seems that enough to make up a big train is assured.

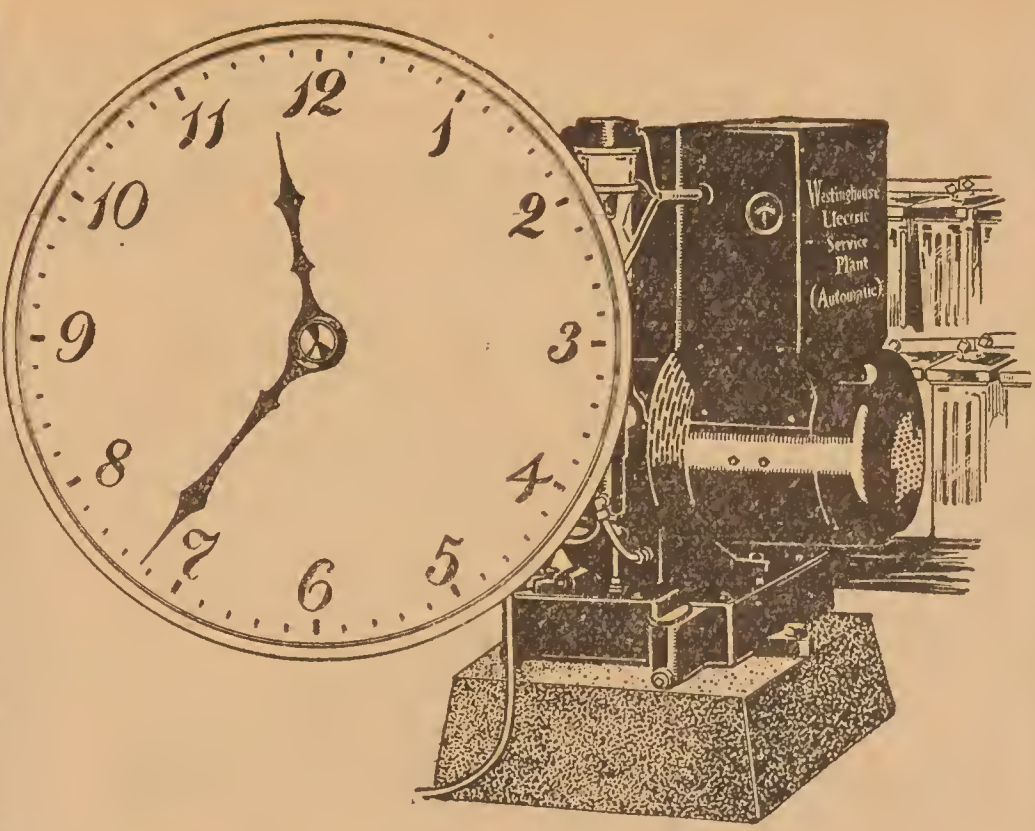
Although the railroad fare will be at excursion rates, there will be fine meals on the train and comfortable berths in which to sleep. Whole families are planning to go. Plans are already under way for a lot of fun and frolic on the excursion train. A regular program is being planned, which includes a band or orchestra.

Besides the fun and recreation which the farm family will get, it is hardly necessary to name the educational results which you are sure to have from the show itself and from meeting so many dairymen from all parts of the country.

The party will spend two or possibly three days in St. Louis at the show and an equal amount of time going and coming. All of the details and the worry of obtaining reservations and making other plans necessary for any trip will be taken care of by American Agriculturist, cooperating with the New York Central Railroad, so all that you will have to do is have a good time. American Agriculturist is not planning to make any profit; our only object is to give all of our dairymen friends who can arrange to go a happy and profitable vacation.

If interested, write us for further details.

We have frequently received requests from subscribers asking how to protect metal roofs against lightning. The Sheet Steel Trade Extension Committee of 511 Terminal Tower, Cleveland, Ohio, has recently put out a folder giving complete directions and complete information on this subject. They will be very glad to mail a copy of this folder to any one who requests it.



A new 24-hour . . . electric service

Here, at last, is the electric service you've always wanted. An electric service that will give you *all* the power and light you need at *any* hour of the day or night. An electric service that can be installed right on your own farm—that will make you your own Light & Power Company.

The new Westinghouse Automatic Electric Service Plant is the last word in light plant design. It is a new type of plant that runs itself. You don't need to go near it for days, even weeks, at a time. It means a considerably smaller battery—longer battery life—and less replacement cost. It guarantees electric service that is always automatic; always economical; and always reliable—every hour of the 24.

Ownership of a Westinghouse Automatic Electric Service Plant will give you a greater opportunity to do more work with less effort and in less time . . . a greater opportunity to profit from your labor . . . and a greater joy in living.

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It tells you in simple, direct language all the things you will want to know about this new electrical service that Westinghouse is offering to farmers. Just send in the coupon below for your copy of this story.

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Westinghouse Electric & Mfg. Co.,
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Please send me more information about your new 24-hour Electric Service and your easy payment plan.
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**"The crows went over
and pulled up my
neighbor's corn"**



writes J. E. Meyers of West Salem, Ohio. And from that day on Mr. Meyers' crow troubles were over, for he said further, "I tested your Crow Repellent and found it to be just as you recommended."

With a successful record of over 20 years behind it, Stanley's Crow Repellent is the one sure cure for crow troubles. Not only crows, but moles, squirrels and all pests leave your cornfield severely alone, if you treat your seed-corn with it just before planting. It is not poisonous.

Large can, enough for 2 bu. of seed-corn (8 to 10 acres) \$1.50. Half size can \$1.00. If your hardware, drug, or seed store doesn't have it in stock, then order direct. "Money Back" guarantee. Address Cedar Hill Formulae Co., Box 500M New Britain, Conn.

Be sure you get

STANLEY'S CROW REPELLENT



DIBBLE'S tested SEED CORN



Northern grown from pedigree stock seed. Average germination all lots tested to date above 95%.

Varieties that we have found best adapted either for husking crop or the silo for the Middle and New England States.

Dibble's Early Yellow Dent.....	\$2.25 per bu.
Dibble's Improved Leaming.....	\$2.25 per bu.
Dibble's Mammoth White Dent.....	\$2.25 per bu.
Dibble's Big Red Dent.....	\$2.75 per bu.
Dibble's Mammoth Yellow Flint.....	\$2.75 per bu.
Cornell 11.....	\$2.75 per bu.
White Cap Yellow Dent.....	\$2.75 per bu.
Sweepstakes.....	\$3.00 per bu.

Bags free of course.

If you wish immediate shipment, it will save time if you send in your order direct from this advertisement. We will ship the same day order is received.

Varieties are illustrated in color with full and accurate description in DIBBLE'S Farm Seed Catalog which with complete Price List is Free. Address:

Edward F. Dibble Seedgrower,
BOX C, HONEOYE FALLS, N. Y.
Headquarters for Seed Corn, Oats, Barley, Alfalfa Clover, Grass seeds, Seed Potatoes, etc.

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PREVENTS CROWS
PULLING YOUR CORN
1 BUSHEL SIZE 60c
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4 BUSHEL SIZE \$1.50
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"FRIEND"
Traction Sprayers
Write for catalog and learn about the many exclusive features of this fine sprayer.
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Best for May, June and July planting. Just as good as pot-grown plants at 1/2 the cost. Also Raspberry, Blackberry and other Berry Plants. Asparagus, etc. Catalog of Trees, Shrubs, Plants, Vines, free. Address
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**LIVERMORE'S
PEDIGREED SEEDS**
Potatoes - Oats - Barley - Silage Corn
Husking Corn - Cabbage
From HIGH YIELDING, TESTED STRAINS. Inspected for disease-freedom and purity.
K. C. LIVERMORE, Box A, HONEOYE FALLS, N. Y.
Write for catalog and prices.



With the A.A. Crop Grower



Steuben County Potato Growers Meet

SOME 800 potato growers in Steuben County attended the second annual Convention held at Cohocton recently, and heard interesting discussions on many phases of the potato industry. The meetings held in the Warner Opera House were presided over by C. D. Wolcott, Atlanta; Charles Noble, Prattsburg; Frank French, Wallace; C. A. Silke, Rexville; Earl Coye, Cohocton, and Leo Briggs of Fremont. The discussions of the first day were on potato diseases by C. H. Chupp and the outlook for the 1929 potato deal and potato marketing by M. P. Rasmussen of the College of Agriculture. The first talk on Thursday morning was a summary of the economic survey of potato production in Steuben County in which V. B. Hart based his talk on cost figures taken on 49 Steuben County farms. R. L. Gillett of Albany, in charge of crop reports, told how crop reports are made. On Thursday afternoon Prof. E. V. Hardenburg led a discussion on seed and fertilizer and F. G. Phillips of the Market Basket Stores, talked on trade requirements and chain store buying of potatoes.

A Potato Grading Demonstration

A demonstration of potato grading was given Friday morning by H. S. Duncan, Inspector in Charge. George W. Lamb, secretary of the New York State Certified Seed Potato Growers Association of Utica, told how seed growers cooperate to market the crop.

C. R. White, president of the New York State Farm Bureau Federation, talked to a full house Friday afternoon. Awards to winners of the slogan contest conducted by the farm bureau in its potato improvement program, were made by R. C. Turnbull, president of the Bath National Bank. The winners were: 1. Clinton & Douglas York, Greenwood; 2. Lena Martin, Kanona; 3. Pauline Coots, Howard; 4. Roberta Stephens, Greenwood; 5. Barbara Burns, Howard; 6. Harry Meyer, Canisteo; 7. Winona Williams, Arkport; 8. Chas. Davis, Hornell; 9. Elizabeth Teribury, Andover; 10. Vernon Pickle, Fremont; 11. Amber Case, Greenwood; and 12. Eva Saxton, Cohocton. A total of \$100 in cash prizes was awarded to the twelve winners. Clinton York's slogan was "Better potatoes is the growing demand, use better seed, better care, and better land."

Earl Coye and Lee Edmonds of Cohocton, received gold medals as premier potato growers from E. V. Hardenburg, secretary of the New York State Potato Club. Mr. Coye winning third and Edmonds 10th in the contest conducted by the Club. Geo. Adams, Cohocton; Murray McNaughton, Hornell; Martin Quanz, Wayland, and Robert Van Wormer, Atlanta, received ribbons for their exhibits in the Steuben County exhibit which won first prize in the 4-H potato show at Utica in January. The other exhibitors were Herman Strobel, Arkport; Erwin Kurtz and Martin Mark, Wayland; Carl Fleishman and Clifford Wheaton, Cohocton, and Delos Conderman, Hornell.

Old Time Fiddlers Entertain

A feature of the afternoon's program was an old-time fiddler's contest in which Byron King of Wayland, won first honors; Henry Morse of Bath, second; and Floyd Sauerbier of Wayland, third.

There were three classes in the potato show which was judged by Geo. Lamb and E. V. Hardenburg. The blue ribbon in the seed class went to E. C. Hollenbeck of Tully; Charles Noble, Prattsburg, won second; and E. C. Hollenbeck, Tully, third; Lewis Atwood, Avoca, fourth; C. D. Wolcott, Atlanta, fifth; E. C. Hollenbeck, Tully, sixth; George Mehlenbacher, Cohocton, seventh; Noble Bros., Cohocton, eighth; Clair Wallace, Cohocton, ninth; and Leo Briggs, Fremont, tenth. The placements in the table stock class were as follows: Deyo Van Wormer of Atlanta, first; Erwin Wise, Cohocton, second; H. A. Stanton, Atlanta, third; Floyd Newman, Wallace, fourth; C. D. Wolcott of Cohocton, fifth; Bernard Mark, Wayland, sixth; Lee Edmonds, Cohocton, seventh; Murray Loveland, Cohocton, eighth; Arthur Zimmer, Cohocton, ninth; and Fred Mehlenbacher of Wayland, tenth. In the junior exhibit Robert Van Wormer of Atlanta, won first; Geo. Adams, Cohocton, second; Murray McNaughton of Hornell, third; Erwin Kurtz, Wayland, fourth; Harry Coye, Cohocton, fifth; Martin Quanz, Wayland, sixth; Carl Fleishman, Cohocton, seventh; Floyd Edwards, Avoca, eighth; Ernest Wise, Cohocton, ninth; and Delos Conderman, Hornell, tenth.

A show of potato machinery was held in the Hoyt Garage through the courtesy of local machinery dealers and leading manufacturers. Several fertilizer companies had booths in the Convention Hall.—Wm. Stempfle.

We have recently received a number of inquiries about growing mushrooms. We suggest that any one interested in mushrooms either for home use or market, secure a copy of Farmers Bulletin 1587, Mushroom Culture for Amateurs, which has just been put out by the Department of Agriculture. The bulletin is free and will be mailed upon application to the U. S. Department of Agriculture, Washington, D. C.



Steuben County Juniors Win At State Potato Show—Left to right: George Adams, Cohocton; Murray McNaughton, Hornell; Martin Quanz, Wayland; Robert Van Wormer, Atlanta; Erwin Kurtz, Wayland; Carl Fleishman, Cohocton; Delos Conderman, Hornell.

Greening Seed Increases Yield of Potatoes

WE have frequently heard discussions as to the results of greenings or sprouting of potatoes previous to planting. Recent experiments at the Canadian Experiment Station throw some light on this subject. It is of course possible that more difference would be noted there than would be farther south in American Agriculturist territory.

This experiment has run for five years during which time the potatoes which were greened were exposed for six weeks before planting to subdued light at a temperature of 40 or 50 degrees Fahrenheit. Following are the results of the experiment:

Variety	Treatment	Average number of days from planting until ready for use	Yield per acre Five-year average marketable
Irish Cobbler.....	Sprouted	70.8	316 bush. 8 lb.
Irish Cobbler.....	Unsprouted	82.6	272 8
Green Mountain.....	Sprouted	80.0	372 28
Green Mountain.....	Unsprouted	83.0	341 —

This shows that Irish cobbler from greened or sprouted seed were ready to use 12 days earlier than from unsprouted tubers and that an average increase in yield of 44 bushels of marketable potatoes was obtained. Where Green Mountains were planted they matured 9 days earlier and gave 21 bushels more per acre.

Millet As a Nurse Crop of Hay

Will it be all right to seed timothy and clover with millet instead of with oats.—A. M., Pennsylvania.

WE doubt whether you would get good results by seeding timothy and clover with millet. The reason for this is that millet is a hot weather crop and is not ordinarily seeded until corn planting time which would be too late to get a good seeding of hay. Even if you could seed it early the millet makes such a dense growth that we believe it would tend to smother out the grass seed.

Sweet Clover for Hay

Would it be possible to graze sweet clover, early in the spring and check its growth, so that it can be cut for hay about the same time that timothy and clover should be cut?—R. D., New York.

SWEET clover is recommended for Spasture rather than for hay, although some dairymen report excellent results from it as hay. It is quite possible to graze the sweet clover early in the season, so that it will not grow too mature before time to cut it for hay.

Fertilizer Applied to Potatoes Shows in Grain

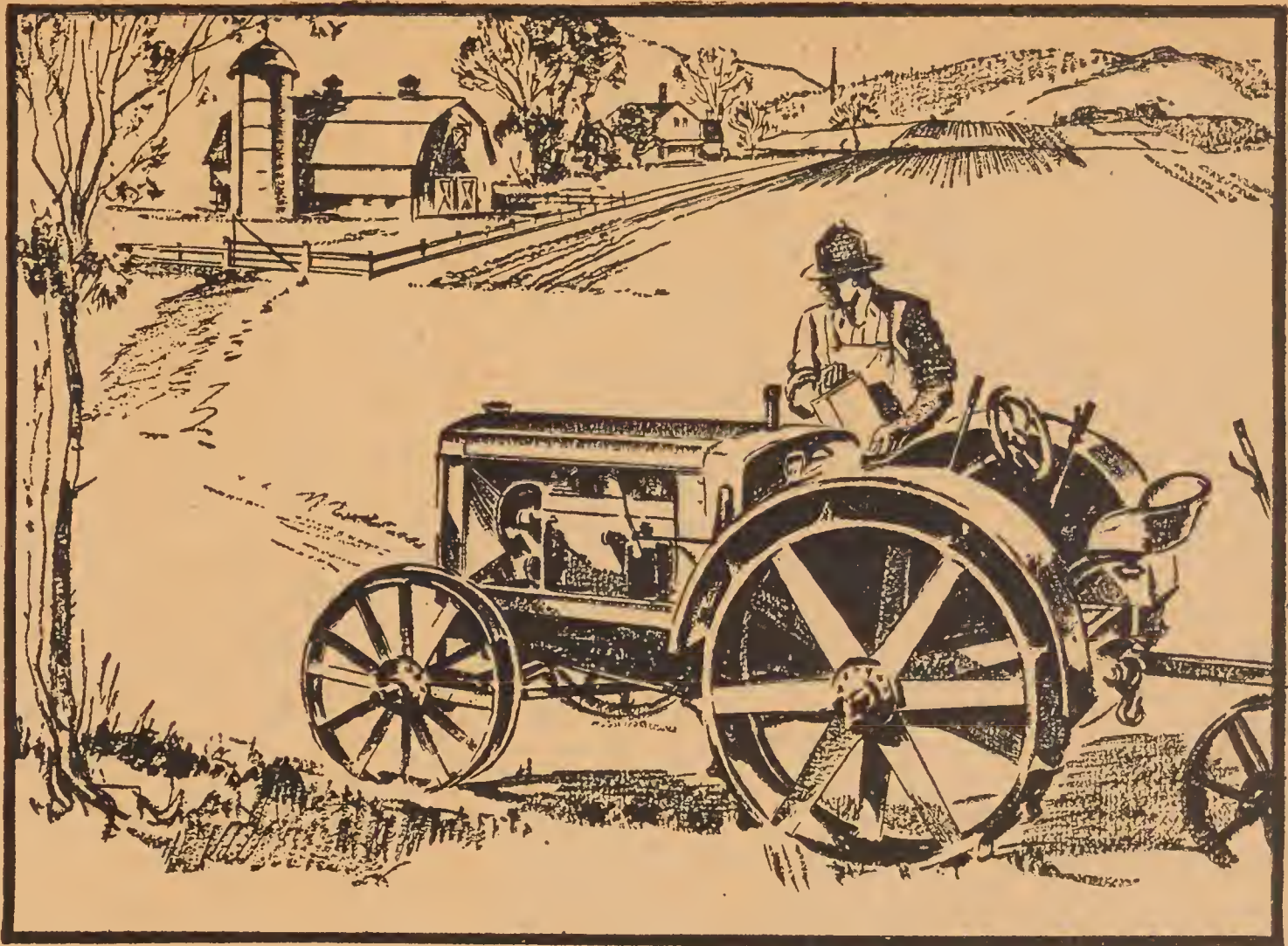
What causes the grain to grow better over potato rows where grain follows potatoes and is there any way that this can be prevented?—R. M., New York.

IT is probable that the phosphoric acid in the fertilizer applied to the potatoes is the principal cause of this tendency. One possible way of stopping it would be to broadcast the major part of the phosphorus in the form of superphosphate and then to apply a mixed fertilizer relatively low in phosphorus in the potato row.

Buying Concentrated Superphosphate

Is there any marked difference in the cost of phosphoric acid in the 16% superphosphate as compared with 40% superphosphate?—F. G., New York.

WHERE 40% superphosphate sells for \$46. a comparable price for the 16% would be \$18.50. Where one has to draw this material a long distance, it would be well to consider buying the more concentrated material. On the other hand, the 16% goods contains considerable landplaster. While New York State farmers are not advised to buy landplaster, it is probable that it is worth drawing home.



Is your farm machinery ready for spring?

Now is the time to fill up with Socony Parabase Motor Oil

IF YOU go to your nearest Socony dealer today he will tell you about Socony Parabase Motor Oil and how it insures long life for your tractors.

Socony Parabase Motor Oil is made from the finest paraffin base crudes. Lubrication experts agree that paraffin base crudes make the best motor oils.

Put this oil in your tractors. It means quieter, more efficient operation. And it greatly reduces wear. Remember, too, that for true Socony performance you should use Socony Special Gasoline.

Then your tractors will be ready for a real summer's work. And you will secure the protection that only Socony products can give.

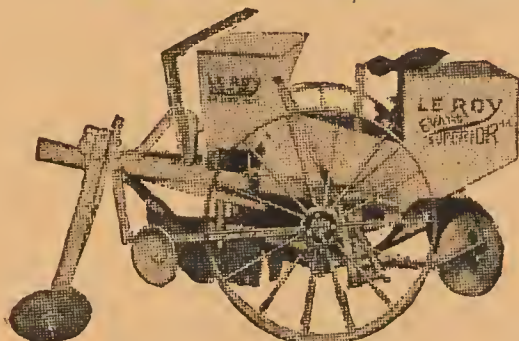
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With the A. A. Dairyman



Plan Now for Next Fall's Milk Supply

THOSE of us who live in the New York Milk Shed and are giving thought to the question of an adequate supply of milk to meet market requirements next fall are confronted with what seems to be conflicting evidence.

In its preliminary statement, the Milk Supply Stabilization Committee brought out the fact that the industry's most burdensome surplus occurs in January, February and March. Yet in the latter part of February, what seems to have been the first exception to the rule came, when there was a shortage of cream which of course means a shortage of milk. A few smaller dealers who apparently do not rely upon a dependable source of supply for their cream, found themselves short and demanded the immediate extension of the area, in order to get some cream. If they had been successful, in this demand, then by the same token the milk shed would have been extended with obvious results. Fortunately for the benefit of all, some of the larger purveyors who had supplies, came to the rescue and averted an impending crisis.

About Cream Requirements

No less an authority than the College of Agriculture reveals the fact that it requires around 18 per cent of the milk to meet cream requirements. Within the past few years the exclusion of uninspected cream by New York City has been more rigidly enforced. Any one who is familiar with the price of cream in New York City in the past, and the price of uninspected cream just outside can not but appreciate what this means to dairymen supplying New York City.

The acute shortage of milk last fall was for a period of a few days—probably not more than a week—although the demand was close up to the supply for some considerable time.

The Stabilization Committee states as a result of its findings, that the milk shed can supply the milk, that a sharp reduction in prices in early spring shows a reduced production in November following and that uncontrolled independent milk caused a drop in prices a year ago. It has been shown that classified price plan of selling has relatively increased the early summer prices, and reduced fall prices. The producers uniformly say that they must produce milk when it will make the most money, and from indications that seems to be in May and June. They also uniformly say that they can and will produce sufficient milk in fall and winter if the price is high enough to make it an inducement.

If these statements are true, and they do not seem to be disputed, how are we to reconcile them?

Cream Should Be Supplied By Milk Shed

If these statements are true, and the fluid market should also help supply the cream requirements. Failure to do so may result in a repetition of what happened in February and we may find our milk shed extended, or that buyers will purchase their milk from the source that can supply them with cream also. We may find that the temporary expedients now being urged should be heeded, that it will be money well invested to produce the milk necessary to meet the situation next fall, and that if sharp reductions in prices in the spring months or any time of heavy surplus are to be averted, some agency with sufficient authority or strength must control the supply thereby regulating and stabilizing prices.

The producers of this milk shed are in a position hardly to be thought of years ago. Think of the conditions now. We have hearty cooperation on the part of the City Health Department; a protective wall around our

producing area; a place for surplus at reasonable prices, cooperation on the part of most dealers. Twelve years ago there were complaints by the thousand, of unjust treatment by city inspectors, producers were cheated on butterfat tests, there was a surplus nearly twelve months of the year and fights to make dealers keep their plants open and take it, strikes threatened every few months with but few places for the milk except to dump it, and eighty-five to ninety thousand dairymen fighting that each one should get the same price.

Perhaps you have forgotten it, others have not. When there is no threatening common enemy to fight we seem to have to quarrel among ourselves. Business acumen demands that we save and preserve the results obtained. It is about time we dismissed prejudice and feeling and call in sound judgment and keep this protective wall. If the dairymen ever had a common cause requiring united action it is now.

Short Time Producers

EVEN old-timers among dairymen are often fooled by the cow who is a short-time producer. There are quite a few cows that give a lot of milk when they first freshen, and the man who walks out with a brimming pail from such a cow concludes that she is a real producer. However, he may be too busy to notice that her production falls off rapidly and that possibly before the third month of lactation she is close to the boarder class.

Another way that dairymen are often fooled by apparently good cows is by their low production of butterfat. The farmer often wonders why he gets no better tests at the milk station or, if he happens to be separating his milk, why there is so little cream. The reason is often found in two or three individuals in the herd that are naturally low butterfat producers. If their milk were sold alone, it would not meet the state law requirements.

If these cows give a lot of milk, and if there are enough good butterfat producers in the herd to over-balance, this does not matter. But if you are having trouble in meeting the requirements for butterfat, it might pay you to locate the cows that are making the trouble.

The only answer to both of these problems of individuals with short-time production and low butterfat is to weigh the milk regularly of every cow for a time and test for butterfat content.

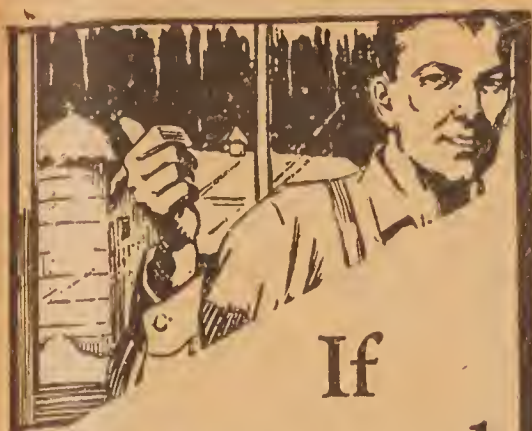
Why Milk Sometimes Has a Bad Odor

ONE of the irritating problems of the everyday dairy business is getting a batch of milk every little while that is off in flavor or has objectionable odor.

There are quite a few feeds that influence the quality, and particularly the flavor of milk. For example pasture grasses, soiling crops, and carrots impart a yellowish tinge to milk fat. But there are other feeds, which, due to small quantities of oils which they contain, give a bad flavor to milk apparent to everybody. Some of these feeds are onions, leeks, which the cattle may pick up in the pasture, turnips, rape, etc. Where it is necessary to use some of these feeds as a part of the ration, they should be fed always after and never before the milking.

Sometimes when a cow is far along in lactation her milk grows bitter and distasteful. Eckles, a dairy authority, states that so far as he has observed, this occurs only when the animal is far advanced in pregnancy and rarely happens when green feed is supplied. He

(Continued from Opposite Page)



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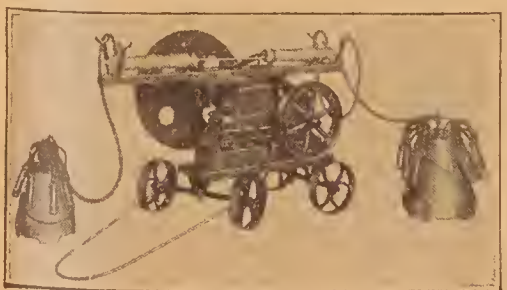
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When Writing Advertisers, Be Sure to
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(Continued On Opposite Page)

writes that reducing the grain ration and giving two or three doses of Ep-som salts may remove the trouble.

Henry and Morrison in their book, "Feeds and Feeding", comment on this problem of odors and taste in milk very interestingly as follows:

It is probable that the milk of every cow, aside from the influence of feed, possesses a distinctly individual flavor too delicately fine to be observed by most humans, but plainly noticed by others. It may be that in the future, when the grosser problems now perplexing the dairymen have been solved, it will be found that certain cows yield a peculiarly palatable milk. Should this prove to be the case, then through selection there may be established breeds or families possessing this ultra-refined and most desirable quality.

"The whole subject of odors and flavors in milk and dairy products is greatly complicated by the fact that there is a wide range in the ability of different individuals to detect and distinguish them. Flavors and odors plainly evident to one person are unnoticed by another. Often odors and flavors charged to feed or cow are due to contamination of the milk in the stable or elsewhere, after it is drawn from the cow."

Minimum Amount of Whole Milk for Calves

What is the minimum amount of whole milk that can be used in growing a good calf?

THE Ohio station raised good calves with skim milk, and skim milk powder and fed only from 130 to 180 pounds of whole milk. The New Jersey station has raised calves without skim milk by feeding whole milk for three weeks, and gradually discontinuing the whole milk during the fourth week. This would require approximately 300 pounds of whole milk.

Where skim milk is not available the New York State College recommends feeding some whole milk until the calf is from fifty to sixty days old which will require from 400 to 500 pounds.

Drying Off Heavy Producers

We have a cow that we can dry off only with the greatest difficulty. Can you give us any suggestions?—D. C., New York.

WHERE a cow is on pasture she may be brought into the barn and fed on hay only. Where cows are in the barn omit all grain and if alfalfa or clover hay is being fed, substitute a poorer grade of hay. Milk her only once a day and then every other day, as soon as possible. When she will go for five or six days without milking, it is usually safe to omit milking altogether. As soon as she is dry, feed a good fitting ration in order to get her in the best possible condition before freshening.

Fitting Cows for Official Testing

We are planning to do some official testing on a few cows. How should we go about fitting them for the test?—C. R., New York.

FIRST your cows should be dry a little longer than usual, at least two months and preferably three. The cows should be fed legume hay, silage and a good fitting ration. If you want to home mix a good ration, use 30 pounds hominy, 30 pounds wheat bran, 30 pounds ground oats, and 10 pounds of oil meal. Usually an animal can be fed all she will clean up of this ration. The idea is to get her in the best possible condition so she will have a reserve of body fat to draw on later in the lactation period.

New York now needs more, and bigger, and better horses. The horse situation is discussed in a Cornell bulletin, E 169. A free copy may be obtained by writing to the college of agriculture, Ithaca, N. Y.



CATTLE

CATTLE

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HEALTHY All from herds under State and Federal Supervision—Mostly Fully Accredited—60 day retest.

90 Fresh cows and Close Springers.
30 Cows bred to freshen in the fall.
50 Bred and Open heifers, a beautiful lot, that will go right out to pasture and grow into money for you.
25 Bulls of Rich Breeding. Selected for their type, breeding and quality. Bulls for the best registered herds, the best part registered herds, and the right kind to head good grade herds. At prices you can well afford to pay.

THIS IS THE SALE THAT YOU SHOULD ATTEND

Cattle placed aboard cars, with hay and bedding for journey free. Hundreds of dairymen and breeders throughout all parts of the east have bought at these sales with satisfaction.

You can select here just what you are looking for, from a large number, and save the time, and expense of much travel—and you can buy at your price. The sales manager takes care of all the details, and you are assured of your papers promptly.

BE SURE THAT YOU ARE ON HAND WHEN THIS IMPORTANT SALE STARTS

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These fine young bulls
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1929 MAY 1929

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MAY 15: Annual Meeting, Commodore Hotel, New York City.

16: National Sale, Trenton, New Jersey.

17: Coventry-Florham Sale, Trenton, New Jersey.

18: Ward Acres Dispersal, New Rochelle, New York.

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Breeds—Chester and Yorkshire cross, and Berkshire and Chester cross. Crating free. These prices F.O.B. our depot. Will ship any number C.O.D. or send check or money order.

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Buy where quality is never sacrificed for quantity. We sell only high grade stock from large type Boars and Sows, thrifty and rugged, having size and breeding. Will ship any amount C.O.D.

Chester & Yorkshire — Berkshire & Chester
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Satisfaction guaranteed or money refunded. 10 days trial allowed. Crates supplied free. A. M. LUX, 206 Washington St., Woburn, Mass. Tel. Wob. 1415.

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Have a Debate in Your Grange

Send 2 cents to cover postage for an outline on the subject:

Is the young man who chooses farming as a life work making a mistake?

American Agriculturist
461-4th Ave. New York City

Reviewing the Latest Eastern Markets

Milk Prices

The following are the April prices for milk in the basic zone of 201-210 miles from New York City.

Dairymen's League prices are based on milk testing 3.5%. Sheffield on the basis of 3%.

Class	Dairymen's League	Sheffield Producers
1 Fluid Milk....	3.37	3.17
2 Fluid Cream		2.30
2A Fluid Cream	2.46	
2B Cond. Milk..		
Soft Cheese....	2.71	
3 Evap. Cond. Milk Powder		2.15
Hard Cheese	2.35	
4 Butter and American cheese. Based on New York City Market quotations on butter and American cheese.		

The Class 1 League price for April 1928 was \$2.90 for 3.5% milk and Sheffield's \$2.80 for 3%.

The above prices in each class are not the final prices the farmer receives. The final price received from the dealer is the result of the weighted average.

Butter Mart in Better Shape

CREAMERY	Apr. 17	Apr. 10	Apr. 18, 1928
SALTED			
Higher than extra....	46 -46 1/2	45 -45 1/2	46 -46 1/2
Extra (92sc).....	45 1/2-	-44 1/2	45 1/2-
84-91 score.....	44 -45 1/4	43 -44 1/4	43 1/2-45 1/4
Lower Grades.....	42 1/2-43 1/2	42 1/2-42 3/4	42 1/2-43

The butter market is in much better shape than it was a week ago at this time. We have been enjoying a good consumer demand. The chain stores have been featuring a 49c retail price which has stimulated buying considerably. In addition we have had good outside buying, so that, all in all, stocks have been moving well and receipts have been clearing closely. Over the week-end from April 13 to April 15, we had a more limited carry-over with the result that the week ending the 20th opened with a firm market. Receipts early in the week have not been too heavy, with the general result that prices have not only held steady but actually gained.

Buyers have been taking hold well. They are still a little cautious and are not anticipating trade needs beyond the immediate future. However, they are paying the price and thereby keeping trade in a healthy condition.

The extremely stormy weather that we have been experiencing has had a marked effect on the market. Traffic in the harbor was seriously interfered with, many car-floats being delayed. In addition to that, the revision to wintry conditions had the effect of changing buyers' minds about the coming of spring.

There is only one fly in the ointment; New York is above par with Chicago and it may be that we will see some butter diverted from the West. If that takes place we are going to see a readjustment.

Slightly Better Demand for New York Fresh Cheese

STATE	Apr. 17	Apr. 10	Apr. 18, 1928
FLATS			
Fresh Fancy.....	23 -25	23 -25	22 -22 1/2
Fresh Average.....			
Held Fancy.....	27 1/2-29 1/2	27 1/2-29 1/2	29 -30
Held Average.....			

There is just enough improvement in the demand for New York State whole milk flats to talk about. Al-

though prices, as yet, show no improvement, the change in sentiment is worthy of note. Receipts are light, but we have not had sufficient demand to warrant a heavier supply. The buying element has just been strong enough to absorb the arrivals without disturbing values. More cheese coming in would have resulted in a downward revision in prices.

The market on New York held flats remains fairly steady. Cured Daisies, on the other hand, are easier with a good many available within the range of 25c to 25 1/2c. Occasionally some very light colored stock, made early, reaches the cent premium.

On April 1, holders of American Cheese in public warehouses throughout the entire United States were reported to have had on hand 45,024,000 pounds compared with 31,887,000 pounds on April 1 last year. From March 1 to April 1, our cold storage holdings were reduced 4,522,000 pounds compared with 4,823,000 pounds a year ago.

Egg Prices Improve

NEARBY WHITE ..	Apr. 17	Apr. 10	Apr. 18, 1928
Hen's Sel. Extras....	34-36	33 -34	34 -35
Hen's Av'ge Extras....	33-	31 -32	32 -33
Extra Firsts.....	30-32	30 -30 1/2	31 -31 1/2
Firsts	29-29 1/2	29 -29 1/2	30 -30 1/2
Undergrades	26-29		27 -31 1/2
Pullets			
Pewees			
NEARBY BROWNS			
Hennery	34-36	28 1/2-31	33 1/2-35
Gathered	29-33 1/2	32 -34	28 1/2-33

We have had a much improved egg market this week. On April 13 and 15 especially the buying element was particularly active. Prices were carried upward not only on nearbys but practically all descriptions. The extra demand for large size eggs of all colors was influenced largely by the approach of the Jewish Passover. However, there was increased speculative interest that materially affected the entire trade. Up to the present, speculative interest has been quite restricted. Most of the local storage operations have been of a different character. The higher grades of storage packings arriving here on contract have often cost a premium over current quotations on the day of arrival. Many of these have been forced into storage lacking a profitable outlet. These high cost goods will undoubtedly move out as soon as our market advances to a point that will make it profitable to offer them to the trade.

Storage stocks have been accumulating less rapidly in New York City than they did a year ago. However, in the ten largest markets making daily reports the into-storage movement has been on the increase. From April 5 to April 12 the holdings in these ten cities have increased 509,000 cases. Whereas a year ago during the same period the holdings increased 436,000 cases. On April 12 the ten cities reported having on hand 966,000 cases, while on May 12, 1928 those same cities reported 1,113,000 cases.

Brown eggs of the higher classification have been selling on par with the best grades of whites.

Live Poultry Receipts Heavy

FOWLS	Apr. 17	Apr. 10	Apr. 18, 1928
Colored	30-32	33-35	30-31
Leghorn	28-30	-35	30-31
CHICKENS			
Colored			
Leghorn			
BROILERS			
Colored	40-55		40-52
Leghorn	35-45		35-45
CAPONS	45-50	45-50	-50
TURKEYS	40-45	40-45	
DUCKS, Nearby..	26-30	27-30	23-24
GESE	17-18	-18	

Extremely heavy receipts of live poultry during the first three days of the week ending April 20 resulted in a confused and jumbled live fowl market. The situation on fowls was a grand mix-up. On Tuesday the 16th there was no adequate basis on which to establish buying. Price cutting was much in evidence, buyers were extremely cautious and receivers were jumpy. The accuracy of the car listings for the week was in doubt and all in all it was worse than a poker game, or a crooked

horse race. Some were of the opinion that because arrivals were so heavy early in the week, we would see a falling off in the latter days. By Wednesday night, however, conditions had not changed. It is very evident at this writing that there were too many fowls in the market this week and too many coming forward to hold up prices. It is hoped that some of the cars will be diverted and other cars held on the track.

Express fowls have been selling slowly, principally because of the fact that the freight market is dominating the situation. Leghorn fowls especially are slow. Broilers, on the other hand, are not too plentiful and prices averaged a little higher. Undoubtedly the severe storms these last few days have been directly responsible for this.

Old Potatoes Dull

STATE	Apr. 17	Apr. 10	Apr. 18, 1928
150 lb. sack.....	1.60-1.75		3.50-3.75
Bulk, 180 lbs.....			
MAINE			
150 lb. sack.....	1.75-2.00	1.75-2.00	3.25-3.85
Bulk, 180 lbs.....	2.00-2.25	2.00-2.25	4.00-4.75
PENNA.			
150 lb. sack			3.60-3.85
No. 1.....			
Bulk, 180 lbs.....			
LONG ISLAND			
150 lb. sack			4.50-4.75
No. 1.....	2.00-2.25	2.00-2.25	5.35-5.85
Bulk, 180 lbs.....	2.25-2.50	2.25-2.50	

The old potato market has slipped back a bit. Trade is very dull on all descriptions and the market as a whole is barely steady.

During the past week we had occasion to visit with some of the folks in the East end of Long Island and they say that potato planting is a long way toward completion. If we have much more of this cloudy, wet weather it is not going to do that seed a bit of good. Several years ago we had a similar situation down on Long Island and there was considerable rotting of seed, in some cases replanting was done, while other growers took pot-luck. We are hoping that the situation will not be duplicated this year.

Meats and Live Stock

The live calf market is a little better than it was last week. Prime veals are worth \$17.50 although most of the arrivals seldom bring better than \$16.50.

Steers show material improvement. The best are bringing \$14 with a few extra choice occasionally higher. Common to mediums from \$10 to \$12.75.

Bulls are doing better. A few have reached \$9.75 with mediums from \$9 to \$9.50. The range is about a half dollar above last week.

Cows are unchanged. Prices ranging from \$4.25 to \$8.25. The market is more steady than it was last week.

Hogs are steadier on the small sizes. Heavier weights are a little lower; 85 to 130 pounds \$11 to \$11.50; 130 to 160 pounds \$11.75 to \$12; 165 to 220 pounds \$12 to \$12.25.

Rabbits are bringing a little more money. On April 17 they were quoted at 24c to 27c.

Feeds and Grains

FUTURES	Apr. 17	Apr. 11, 1928	Apr. 18, 1928
(At Chicago)			
Wheat, (May)	1.19	1.47 1/8	1.56 1/8
Corn (Mar.).....	.93 1/4	1.00 1/4	1.04 1/4
Oats (Mar.).....	.49 1/8	.57 1/8	.62 1/8
CASH GRAINS			
(At New York)			
Wheat, No. 2 Red..	1.47 1/8	1.92 1/8	2.06 1/8
Corn, No. 2 Yel..	1.12 1/8	1.20 1/4	1.20 1/4
Oats, No. 2.....	.61 1/2	.71 1/4	.77 1/4
FEEDS			
(At Buffalo)	Apr. 13	Apr. 6	Apr. 14,
Grade Oats.....	34.00	33.00	39.00
Spring Bran.....	27.50	27.50	37.50
Hard Bran.....	30.00	30.00	41.50
Standard Mids.....	26.50	26.50	36.50
Soft W. Mids.....	35.00	35.00	42.50
Flour Mids.....	33.00	33.00	40.50
Red Dog.....	37.00	36.50	41.50
Wh. Hominy.....	37.00	36.50	41.00
Yel. Hominy.....	37.00	37.00	42.00
Corn Meal.....	39.00	38.00	44.75
Gluten Feed.....	42.50	42.50	57.00
Gluten Meal.....	52.50	52.50	55.00
36% C. S. Meal.....	41.50	41.00	60.50
41% C. S. Meal.....	46.00	45.50	62.50
43% C. S. Meal.....	49.00	48.00	
34% O. P. Linseed Meal	51.00	51.00	54.00

Lowered vitality, from any cause, makes livestock subject to infections which animals of normal vigor might readily resist.

The Greatest Advance in Chick Feeding in 10 Years!

Think of it, Chick Feeders! A complete perfect all-mash ration for the first eight weeks—better than ever before, and at lower cost!

When Beacon produced its famous Broiler Feed three years ago, skeptics grunted, while Beacon users grew and prospered! And now, comes this even greater discovery—a truly remarkable one—in which science and years of experiment have produced an amazing new Chick Feed that gives: 20% better growth, better feathering, excellent uniform fleshing at any age, uniform development, very low mortality, top notch vitality and vigor!

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Cayuga, New York

* A regular part of Beacon Complete Starting Ration and Broiler Feed, and now available in any other Beacon feed at \$2.50 a ton extra, much cheaper than it can be bought for and mixed separately.



Farm News from New York

President Hoover Sends Message To Congress Concerning Farm Relief and the Tariff

THE special session of Congress called to consider farm relief and tariff revision convened on April 15, and on the 16th President Hoover's message was read in both Houses. The message calls attention to the unsatisfactory condition of agriculture and proposes a Federal Farm Board to assist farmers to meet their problems and specifically disapproves of putting the government in business, fixing prices and imposing an equalization fee or tax upon producers.

Space will not allow us to print the entire message so we have selected the portion which appeared to be most important to our readers.

From President Hoover's Message

"The difficulties of the agricultural industry arise out of a multitude of causes. A heavy indebtedness was inherited by the industry from the deflation processes of 1920. Disorderly and wasteful methods of marketing have developed. The growing specialization in the industry has for

to develop industrial by-products and to survey a score of other fields of helpfulness.

Against Equalization Fee

"Certain safeguards must naturally surround these activities and the instrumentalities that are created. * * *

"* * * We must not undermine initiative. There should be no fee or tax imposed upon the farmer. No governmental agency should engage in the buying and selling and price fixing of products, for such courses can lead only to bureaucracy and domination. * * *

"The difficulties of agriculture cannot be cured in a day; they cannot all be cured by legislation; they cannot be cured by the Federal government alone. But farmers and their organizations can be assisted to overcome these inequalities. Every effort of this character is an experiment, and we shall find from our experience the way to further advance. We must make a start.

Proposes Basis for Tariff Changes

"* * * Seven years of experience under the tariff bill enacted in 1922 have demonstrated the wisdom of Congress in the enactment of that measure. On the whole it has worked well. * * *

"* * * Nevertheless, economic changes have taken place during that time which have placed certain domestic products at a disadvantage, and new industries have come into being, all of which creates the necessity for some limited changes in the schedules and in the administrative clauses of the laws written in 1922. * * *

"It would seem to me that the test of necessity for revision is in the main whether there has been a substantial slackness of activity in an industry during the last few years, and a consequent decrease of employment due to insurmountable competition in the products of that industry. * * *

"I am impressed with the fact that we also need important revision in some of the administrative phases of the tariff. The Tariff Commission should be reorganized and placed upon a basis of higher salaries in order that we may at all times command men of the broadest attainments. Seven years of experience have proved the principle of flexible tariff to be practical, and in the long view a most important principle to maintain. However, the basis upon which the Tariff Commission makes its recommendations to the President for administrative changes in the rates of duty should be made more automatic and more comprehensive, to the end that the time required for determinations by the Tariff Commission shall be greatly shortened."

A Brief Summary of the Proposed Federal Farm Relief Legislation

THE farm relief bill introduced in Congress and commonly called the Federal Farm Board Act, provides for a Federal Farm Board composed of five members and a chairman to be appointed by the President. The members of the Board are to be paid \$12,000 a year while the pay of the chairman is to be set by the President.

The bill authorizes an appropriation by Congress of \$500,000,000 to be used as a revolving fund from which the Federal Farm Board can make loans under certain restrictions to several agencies for the purpose of improvement in the marketing of farm products.

The bill provides for close cooperation between the Federal Farm Loan Board and existing cooperative marketing organizations. For example, the bill provides that the Board is to invite cooperative associations to form a commodity advisory committee of seven members. As we understand it, all the cooperatives handling cotton will form an advisory committee, all cooperatives handling milk will form another committee and so on.

The Board can also on application from any cooperative association handling farm products, set up what is called "producer-controlled clearing house associations" for the purpose of improving the marketing of farm products.

Other Powers and Duties

In addition to the provisions for loaning money, which, by the way, are surrounded by safeguards to assure that the money will be paid into the revolving fund, the Board has several other powers and duties. For example, they are directed to promote education concerning the principles and practices of cooperative

marketing, to encourage the development and organization of cooperative marketing associations, to keep themselves advised on crop conditions and to investigate and report on the best uses of land for agricultural purposes, as well as the reduction of unprofitable land under cultivation, the need of reclamation and irrigation projects, methods of developing by-products and new uses for agricultural products and transportation conditions and their effect on marketing agricultural products.

When Loans Are to Be Made

Loans from the revolving fund can be made by the Board to any cooperative farm marketing association for the purpose of effective merchandising, to buy, build or lease storage facilities, to form clearing house associations or to extend the membership of the cooperative associations by giving information to producers.

No loan is to be made unless the Board believes that it will be used in accordance with the policies of the proposed law and that the cooperative association is organized so that the safety of the loan will be assured.

A Few Safeguards

The bill specifically states that it shall be unlawful for any member, officer or employee of the Board to speculate directly or indirectly in any agricultural commodity. It also makes it unlawful for anyone connected with the operation of this bill to disclose any information in violation of any regulation of the Board.

At this writing there is, of course, no assurance that this bill will become a law. It is reported that congressmen from the West feel that the bill does not go far enough in its efforts to control the crop surplus. The export debenture plan, which has been endorsed by the National Grange, has a big following and in fact,

the Senate Committee on Agriculture has put a provision into the Senate bill which will allow the Federal Farm Board to employ the export debenture plan as a farm relief measure. There is a feeling, however, that President Hoover is opposed to the debenture plan.

In addition to the Federal Farm Board Bill, it is expected that tariff revision at this session may help to put agriculture on an equality with other industry.

New York County Notes

Cattaraugus County—Mrs. Mamie M. Saalfeld, lecturer of the County Grange; Mrs. Flossie L. Milks, lecturer, Little Valley Grange; Mrs. Myra Foster, Mansfield; Mrs. Anna Laing, East Otto; and Mrs. Bernice Folts, West Valley, are among the hundreds attending the third annual school for grange lecturers held in Cornell, April 8-13. Mr. Eastman, Editor of the AMERICAN AGRICULTURIST, addressed the lecturers on Tuesday evening on the relief in taxation afforded farmers by the recent bills signed by Governor Roosevelt. National Lecturer, James C. Farmer, a Mr. Taylor of Washington, D. C., Elizabeth Arthur, Lecturer of New York State Grange, are in constant attendance. Professor Peabody was in charge of debates. The visitors were divided into groups Wednesday evening and visited five nearby granges and put on the program.—M. M. S.

Delaware County—We are having snow and a cold rain after summer weather. Leaves and other things got quite a start before cooler weather halted them. The sugar season was very short. Many report that cows came through the winter in poor condition owing to poor quality of hay. Cauliflower growers are getting hot beds ready for early seed. The trout season opened April 16 and some good catches were reported.—E. H. M.

Agricultural Programs From WGY

12:00 Noon—Eastern Standard Time, daily except Saturday and Sunday—weather report, farm produce report, farm talks.

6:10 P. M.—Eastern Standard Time, daily except Saturday and Sunday—farm produce report, farm talk.

7:30 P. M.—Eastern Standard Time, Thursday—Half-hour agricultural program.

years been increasing the proportion of products that now leave the farm and, in consequence, prices have been unduly depressed by congested marketing at the harvest or by the occasional climatic surpluses. Railway rates have necessarily increased. There has been a growth of competition in the world markets from countries that enjoy cheaper labor or more nearly virgin soils. There was a great expansion of production from our marginal lands during the war, and upon these profitable enterprise under normal conditions cannot be maintained. Meanwhile, their continued output tends to aggravate the situation. Local taxes have doubled and in some cases trebled. Work animals have been steadily replaced by mechanical appliances, thereby decreasing the consumption of farm products. There are many other contributing causes.

"There being no disagreement as to the need of farm relief, the problem before us becomes one of method by which relief may be most successfully brought about. * * *

"* * * Some of the forces working to the detriment of agriculture can be greatly mitigated by improving our waterway transportation; some of them by readjustment of the tariff; some by better understanding and adjustment of production needs, and some by improvement in the methods of marketing.

"An effective tariff upon agricultural products, that will compensate the farmer's higher costs and higher standards of living, has a dual purpose. Such a tariff not only protects the farmer in our domestic market, but it also stimulates him to diversify his crops and to grow products that he could not otherwise produce, and thus lessens his dependence upon exports to foreign markets. * * *

Proposes Farm Board

"I have long held that the multiplicity of causes of agricultural depression could only be met by the creation of a great instrumentality clothed with sufficient authority and resources to assist our farmers to meet these problems, each upon its own merits. * * *

The pledged purpose of such a Federal farm board is the reorganization of the marketing system on sounder and more stable and more economic lines. * * *

"In addition * * * special provisions in the direction of improved returns the board should be organized to investigate every field of economic betterment for the farmer so as to furnish guidance as to need in production, to devise methods for elimination of unprofitable marginal lands and their adaptation to other uses;

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Sold on a Money-Back Guarantee. Insist upon K-R-O, the original Squill exterminator. All druggists, 75c. Large size (four times as much) \$2.00. Direct if dealer cannot supply you. K-R-O Co., Springfield, O.

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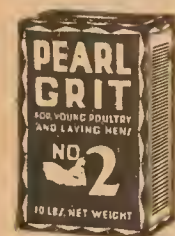
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This is an important time in the poultry calendar. There are late chicks coming on. There are springers from early hatches. There are layers turning out eggs as fast as they can. *And they all need PEARL GRIT*—the pure, white, high-calcium limestone grit which comes in 10-lb. cartons and 100-lb. bags. Size No. 1 is for baby chicks. Size No. 2 is for half-grown and adult birds.

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Send me your free book, "The Poultry Raiser's Pay Envelope," and give me the names of dealers who handle PEARL GRIT.

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With the A. A. Poultry Farmer



The Care of Young Turkeys

DURING the months of May and June most of the poults will be hatched in this north country and usually we get some cold wet days in May and often a shortage of sunshine. Unless extra care and attention is given the poults at this time the loss will be heavy and one poult saved to maturity will pay for a good bit of this trouble and all the rest saved will be all gain.

When poults are raised with a mother hen turkey too often she fails to hover them when she should especially if there are a few a little weaker, as there usually are, in all flocks. These little turks could all be saved or at least the most of them, if they were furnished heat when they needed it. Here is the solution—small brooders can be purchased for only a few dollars and will more than pay for themselves in one season. Here the little turks can run and get warm any time and not have to wait for mother hen or turkey to sit down.

They Should Be Comfortable

If you watch them you will often see the poults run in and get warm, then in a few minutes run out again and pick up some gravel or feed, perhaps a drink of water, and run back under the hover for a few minutes. Raise the cover carefully and you will find them stretched out, resting so warm and happy, for this artificial mother is always "sitting down" ready to warm the little brood.

Then we have cod liver oil to substitute for sunshine during the cloudy days and it sure does its work. Be sure and buy a good grade. The brand we use costs \$7.50 for five gallons F.O. B. New York City and it has proved very satisfactory.

We find it more satisfactory to feed cod liver oil on grain than in the mash as you can control the amount consumed to a better advantage and the birds seem to thrive better. We mix only the amount we can use each day.

A Helpful Book

Perhaps on a big plant this way would not be practical, but I write for the small flock owners' help, there being so much written where one can run business on a large scale I find many people like ourselves, get more help from the breeders of less than twenty-five turkey hens than from those with 50 to 100. I feel I must make an exception to that in at least one case. Recently the new turkey book written by Mrs. Helen Baker was sent me to read and while Mrs. Baker raises over 1000 turkeys here in the east, she has written the best book on turkeys I have ever seen. It is all so practical and while she does not approve of some of my methods, I feel this book is a great help to the turkey world. And the best part is the way it is written; after reading a chapter you just feel as if you had been to Maryland and had a visit with this grand woman in her own home, as I hope some time I may be able to do.

Another advantage of a brooder is that it can be kept clean much easier as the hen or turkeys get the coops dirty much more quickly than the poults. Also their feed and water dishes can be kept more sanitary with less work.

With these early poults don't overlook the green feed and gravel. We cut up green feed with the shears and feed all they will eat many times a day. Even after our turkeys are half grown they will rush to me if they see I have the shears in my hands, and we always continue feeding it after they run out in grass and here is our reason. Watch a little turkey pick at greens and see how hard he works to get a little, often gets discouraged and goes on to try and find something else. If you cut it up they will eat quantities of it and they need it, so that is why

we furnish them all they will eat and it gives good results, too.—Mrs. C. J. Doxtater.

Hens Become Paralyzed

Our chickens seem to lose the use of their legs. Can you suggest a remedy or cause of this.—O.D.T., New York.

THERE seems to be quite a bit of trouble with paralysis in poultry this year. There are at least three possible causes for this trouble and it is practically impossible to tell which cause applies in any particular case.

First, a bad infestation of intestinal parasites may result in some paralysis. In this case it is wise to give the flock the tobacco dust treatment or some other treatment for eradicating worms. The second cause may be lack of sufficient green feed or exercise which causes an enlargement of the liver and finally results in death. The remedy for this, of course, is to provide plenty of green feed and allow the hens to get out doors where they can get exercise.

The third possible cause is a chronic form of coccidiosis. This disease frequently causes loss among chicks when they are a month or two old and what is called the chronic form sometimes develops in a flock of pullets and causes considerable loss. There is loss of appetite. The plumage looks dirty. The hens lose weight and the combs become pale and there is leg weakness or paralysis.

There is no very satisfactory treatment for this disease and it is recommended that all birds which become lame should be killed when it is noticed. At this time we are advised that birds are entirely fit for human consumption.

The fowls should be managed in as sanitary a way as possible and milk in some form should be fed to the flock liberally. It is also important that infection should be prevented in this spring's chicks in order that the trouble may be avoided next winter.

How to Raise Ducks

IT is essential to keep ducklings warm for the first few weeks, 95 degrees F. the first week, and gradually reducing the temperature until at the end of the fourth week the temperature is 75 degrees F. After this time the quantity of heat needed will depend upon the weather of the locality in which they are raised. Give them a good clean run whenever the weather is good after they have reached about two weeks of age. Shade is necessary in warm weather and especial care must be taken to protect them on wet and cold days.

Feeding the Ducks

Ducks grow best on a straight mash diet—no grain. This mash should be moistened until it is crumbly and fed to the ducklings, all they can finish up in 20 minutes, five times a day for the first week, four times daily from the 2nd to the 8th and three times from then until marketed, usually about the 11th or 12th week. A good starting ration consists of:

100 lbs. yellow corn meal
100 lbs. wheat bran
10 lbs. gr. alfalfa or chopped green feed
10 lbs. Red dog flour
10 lbs. meat scrap
10 lbs. condensed buttermilk
Add 2% cod liver oil if the birds are confined.

This ration should be fed the first week and gradually changed to a growing ration by increasing the corn meal and wheat bran to 200 pounds each with the remainder of the mixture unchanged. After the birds have had the growing ration until they are about eight weeks old they may be fed a fattening ration, which is obtained by gradually increasing the corn meal and decreasing the wheat bran until the mash mixture contains 300 pounds (Continued on Opposite Page)

Danger of Infection Among Baby Chicks

Success in raising baby chicks is dependent upon proper care and management. Readers are warned to exercise every sanitary precaution and beware of contaminated drinking water. Baby chicks must have a generous supply of pure water. Drinking vessels harbour germs and ordinary drinking water often becomes contaminated and may spread disease through your entire flock and cause the loss of half or two thirds your hatch before you are aware. Don't wait until you lose half your chicks. Take the "stitch in time that saves nine." Remember that in every hatch there is the danger of some infected chicks—danger of diarrhea in some form and other loose bowel and intestinal troubles. Don't let a few chicks infect your entire flock. Give Walko Tablets in all drinking water for the first two weeks and you won't lose one chick where you lost dozens before. These letters prove it:

Mrs. Bradshaw's Remarkable Success in Raising Baby Chicks

"Dear Sir: I see reports of so many losing their little chicks, so thought I would tell my experience. I used to lose a great many of the little downy fellows from bowel troubles, tried many remedies and was about discouraged. As a last resort I sent to the Walker Remedy Co. Dept. 427, Waterloo, Iowa, for their Walko Tablets for use in the drinking water of baby chicks. I used two 50c packages, raised 300 White Wyandottes and never lost one or had one sick after using the Tablets and my chickens are larger and healthier than ever before. I have found this Company thoroughly reliable and always get the remedy by return mail." —Mrs. C. M. Bradshaw, Beaconfield, Iowa.

Never Lost a Single Chick

Mrs. L. L. Tam, Burnettsville, Ind., writes: "I have lost my share of little chicks from the usual baby chick troubles. Finally I sent for two 50c packages of Walko Tablets, used it in all drinking water, raised over 500 chicks and I never lost a single chick. Walko Tablets not only tend to prevent baby chick troubles, but also tend to give chicks increased strength and vigor. They develop quicker and feather earlier."

Never Lost One After First Dose

Mrs. Ethel Rhoades, Shenandoah, Iowa, writes: "My first incubator chicks, when but a few days old, began to die by the dozens. I tried different remedies and was about discouraged with the chicken business. Finally I sent to the Walker Remedy Co., Waterloo, Iowa, for a box of their Walko Tablets to be used in the drinking water for baby chicks. It's just the only thing to keep the chicks free from disease. We raised 700 thrifty, healthy chicks and never lost a single chick after the first dose."

You Run No Risk

We will send Walko Tablets entirely at our risk—postage prepaid—so you can see for yourself what a wonder-working remedy it is when used in the drinking water for baby chicks. So you can prove—as thousands have proven—that it will stop your losses and double, treble, even quadruple your profits. Send 50c for a package of Walko Tablets (or \$1.00 for extra large box)—give it in all drinking water and watch results. You'll find you won't lose one chick where you lost dozens before. It's a positive fact. You run no risk. We guarantee to refund your money promptly if you don't find it the greatest little chick saver you ever used. The Pioneer National Bank, the oldest and strongest bank in Waterloo, Iowa, stands back of our guarantee.

WALKER REMEDY CO., Dept. 427, Waterloo, Iowa.

Send me the [] 50c regular size (or [] \$1 economical large size) package of Walko Tablets to try at your risk. Send it on your positive guarantee to promptly refund my money if not satisfied in every way. I am enclosing 50c (or \$1.00). (P. O. money order, check or currency acceptable.)

Name.....

Town.....

State..... R. F. D.....

Mark (X) in square indicating size package wanted. Large package contains about two and one-third times as much as small.

(Continued from Opposite Page)

of corn meal and 100 pounds of wheat bran in each 440 pounds of feed. No cod liver oil should be fed for at least four weeks preceding marketing to avoid the fishy flavor in the flesh. It is well to keep a supply of grit and oyster shell before them at all times. The birds must have clean drinking water before them all times but should not be allowed to swim before they are seven or eight weeks old.

Marketing

A duckling is ready for market at about 10 to 12 weeks of age. At this time the birds will go into a molt and if they are not marketed before or within a week after this molt begins they will begin to lose weight, the appearance of the bird suffers and consequently returns will be less. When the birds have been fattened and are ready for market, they should be starved for a day (i. e., not fed the day killed) and killed by cutting the veins in the neck and plucked, either dry or scald, in a similar manner to that practiced with chickens.

If the birds are shipped to market alive, they should be crated and supplied with moistened mash in a can that cannot be spilled.—A. Van Wageningen.

The Cost of Raising Pullets

Are there any figures to indicate what is the cost of raising a pullet until she is ready to produce.

THE New York State College of Agriculture recently published a report showing that it costs slightly over a dollar to grow a pullet up to producing age. These figures include the labor costs but returns from broilers and cockerels were deducted from total costs. In other words it costs slightly over \$1.00 to raise a pullet after crediting the returns from cockerels. Feed costs are nearly two-thirds of the cost of raising pullets.

The Two-Story Poultry House

THE writer confesses that up to within a short time the mere mention of a two-story henhouse inspired him with feelings of revulsion. Since inspecting such a building, however, at the plant of the Wadsworth Brothers of Canal Brook Farm, So. Hiram, he admits that many of his prejudices have been removed; if, indeed, he is not actually a convert to this style of house.

The Wadsworth Brothers, Harry and William, are graduates of the poultry course at the University of Maine and have been breeding for ten years, as a side-line to farming. They began with 100 layers, now they are wintering



more than 600. And they have the figures to show that their annual profits, including what is realized from the cockerels, average \$3.00 per head. They find it profitable to keep the cockerels to the roaster age, when they bring 40c a pound in the Boston market. And they usually have a few capons at 50c.

Two years ago the Wadsworth Brothers, as an experiment, put up a two-story house, which has proved very satisfactory. The building is 50ft. long by 20 ft. wide and divided into two pens 20 ft. square above and below, each carrying 100 layers. The extra 10 ft. is used for a grain room, storing egg cases, etc. Below is a cement basement, 15 ft. by 20 ft., in which they are to install a 2,700 egg electric incubator. For they expect to clip something from the expense side of the ledger by hatching their own chicks.

The disadvantages of the double-



"We Can Help You Fill YOUR Egg Baskets Too!"

Says Uncle Charlie

his 6-month-old pullets. "B-B Poultry Feeds will double the profits of any poultryman," say Woglom Brothers, Prince's Bay, N. Y.

A Feed For Every Age

There's a B-B Feed for every period of a chicken's growth. Start your chicks on B-B All Mash starter Ration or B-B Chick Starter and B-B Chick Feed, and at the proper time change over to B-B All Mash Growing Ration or B-B Growing Mash and B-B Developing Feed. Then follow with B-B Laying Mash and B-B Scratch Feed for early and steady egg production.

All of these feeds are guaranteed. You will get better results from the chick and growing feeds and bigger production from the poultry feeds per dollar of feed cost or you can go to your dealer and get your money back. You are to be the sole judge of results.

FREE to You: Book on Care and Raising of Poultry

"Making Poultry Pay a Profit" is the title of a 64-page booklet written by Professor L. N. Gilmore of Syracuse University, a noted poultry expert. How to select eggs for hatching; how to get most out of the incubator; brooding problems; how to tell vigorous chickens; increased laying records; poultry diseases; marketing eggs for bigger profit—these are a few of the subjects it covers. It also contains a complete system for keeping record of flock production and expenses.

Simply fill out the coupon below and it will be sent to you without cost or obligation. Mail it today so that you will have it to help you with your chick problems.

Maritime Milling Co., Inc., Buffalo, N. Y.

"UNCLE CHARLIE,"
Care of MARITIME MILLING CO., INC.
1109 Chamber of Commerce Bldg.,
Buffalo, N. Y.

Send me at once a copy of Professor Gilmore's 64-page book, "Making Poultry Pay a Profit." There is no charge or obligation to me.

Name _____

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FOR more than ten years we have been helping our customer-friends to fill their egg baskets, for, right from the start, we determined to make Bull Brand Poultry Feeds the finest quality, the most productive of any on the market. And because we have always stuck to that policy and put our level best into our feeds, B-B has a world of friends who swear by it and will not use any other.

Results Are What Count

No wonder these poultrymen believe in B-B! Read this letter that I got from one of them the other day:

"In October, I became dissatisfied because my birds did not produce. I was using a high grade, highly advertised commercial feed. I decided to put 50 birds on Bull Brand, 50 on my own mixture and keep 50 on the feed I had been using. During October the B-B hens led the contest by 80 eggs. Then I took the poorest pen and put them on B-B and they came right up to the other B-B pen. Now I am using B-B exclusively."

(Signed) CHAS PIKE, Spring City, Pa.

How We Filled Their Baskets

"I am now getting 178 eggs daily from 220 pullets," writes Lester Klopp, Bethel, Pa. "My 20 two-year-olds and 110 yearlings have laid 90 to 103 eggs a day since January 1st on B-B Laying Mash," says C. A. Siner, Syracuse, N. Y. "2097 eggs from 80 leghorns in one month," reports C. N. Schaeffer of Auburn, Pa. H. P. Birden of Barkhamstead, Conn., secured 63% in eggs in January from



SINGLE COMB
White Leghorns Exclusively
3000 breeders on free farm range. Pure Barron English Strain, with trapnest records up to 314 eggs in a year. The large vigorous Leghorns that lay large white eggs. Now looking orders for hatching eggs and baby chicks Mar., Apr. & May delivery. Special feeding directions with all orders. Circular free. Cecil Sherow and Olive Briggs-Sherow successors to EDGAR BRIGGS, SUNNY BROOK FARM, Pleasant Valley, N. Y. Box 50

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BABY

CHICKS

SIEB'S GUARANTEED CHICKS

from CERTIFIED HOGAN TESTED
HEAVY LAYING FLOCKS

STILL
LOWER PRICES
WHY PAY MORE?

SIEB'S "OVERSIZE" CHICKS are from PURE-BRED Flocks of THE WORLD'S FINEST BLOOD LINES. They are a new Sieb Development—an advanced step in scientific breeding to produce chicks that grow larger, stronger, mature quicker and lay more and larger eggs. All one quality only THE BEST.

WHY SIEB CHICKS PAY BETTER

Fortunes have been spent to produce a superior quality chick. It costs just as much to raise a chick that weighs 6 lbs. at 6 months old as it does a Sieb Chick that will weigh 8 lbs. or more at 6 months old. The best proof of this wonderful achievement is the testimonials from our customers. Think of young cockerels weighing 9 lbs. and pullets 8½ lbs. with remarkable egg laying records. If you want larger, stronger stock, more eggs, more meat, and more profits, buy Sieb's "OVERSIZE CHICKS". Our great capacity of over five million per year insures quick delivery, cuts down cost of production and enables us to give you THE BEST GRADE ONLY at prices even less than many hatcheries charge for second and third grade chicks. SEND FOR CATALOG or order from this ad. 100% live delivery guaranteed.

PRICES PREPAID	25	50	100	500	1000
Wh. Br. & Bl. Leghorns	\$3.00	\$5.75	\$11	\$52.50	\$100.
Br. Wh. & Buff Rocks	3.50	6.75	13	62.50	120.
Wh. Min. S. C. R. I. Reds	3.50	6.75	13	62.50	120.
R. C. R. I. Reds, Wh. Wyen.	3.75	7.25	14	67.50	130.
Wh. & Buff Orps. Sil. L. Wyen.	3.75	7.25	14	67.50	130.
Black Minorcas	3.25	6.25	12	57.50	110.
Ancones & Heavy Assorted	3.00	5.75	11	52.50	100.
Heavy & Light Assorted	2.75	5.25	10	47.50	90.
Light Assorted	2.50	4.75	9	42.50	80.

SIEB'S HATCHERY,
BOX 230 LINCOLN, ILL.
Members Int'l. Mid-West, Ill. & America
B. C. P. Association

WOLF SELECTED CHICKS

CHICKS C. O. D.

Special pen mated and extra high bred chicks at slightly higher prices. Shipment made any time you wish.

	25	50	100	500
S. C. Wh. Br. & Buff Leghorns, S. C. M. Ancones	\$3.25	\$6.50	\$12.00	\$57.50
Bd. & Wh. Rocks, S. C. & R. C. R. I. Reds, Bl. Minorcas	3.75	7.25	14.00	67.50
White Wyandottes, Buff Orpingtons	4.25	8.00	15.00	72.50
Jersey Black Giants	5.00	9.50	18.00	87.50
Assorted Odds and Ends, Mixed Chicks	3.00	4.75	9.00	45.00
Assorted Heavy Mixed Chicks	3.50	6.00	11.00	55.00

WOLF HATCHING & BREEDING COMPANY, BOX 1, GIBSONBURG, OHIO

"OHIO'S BEST" CHICKS C. O. D.

Our chicks are from some of Ohio's best breeding flocks. Every breeder carefully culled and mated with sturdy, vigorous, highly bred males.

Postpaid prices on	25	50	100	500	1000
White Leghorns	\$3.25	\$6.00	\$11.50	\$55.00	\$108.00
Bd. & Wh. Rocks, R. I. Reds	3.50	6.75	13.00	62.50	120.00
Wh. Wyen. Buff Orpingtons	3.75	7.25	14.00	67.50	130.00
Asst. for broilers \$9.75 for 100; \$45 for 500. Asst. all heavies \$11 for 100; \$52.50 for 500.					

Order from this ad. We will ship C. O. D. on 10% deposit. Ref.: Van Wert National Bank. 100% live delivery prepaid. Make certain of your shipping date by placing your order now for May and June.

GUS ICKES, Mgr.,
R46, VAN WERT, OHIO

Buy C.M.L. Chicks

C.M.L. CHICKS

Cost no more than ordinary chicks from the average hatchery and the quality is far better. We have specialized for years in BARRON LEGHORNS. Imported direct from Barron, Pedigree 285 to 314. BARRON S.C.W. LEGHORNS, BARRED ROCKS, WHITE ROCKS, REDS, WHITE WYANDOTTES.

Our birds have ample range which insures large, hardy chicks. They are carefully selected and mated. They mature early. Our fine quality chicks can be had at a price that will surprise you. Get our low prices. They will interest you. C. M. Longenecker, Box 40, Elizabethtown, Pa.

Write today for FREE catalogue.

HUBER'S RELIABLE CHICKS

MAKE EXTRA POULTRY PROFITS

When we say RELIABLE—we mean RELIABLE in every way. Breeding stock of highest quality of 19 years of careful development. Special attention paid to health of flocks and records kept.

CATALOG FREE—CHICKS SENT C. O. D. IF YOU WISH
Write for details—get our illustrated catalog which tells all the story. Our prices reasonable. A book on Raising Chicks worth many dollars given free with each order of \$10.00 or more. Big discount for early orders.

HUBER'S RELIABLE HATCHERY, No. High St., Fostoria, Ohio

QUALITY BABY CHICKS

Five extra given off with every box of one hundred ordered. May hatched chicks, Leghorns, White, Brown, Buff, Black—\$12.00 per 100; Barred Rocks, Reds, Minorcas, Ancones, \$14.00 per 100; White Rocks, Wyandottes, Buff Orpingtons, \$16.00 per 100. April \$2 more, June and July \$2 less. Custom hatching. Eggs for hatching, Odds and Ends, Left Overs, Mixed broiler chicks, Light, 10c; Light and Heavy, 12c; All Heavy, 14c; Better order now. Will send C. O. D. Thousands hatching daily all year around. Active, husky, chicks hatched from healthy free range breeders that will live, grow and lay. Prompt shipments. Postage prepaid. Live delivery. Send for folder. SCHOENBORN'S HATCHERY, 335 Main St., Hackensack, N. J. Phone 1603 or 1604.

BABY CHICKS

FROM A HEAVY LAYING STRAIN. Three years blood tested for white diarrhea and under State supervision. Barred Rocks, White Wyandottes, Reds, White Leghorns. Moderately priced. Write for Catalogue and Prices.

BYRON PEPPER & SONS

CHIX FROM LARGE BREEDERS

	100	500	1000
Ferris Strain White Leghorns	\$10	\$47.50	\$90
Everlay Brown Leghorns	10	47.50	90
Basom's Barred Rocks	12	57.50	110
Owens' R. I. Reds	12	57.50	110
Mixed Chicks	9	42.50	80

Our breeders are selected for size, type and egg production. The kind that lay and pay. Send for literature. It's free. Tells all about our great egg machines.

Juniata Poultry Farm,
BOX T RICHFIELD, PA.

BABY CHICKS

Tanered Strain W. Leg. \$10 per 100
Wh. Leghorns 9 per 100
Barred Rocks 12 per 100
S. C. Red 12 per 100
Heavy Mixed 10 per 100
Light Mixed 8 per 100
500 lots 1/2 less: 1000 lots 1c less.
100% live delivery guaranteed. Order from this ad, or write for free C. P. Leister, McAlisterville, Pa. circular.

decker are lugging feed, water and litter up stairs. Against this, it cuts in half the cost of foundation and roof. And there is an agreeable compactness not found in the long house. Moreover, the Wadsworth Brothers say the hens kept in this house usually show an increased yield over those quartered in the ordinary houses.—J. L. W.

Chicken Pox Serious

While there has been less trouble with chicken pox this year than in former winters, the recent outbreak threatens to become quite serious if not handled in the proper manner.

The recommendations put out are not guaranteed to cure the disease but they are offered to help the birds resist the ravages of the chicken pox once it gets a start in the flock.

1—Use B-K in the drinking water according to the directions on the container.

2—Feed liberal quantities (5 pounds to the 100 birds) of green feed daily.

3—Encourage activity in the birds by cleaning out all of the old litter and supplying new clean straw for the birds to scratch in.

4—Endeavor to maintain the appetites of the birds. This is most difficult, but may be done by feeding two-thirds table-spoonfuls of the following tonic in each ten quarts of a moist mash for a period of one week. The mixture to contain, 1 pound pulverized gentian, one half pound pulverized ginger, one half pound pulverized saltpeter and one half pound pulverized ferric sulphate.

These recommendations have proven successful in a large number of cases in New Jersey in other years when the chicken pox has been quite serious.

SURVEYING: For Agricultural Students, Land Agents and Farmers. By A. H. Haines: Longman, Greene & Co., 55 Fifth Avenue, New York.

This little volume recently in print will be of interest to all parties, professional or amateur, whose labors or whose hobbies bring contact with the ancient and fascinating science of lines and angles. It is written in non-technical language and its diagrams and rules are so simplified as to be easily understandable by a person of ordinary education. By its aid together with that of one of the simpler surveying instruments the ordinary farmer may learn to run an exact line from a determined base station, or to ascertain the land content of a field with irregular boundaries.

KERLIN BARGAINS in Wh Leghorn Chicks

"Kerlin-Quality" Money-Making Leghorns. Beautiful, Great Winter Layers, White Diarrhoea Free, Egg Contest Winners. Over 50,000 Delighted Customers. BIG DISCOUNT on Chicks ordered Now, Delivery When Wanted. Free Starting Feed! Big Catalog FREE! Kerlin's Grand View Poultry Farm, Box 35, Centre Hall, Pa.

Klines Barred Rocks

Tested stock, Penna State College males. Strong chicks guaranteed. Prompt delivery. C. O. D. \$12.00-100. \$110.00-1,000. \$500.00-5,000. Write or wire.

S. W. Kline, Box 40, Middlecreek, Pa.

CHICKS 8 1/2c

CLASS A CHICKS at low prices, also pullets. Special discounts. Several varieties. No money down. 100% live arrival; postpaid. Catalog free.

BOS HATCHERY, R 2A, ZEELAND, MICH.

WYCKOFF and BARRON STRAIN, White Leghorn

Chicks for May 9c each; \$80 per 1000. Prepaid and safe delivery guaranteed. Our 19th year. Circular free. \$1.00 books order. THE PENNSYLVANIA HATCHERY, Box W, Liverpool, Pa.

BRED TO LAY BABY CHICKS

Barred Rocks; White Leghorns \$10.00 per hundred for May and June deliveries. 25 chicks \$2.75; 50 chicks \$5.25. Scarborough Poultry Farm, Box A, Milford, Del.

TURKEYS

TURKEYS Esbenschade's Famous Bronze Strain will pay you. Customers report raising up to 95% without previous experience.

BABY Free instructions with orders, assures success. Satisfaction guaranteed. Catalog.

TURKEYS Come to Headquarters. ESBENSCHADE TURKEY FARM, Box A, Ronks, Penna.

WENE Blood-Tested CHICKS

Sharply Reduced
May Prices

Again we reduce our prices! Judges of quality chicks wonder how we can do it. The answer is quantity production—a million or more. Every mating blood-tested—Leghorns State-Supervised. Rush your order today.

Immediate May Delivery	50	100	500
S. C. White Leghorns	\$7.50	\$14.00	\$65.00
Rock-Wyandotte Cross Bred	6.50	12.50	60.00
Straight Rocks, Reds,			
Wyandottes	8.50	16.00	77.50

All Chick Shipments Prepaid—
100% Live Delivery Guaranteed

FREE FOLDER and Mating List Mailed on Request.

WENE CHICK FARMS, Dept. D, VINELAND, N. J.

CHICKS with vim and vigor

Hatched by men with 19 years experience, from culled flocks. 100 per cent live delivery guaranteed by Prepaid Parcel Post at the following prices:

PRICES FOR MAY	9c each—	\$8.00 per 1000
S. C. White Leghorns	9c	\$8.00 " 1000
S. C. Brown Leghorns	9c	" " 1000
Barred Rocks	10c	" " 1000
S. C. R. I. Reds	12c	" " 1000
S. C. Black Minorcas	12c	" " 1000
II. B. Mixed	9c	" " 1000
L. B. Mixed	8c	" " 1000

\$1.00 will book your order. Catalogue free.

THE PENNSYLVANIA HATCHERY
LIVERPOOL, PA.

CHERRY HILL CHICKS

S.C.W. Leghorns—Wyckoff Strain	\$10.00
S.C. Everlay Brown Leghorns	10.00
Barred Rocks—Wm. Nace's select	12.00
S.C. Rhode Island Reds	13.00
Mixed or Broiler Chicks	7.00

1/2c less in 500 lots. 1c less in 1,000 lots.
25 chicks add 2c, 50 chicks add 1c. Full count. 100% live arrival guaranteed. Parcel Post prepaid. Bank reference. Order direct from this ad or write for free circular.

CHERRY HILL POULTRY FARM,
WM. NACE, Prop. Dept. A, McAlisterville, Pa.

STOP! LOOK! LISTEN!

Cash or C.O.D.	25	50	100	500	1000
Wh. Wyandottes	\$4.00	\$7.50	\$14.00	\$67.50	\$130
Rocks or Reds	3.50	6.50	12.00	57.50	110
Wh. Leghorns	3.00	5.50	10.00	47.50	90
Heavy Mixed	3.00	5.50	10.00	47.50	90
Light Mixed	2.50	4.50	8.00	37.50	70

From carefully selected free-range flocks. 100% arrival. Postpaid. Valuable illustrated 96-page booklet FREE. Telling all about poultry.

The Commercial Hatchery,
Box 75-A (The dependable plant) Richfield, Penna.

BABY CHICKS

From Heavy Laying Free Range Flocks

	25	50	100	500	1000
S.C.W. & Br. Leghorns	\$3.00	\$5.50	\$10	\$47.50	\$90
S.C.B. & Wh. Rocks	3.50	6.50	12	57.50	110
Buff Orpingtons & Reds	3.50	6.50	12	57.50	110
White Wyandottes	3.50	6.50	12	57.50	110
Assorted Chicks	2.75	4.50	8	37.50	70

100% prepaid safe delivery guaranteed.

Order from this ad. or write for circular

Box 161
J. N. Nace Poultry Farm RICHFIELD, Pa.

Chick Bargain

FREE IMMEDIATE DELIVERY

of 50-100 CHICKS if desired. Direct from Missouri's Great \$100,000 Hatchery. World's Lowest Prices for quality offered. -low as 7 1/2c each. \$1.00 per 100 books order. Guaranteed, vigorous chicks from big-type, heavyweight flocks. Same strains that win at famous egg laying contests. 100% alive, prepaid. Poultry course, 10 lessons, filled with secrets of poultry raising, FREE to customers. Write now for FREE CATALOG & BARGAIN PRICES. SMITH BROS. HATCHERIES, Box 410, MEXICO, MO.

TAKE NOTICE 75,000 CHICKS for MAY DELIVERY

	25	50	100	500	1000
S. C. White Leghorns	\$3.00	\$5.50	\$10.00	\$47.50	\$90
Barred Rocks or Reds	3.50	6.50	12.00	57.50	110
Silver Laced Wyandottes	4.00	7.50	14.00	65.00	
Light Mixed	2.50	4.50	8.00	37.50	70
Heavy Mixed	2.75	5.00	9.50	45.00	85

From carefully selected free range flocks. 100% arrival. Postpaid. Write for illustrated catalogue.

The Richfield Hatchery, Box 80, Richfield, Pa.

MAY PRICES

	100	500	1000
S. C. White Leghorns	\$ 9.00	\$42.50	\$80.00
Barron & Wyckoff Leghorns	10.00	47.50	90.00
Barred Rocks & R. I. Reds	12.00	57.50	110.00
Light Mixed \$8. Heavy Mixed \$10. Our chicks are properly hatched, strong and vigorous. 100% live delivery. Postpaid. Circular free giving full details of all breeds. CLEAR SPRING HATCHERY, McAlisterville, Pa. R. D. No. 2, F. B. Leister, Prop.			

BABY

CHICKS

BIG CHICKS from High Record Matings



300-326 eggs S.C. White Leghorns. Also Special Tancred Matings and 15 other varieties. Buff, Brown, Black Leghorns; Anconas; White, Buff, Black Minorcas; Barred, White, Buff Rocks; White Wyandottes; S.C. and R.C. Reds; Buff Orpingtons; Jersey Black Giants. Write today for free catalog before you buy. Prices Low and good genuine personal service to each customer. Satisfaction Guaranteed. 28 years shipping chicks to satisfied customers. **FREE!** 1000 CHICKS in prizes for best photos of Pioneer Chicks or Flocks.

UHL PIONEER HATCHERY & EGG FARMS
New Washington, Ohio Dept. A

5 Lb. Leghorns

The old reliable Heavyweight stock. Produced High Up on Pennsylvania's healthy mountain top. Get your chicks from certified record strains above 300 eggs. R.O.P. Hollywood, Tancred, Barron Matings. Hatch weekly pure white eggs up to 24 ounces per dozen. *Beautiful Color Plate Leghorn Catalogue Free.*

FARM SERVICE
ROUTE A10 TYRONE, PA.

200,000 CHICKS 1929

Goodling's Super Quality. Healthy, Strong and Vigorous

	50	100	500	1000
Single Comb, White Leghorns.....	\$6.50	\$12.00	\$57.50	\$110
Barred Plymouth Rocks.....	7.00	13.00	62.50	120
S.C. Rhode Island Reds.....	8.00	15.00	75.00	
Broiler Chicks, Heavy Breed.....	5.50	11.00	52.50	100
Broiler Chicks, Light Breed.....	5.00	10.00	47.50	90

Order direct. Prepaid 100% live delivery guaranteed. Circular Free.

THE VALLEY HATCHERY Box A, R. No. 1, RICHFIELD, PA.

PENNA. CHICKS

"State Supervised"

Flocks inspected by officials from the Penna. Dept. of Agriculture. Our 10th year. Get our low prices on Reds, Rocks, Leghorns and Minorcas. Member I.B.C.A.

Catalogue free.

THE KEYSTONE HATCHERY,
(The old reliable plant) RICHFIELD, PA.

BETTER BABY CHICKS

\$12 to \$25 per 100

Barred and White Rocks, White and Columbian Wyandottes, R. I. Reds, Jersey Black Giants, Black Minorcas, White and Brown Leghorns, Mottled Anconas, 20,000 Weekly. Finest purebred, heavy producing, free range stock, under State inspection. 100% Safe delivery guaranteed. Catalog free.

ULSTER POULTRY FARMS, Box 40, WALDEN, N. Y.

BABY CHICKS

13 Leading Varieties—White Leghorns, Black Minorcas, Rocks, Reds, Wyandottes, Hamburgs, Speckled Sussex, Buff Orpingtons.

\$9.00 per hundred and up.
Free Catalog and Price List

Lantz Hatchery, Tiffin, Ohio

BARRED ROCK CHICKS

A large modern Breeding Farm and Hatchery devoted exclusively to the production of BARRED PLYMOUTH ROCKS.

MARVEL POULTRY FARM, GEORGETOWN, DEL.

No Bluff Chicks

Just Real Standard Quality

Thousands of customers know. Order year after year. A satisfied customer my best advertisement. Join the old reliable plant. 16 years satisfactory service cuts down expensive advertising. My customer reaps the benefit by ordering from this small advertisement. S. C. White and Brown Leghorn SPECIALIST. 200 to 290 Egg Strain CHICKS \$13.00 per 100; 500 or more, \$11.00 per 100. Assorted chicks, \$8.00 per 100. **FREE & 100% LIVE DELIVERY GUARANTEED.**

HOUSEWORTH'S LEGHORN FARMS,
Port Trevorton, Penna.

SPECIAL FALL

prices for breeding Turkeys, Geese, Ducks, and Guinea. Write your wants and for mailing list. **PIONEER STOCK FARM, TELFORD, PA.**

Hampton's Black Leghorn

Day Old Chicks. The Kind that lay. Circular free. **A. E. HAMPTON, Box A, Pittstown, N.J.**

Hall's Chicks

Leghorns-Reds-Rocks-Wyandottes

"WELL BRED FROM WELL BREEDERS"

New England Accredited stock. All breeders 100% White Diarrhea free

	S. C. W. LEGHORNS	S. C. R. I. REDS	BARRED ROCKS	WHITE WYANDOTTES
Week of April 29	Grade A..... 18.00	22.00	24.00	27.00
Special Matings.....	21.00	25.00	28.00	32.00
Week of May 6	Grade A..... 16.00	20.00	22.00	25.00
Special Matings.....	19.00	23.00	25.00	28.00

Prices are per hundred. For orders of 25 chicks add 75c. For orders of 50 chicks add \$1.00.

We ship Prepaid and guarantee safe delivery

Everyone answering this advertisement will receive **FREE** our suggestions for brooding, feeding and rearing chicks.

Hall Bros.

POPLAR HILL FARM
BOX 59 WALLINGFORD CONN.

EIGENRAUCH FARMS

RED BANK, NEW JERSEY

18TH YEAR

breeding White Leghorns for size, vigor and heavy production of large White EGGS. 8,000 LAYERS are housed on our farm.

Our Chick Guarantee

100% satisfactory arrival on the exact date we promise shipment. Every chick sold by us is hatched from eggs laid by breeders on our own farm.

Write for Free Folder and Prices on Pullets and Chicks

EIGENRAUCH FARMS Dept. G, Red Bank, N. J.

National "Superbred" Chicks

Insure your future poultry profits by ordering NATIONAL "SUPERBRED" CHICKS NOW

	50	100	500	1000
S. C. White, Brown and Buff Leghorns.....	\$6.75	\$13.00	\$62.00	\$120.00
Tancred & Hollywood White Leghorns.....	7.25	14.00	67.00	130.00
Barred & White Rocks, R. I. Reds.....	7.75	15.00	72.00	140.00
Wh. Wyandottes, Buff Orpingtons.....	9.00	17.00	82.00	160.00

Light Mixed—\$9.00 per 100. Heavy Mixed—\$10.00 per 100.

Also Black Minorcas, White Minorcas, Anconas, Blue Andalusians and Jersey Black Giants. Send for our free catalog and prices on our Special Mated Chicks. We guarantee 100% live delivery. Member International Baby Chick Association.

NATIONAL CHICK FARMS, BOX 408, MIFFLINTOWN, PENNA.

Fairport Quality Chicks

are bred to make money for you. Strong, healthy, vigorous from the world's best and heaviest laying strains such as—Tancred, Ferris, Owen Farms, Daniels, Thompson, Martin, Shepard, Fishel and others. Free range flocks, scientifically culled and supervised. Smith Hatched. 100% live delivery guaranteed. 16 breeds 9c and up. Postpaid. Members International Baby Chick Association. Send now for free poultry book and prices. Buy Hatchery Chicks for Greater Profits.

FAIRPORT HATCHERIES Box 44 Fairport, N. Y.

AMERICAN CHICKERIES

Here: Nearly Everyone Raises Full Blooded "AMERICAN" Quality Chicks

Write now for our new low prices. Your opportunity to get our special flock mating chicks at utility prices. Chicks shipped C. O. D. Catalogue and prices on request. 100% live arrival guaranteed. 15 breeds. *Write now.*

American Chickeries, Box 214, Grampian, Pa.

Schwegler's "THOR-O-BRED" BABY CHICKS

"LIVE AND LAY"

THEY LIVE because they are bred from healthy, free range breeders that have thrived and gained in vigor for generations. They LAY because they are from selected and tested high egg power stock. White, Brown and Buff Leghorns, Barred and White Rocks, R. I. Reds, Anconas, Black Minorcas, Buff Orpingtons, White Wyandottes. 12c and up. 100% live delivery guaranteed. Postpaid. Member International Chick Assn. Write today for **FREE** Chick Book.

SCHWEGLER'S HATCHERY, 204 Northampton, BUFFALO, N. Y.

BABY CHICKS

	25	50	100	500
White Leghorns.....	\$2.75	\$5.25	\$10.00	\$47.50
Barred Rocks.....	3.25	6.25	12.00	57.50
Rhode Island Reds.....	3.25	6.25	12.00	57.50
Heavy Mixed.....	2.75	5.25	10.00	47.50
Light Mixed.....	2.50	4.75	9.00	42.50
Pekin Ducklings.....	7.50	14.50	28.00	
Mixed Ducklings.....	6.50	13.00	25.00	

John Shadel Hatchery McAlisterville, Pa. Route 2

Pennsylvania Co-Operative Leghorn Farms
Breeding COCKERELS with RECORDS to 303 EGGS. PURE TANCRED-HOLLYWOOD-BARRON STRAINS White Leghorns—Brown and Buff Leghorns—QUALITY EXTRAORDINARY—PRICE WAY DOWN—SHIP C. O. D. Get our prices quick.

Pennsylvania Co-Operative Leghorn Farms, Box 314, Grampian, Pa.

When writing advertisers be sure to say that you saw it in **AMERICAN AGRICULTURIST**

FINGER LAKE REGION BABY CHICKS

with an official record. Ask for our Baby Chick Book describing our Pedigreed Cornell Chicks from stock that has laid from 200 to 312 eggs in their pullet year and mated to breeders that have averaged over 200 eggs in their pullet year. Also describes our 144,000 egg hatchery with 22 years' experience in hatching Baby Chicks. Leghorns, Reds, Rocks, Wyandottes, Minorcas, and Giants. *The home of better Chicks at lower cost.*

THE DEROY TAYLOR CO.,
NEWARK, NEW YORK

BABY CHICKS

hatched by the best system of Incubators from high class bred-to-lay stock. White, Brown, Buff Leghorns, Anconas \$14.00 per 100; Barred, White Rocks, Minorcas, Reds \$16.00 per 100; White Wyandottes, Buff Orpingtons \$17.00 per 100; Giants \$20.00 per 100; Heavy Broilers \$12.00 per 100; Light Broilers \$10.00 per 100; Pekin Ducklings \$30.00 per 100. Add 25c on orders for less than 100. Safe delivery guaranteed by parcel post.

Nunda Poultry Farm, Desk H, Nunda, N. Y.
Member of the International Baby Chick Ass'n. and the N. Y. State Co-Operative Chick Producers Ass'n.

HIGH GRADE CHICKS

Immediate and April delivery

	100	500	1000
White & Brown Leghorns.....	\$13	\$62.50	\$120
Bd. Rocks, R. I. Reds, Anconas.....	15	72.50	140
Wh. Rocks, Wh. Wyan., B.I. Minorcas.....	16	77.50	150

Assorted: Light 10c, Heavy 12c; Pekin Ducklings 32c each, \$30 per 100. All chicks for May delivery 1c less. Also special mating blood tested chicks and two and six weeks old chicks. 100% Live delivery guaranteed. Order direct from adv. or write for circular. 10% books order, balance cash or C. O. D.

TAYLOR'S HATCHERY, BOX 12, LIBERTY, N. Y.

Green Forest Husky Chicks

English and Tancred Strain

	25	50	100
S. C. White Leghorns.....	\$3.25	\$6.25	\$12
S. C. Barred Plymouth Rocks.....	3.75	7.25	14
Mixed Chicks.....	2.75	5.25	10

Leghorns are out of hens with trapnest records of 291-300 eggs. We pay parcel post and guarantee 100% good, strong chicks on arrival. Free circular.

GREEN FOREST POULTRY FARM
J. W. Amig & Son, Props. Star Route Richfield, Pa.

BABY CHIX

THIS IS MY 11TH YEAR OF EXPERIENCE

	25	50	100	500	1000
Cash or C. O. D.....	\$5.00	\$7.50	\$12	\$67.50	\$130
Barred Rocks.....	3.25	6.50	12	57.50	110
Tancred Strain S.C.W. Leghorns.....	3.50	6.50	12	57.50	110
Heavy Mixed.....	3.25	6.50	12	57.50	110
Light Mixed.....	2.50	4.75	9	42.50	80

These chicks are from free range and heavy egg producing flock. 100% live delivery guaranteed to your door. Write for Special Mating prices.

FRANK NACE, Cocolamus, Pa., Box No. 120

BABY CHICKS

	25	50	100	500	1000
S.C.W. Leghorns.....	\$3.25	\$6.50	\$12	\$67.50	\$110
Bd. Rocks & S.C. Reds.....	3.75	7.25	14	67.50	130
Heavy Mixed.....	3.25	6.50	12	57.50	110
Light Mixed.....	2.50	4.75	9	42.50	80

A Special Discount on orders placed in advance. Will ship C. O. D.

PINECREST POULTRY FARM & HATCHERY

Herbert Miller, Prop. Box 12, Richfield, Pa.

BABY CHICKS

	25	50	100	500	1000
Free range bred.....	\$5.00	\$7.50	\$12	\$67.50	\$110
Wh. & Brown Leghorns.....	3.25	6.25	12.00	58.75	115
Ancona & Black Leghorns.....	3.25	6.25	12.00	58.75	115
White & Barred Rocks.....	3.75	7.25	14.00	68.75	135
Rhode Island Reds.....	3.75	7.25	14.00	68.75	135
Heavy Mixed Broilers.....	3.25	6.25	12.00	58.75	115
Light Mixed Broilers.....	2.25	4.25	8.00	38.75	75

Full count and quality guaranteed. Catalogue free. For Greater Profit **ULSH POULTRY FARM & HATCHERY** Hotchery Chicks. Port Trevorton, Penna.

GOLD MEDAL CHICKS

Choice Chicks at Popular Prices. 50 100 500 1000

Wh., Br., Buff Leghorns, Anconas.....	\$7.50	\$14	\$67.50	\$130
Barred, Wh., Buff Rocks, Reds.....	8.50	16	77.50	150
Wyandottes, Orpingtons, Minorcas.....	9.00	17	82.50	160

Mixed Chicks, \$12, 100. All shipments Postpaid. Finest Stock. Greatest Profit Makers. 100% Safe Delivery.

Gold Medal Chickeries, Box 444, Wallkill, N. Y.

CHICKS, 8c UP

HEALTHY, FREE RANGE STOCK

Rocks - Reds - Wyandottes - Leghorns - Mixed Circular and Price List. Delivery Guaranteed.

LONG'S RELIABLE HATCHERY, Box 12, Millerstown, Pa.

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Our breeders are large birds; long, deep, rectangular bodies. Selected for size, type and egg production.

\$10 Per 100; \$47.50, 500; \$90, 1000

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SINGLE COMB RHODE ISLAND REDS

Vt. Certified: Tested free from B.W.D. Males from 200-300 egg hens. Pullets: Started Chicks: 3000 Baby Chicks weekly: Circular.

ASCUTNEY FARMS, A10, HARTLAND, VT.

DUCKLINGS

\$33; EGGS \$14-100 "Duck News" Free. **ROY PARDEE, Islip, L. I., N. Y.**

Some Suggestions for Selecting Colors

Every Rule Has Exceptions But These Facts Apply to the Majority

THE following suggestions are based on the natural tones of complexion, hair and eyes. Where make-up is used it modifies the combination and must of course be taken into consideration in selecting colors for garments.

As a general rule:
If your hair is dark, choose rich, warm colors.

If you are blond haired, choose delicate clear colors.

If you are auburn or red haired, choose pure greens, slightly grayed, and warm shades of blue and brown.

If you are gray or white haired, choose from the varieties of blue, purple or green, except yellowish green. Wine, soft shades of rose, black and white combinations are very good. Usually the soft silvery tones of any color are most becoming. If a gray-haired woman has plenty of color in the face, gray should be becoming. The gray should match or blend with the hair.

To these general suggestions may be added some further details. For instance:

The girl with golden hair, fair skin and blue eyes will find generally that the following are good colors:

Black, which makes an effective contrast.

Mauve, because it enhances her coloring.

Nile green, which, being complementary to red, emphasizes her coloring, but like mauve, is delicate enough to suit her type.

Soft blues, of course—but everybody knows that!

For a girl of this type the following are generally to be avoided:

Emerald green and royal blue, because they are too strong; Mulberry, which is too heavy for one with cool coloring.

The medium-light blonds with rather sallown skin and gray eyes will as a

rule find her best colors among the following:

Orchid and rose pink, because they reflect their color in her face.

Navy blue, which by contrast gives character to her hair and skin.

Cream ivory, which tends to make the skin look white.

She will do well generally to avoid such colors as:

Copenhagen blue, because it brings out sallowness of skin.



When the older members of the home try it—this telephone screen may be "scissors painted" and the design may be moulded in sealing wax.

Dead white, which by contrast makes the skin more sallowness.

Putty and sand shades, which are too much like her own coloring and add no character to the costume.

The medium blonde with fair skin and high coloring and with hazel eyes usually looks her best in such colors as:

Lip-stick red, which lessens high color and enhances the fairness of the skin.

Apricot, which though delicate brings out the natural color.

Lanvin green, a cool color which enhances the coloring of the skin and eyes.

She should be careful about such colors as:

Lemon, which is too pale and characterless.

Olive, a heavy shade which is too nearly the color of her hair and reflects unbecoming green in the skin.

Alice blue, because it is too light and brings out the yellow in her skin.

The woman with dark-brown hair and eyes, vivid coloring and dark skin can generally wear successfully:

Buff, which by contrast is often becoming to one with warm coloring. Orange or geranium red, because these lessen the natural color.

Poor colors for her type are: Chocolate brown, which produces an uninteresting one-color effect.

Electric blue, because bright blue brings out the yellow in the skin. Mauve, which is too delicate for the strong type.

The auburn or red haired woman with brown eyes and delicate coloring will find the following are usually good colors for her type:

White, which forms a striking contrast with the hair.

Golden brown, a becoming shade bringing out the glints in the hair.

Bishop purple, a strong color suitable for her type.

Shades that she will generally do well to avoid are:

Lemon yellow, which is too delicate and gives a yellowish cast to the skin.

Copper or red shades that do not harmonize with the hair.

Soft green, which enhances an already dominant color.

The large woman of medium coloring will find that the following colors are usually becoming:

Midnight blue, which is inconspicuous and therefore good for the large figure.

Beaver, a rich color but inconspicuous.

Bottle green, which enhances coloring and affords relief from ordinary dark shades.

Eggplant (purple), especially good in Georgette and similar soft fabrics.

Neutral and not too pale shades of blue, taupe and smoky gray.

Colors to be avoided by the woman of large proportions are:

Flesh, silver gray, tangerine and similar colors that tend to make the figure appear larger than it really is.

—Art of Dressmaking.

Try "Scissors Painting"

"**S**CISSORS Painting" is a craft proving extremely fascinating to children and has just as attractive possibilities for the mature members of the family as well. With a little assistance or direction the average small child who has begun simple craft work or sewing, or who has attended kindergarten, can not only be amused many hours in fashioning quaint and picturesque objects of decoration, but gains, at the same time, useful and artistic training.

This craft is referred to as "Scissors Painting" because the process involves the cutting out of designs, applying them to some background and painting over them to achieve a certain effect. This unique method of painting is especially adaptable to pottery, although



Little children will delight in decorating flower pots for gifts of gay artificial flowers.

boxes, flower pots, wall panels, book covers, screens, posters and many other objects lend themselves beautifully to the treatment. Plain undecorated objects can always be bought at slight cost, and, best of all, there are always simple things about every household that can be transformed into lovely and useful ornaments. Two very charming effects can be achieved, namely, the stippled and the tinted.

The Stippled Method

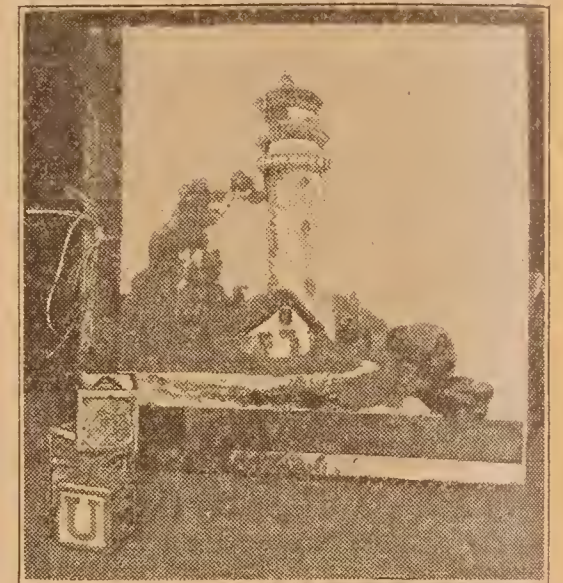
Any picture cut from decorated crepe paper can be used as a design and there are many beautiful ones to choose from. There are floral designs, nature scenes, birds, Japanese figures, animals, quaint old ship models, conventional and modernistic designs, and holiday motifs for almost every special day of the year's calendar. And the crepe paper is so soft and pliable of texture that it shapes itself readily to ovals, curves and angles of any shaped foundation.

First, cut out the different parts of the design and brush the back with good fresh paste, brushing with the grain of the paper, not across it. The paper carrying the design must not be stretched the least little bit, else the picture would be distorted and spoiled. Apply the design, then, as desired. The vase and telephone screen in the accompanying photographs illustrate how attractively this can be done.

Next, paint the entire surface with transparent amber sealing wax paint. (To prepare any sealing wax paint, break the wax in tiny pieces, place in small screw top jars and cover the wax scantily with denatured alcohol. Let stand until dissolved. Stir before

using; if too thin, let some of the alcohol evaporate; if too thick, add more alcohol.)

Next stipple the background. For this step a medium thick solution of paint that will not drip from the brush is required. Sometimes it is desirable to introduce several shades of one



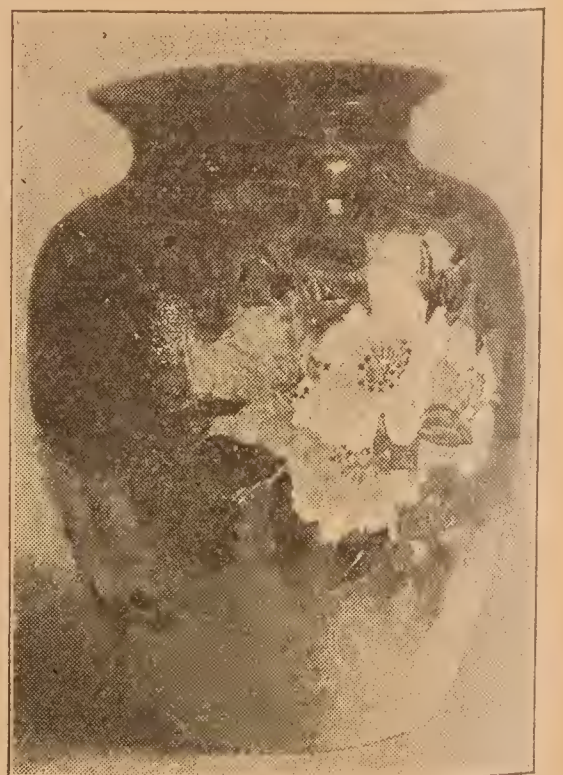
Any little tot will be delighted to make his own little scrap book when he can "scissors paint" such an interesting cover.

color. In that case, simply use the same color but of different consistency as regards thickness. The different thicknesses will give the various shades. Fill in all the background around the design with the stippling, applying the paint in little dab-like motions rather than strokes of the brush. Shade as desired by alternating the thick and thin paint, or use contrasting colors.

This step is followed by touching up the high lights of the design with wax paint, following the colors in the design itself.

Paste the design in place as already described and give one coat of transparent amber paint. Next, paint over this coat, in the background only, with the colors you wish for the background, stroking it on smoothly. Lastly, with medium thick paint, touch up the outlines and high lights so they will stand out boldly from the background.

With the completed pieces of work interest and beauty can be brought to a dark corner or anywhere in a room where somberness depresses, by the



While Mother is teaching the children to do this craft work, she may decorate a vase like this one herself.

splashes of lovely color and catchy designs. Once a child has experienced the thrill of creating a beautiful object of art, he or she will want to delve further into the craft, and in that way pass many hours happily and instructively.—Dorothy Wright.



This novel kitchen set, No. 1913, is a pleasing color note in any kitchen. It is particularly satisfying for the bride's shower or for gift purposes. The church or grange sale offers an equally good opportunity for using such a set. It comes in colors green, blue, tangerine, brown, pink and lavender and is stamped on good quality material. The five piece set consists of one pair sash curtains, two hot pads, and a kitchen apron. Price of set postpaid, \$1.65. Send orders to Embroidery Department, American Agriculturist, 461-4th Avenue, New York City.

Home Bureau District Meets

Eight Counties of Southeastern New York Are Represented

THE southeastern district of the New York State Home Bureau Federation had its annual meeting in New York City, April 11th and 12th. The conference opened with a luncheon at the Commodore Hotel, with about thirty-five women present from eight counties of the district. Speakers at the luncheon were Mrs. Edward Young, President New York State Federation of Home Bureaus; Mrs. Elmer Van Brunt, Suffolk County; Miss Vera McCrea, Director of Home Department of Dairymen's League; Mrs. Grace W. Hockett, Household Editor of American Agriculturist; and Mrs. G. T. Powell, Past-President of New York State Home Bureau Federation. Mrs. Edward Eddy of Saratoga County, was the toastmistress. Nassau and Suffolk were the hostess counties.

Miss Joan Rock of the educational department of Royal Baking Powder presented the story of home economics women in the business world. Mrs. Bettina Gunczy, Secretary of the National Board of Motion Picture Review, told how the general public may encourage the production of better movies by patronizing those which are selected for special audiences, family,

juvenile or otherwise. Dr. Ruby Green Smith, Associate State Leader of Home Bureaus, spoke on conservation of human life.

In addition to regular business sessions of the district, inspection trips were arranged for the second day through the Homemaking Center of the New York State Federation of Women's Clubs at Grand Central Palace and through the American wing at the Metropolitan Art Museum.

Miss Martha Van Rensselaer, Director of the New York State College of Home Economics, spoke at the business meeting.

Those attending the conference were:

Nassau: Mrs. Charles Rhodes, Mrs. J. P. Henry, Mrs. George Klaun, Mrs. M. Muller, Mrs. Mayer, Mrs. Stephen Bedell, Mrs. C. W. Shattuck, Mrs. H. S. McKnight, Mrs. G. T. Powell, Mrs. William Seiffert, Mrs. H. W. Reddick, Mrs. W. E. Harkness, Miss Lavinia Bacon, Mrs. John Blust, Miss Florence Elrey.

Suffolk: Mrs. E. W. Van Brunt, Mrs. John A. Herrick, Mrs. A. E. Wilkinson, Mrs. H. C. Duffield, Miss Kathleen McBride.

Saratoga: Mrs. Edward Eddy, Mrs. F. B. Renner, Mrs. W. A. Clemens, Mrs. J. W. Nichols, Mrs. G. W. Thomas, Mrs. H. B. Little.

Rensselaer: Mrs. R. J. Pine, Miss H. Ackery.

Sullivan: Miss W. V. Dexter.

Ulster: Mrs. R. E. Bush, Mrs. E. J. Hunt, Mrs. Edward Young, Miss Evelyn Nance.

Orange: Dolly W. Booth.

Warren: Mrs. Charles S. Wade.

Others attending were: Mrs. Charles

E. Hooper, Mrs. H. B. Reed, Mrs. Margaret Dowding.

Letter from Little Cook

NO doubt you have been reading Betty's little recipes for little cooks. The first recipe appeared in our issue of March 30, the second appeared in the issue of April 20 (page 2). Hundreds of orders have already been received inclosing their 10c for the scrapbook in which to keep these recipes. One of our little readers has sent the following letter which gives one of her recipes:

Dear Betty:
I saw your piece in the AMERICAN AGRICULTURIST. I think it is very nice. I have baked for my mother ever since I was four years old. I am nine now. I did just as you did, beginning with 1/4 of a recipe first, then came up to a full recipe. I just made some cup cakes today. Would you like the recipe? Well anyway here it is:

1 cup of sugar.
1/2 cup of fat.
3/4 cup of milk.
1 egg.
2 cups of flour.
1 teaspoon of cream tartar.
3/4 of a teaspoon of soda in warm water:
This will make about twenty-four cup cakes.

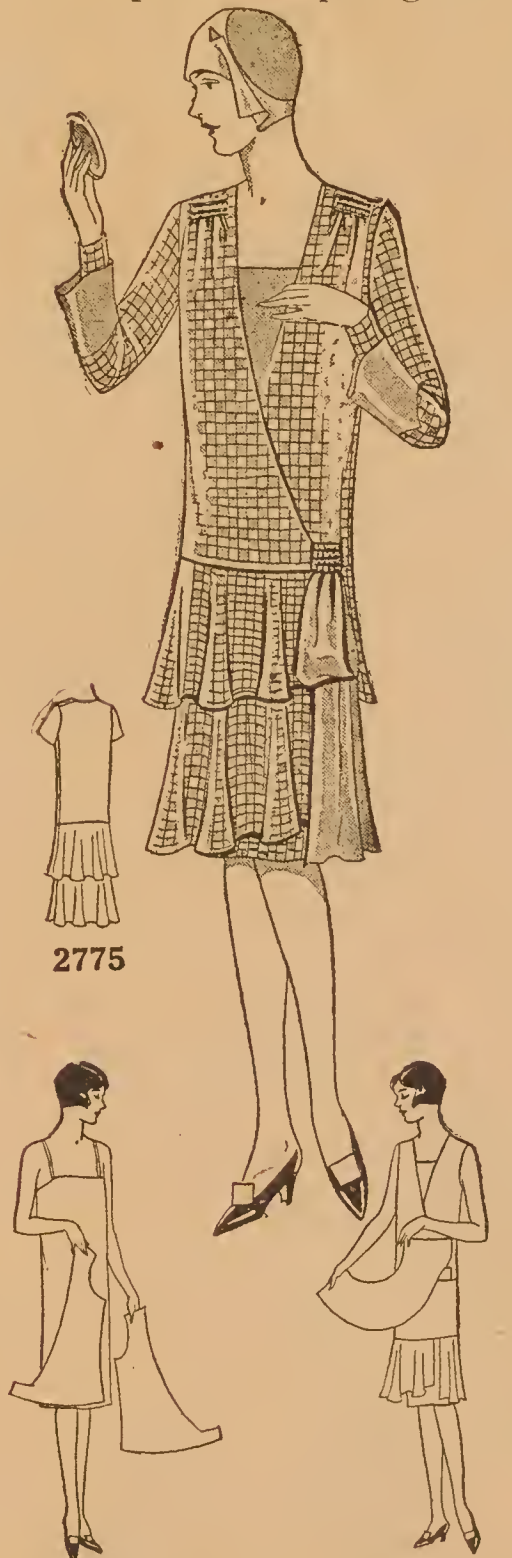
Your friend,
LOUISE ROGERS.

Sprightly and Youthful



2762

The Spirit of Springtime



2775

STYLE No. 2762 shows a very practical one-piece pattern for the young girl and is particularly attractive if made up in the sprightly printed fabrics for spring. Dots are much in vogue and come on all kinds of materials, silks, wool crepes, cotton broadcloth or percales. The pattern cuts in sizes 8, 10, 12 and 14 years. Size 8 requires 2 yards of 36-inch material with 1/2 yard of 40-inch contrasting. PRICE 13c.

TO ORDER: Write name, address, pattern sizes and numbers clearly and correctly and inclose with remittance in stamps or coin (although coin is sent at own risk). Add 12c for one of the new fashion catalogues and send to Pattern Department, American Agriculturist, 461-4th Avenue, New York City.

PATTERN No. 2775 with its softly rippling flounces is delightful when made up in the pretty figured silks and set off by trim of matching or contrasting plain color. The pattern cuts in sizes 16, 18 years, 36, 38, 40 and 42 inches bust measure. Size 36 requires 4 1/2 yards of 40-inch material with 1/2 yard of 40-inch contrasting. PRICE 13c.



"Fresh" Paint Without Painting...

if you wash it with Fels-Naptha. For Fels-Naptha brings *extra help* that banishes grime! Two effective cleaners working together. Naptha to dissolve grease and dirt—good golden soap to wash them away—combined in Fels-Naptha by our special process. That's why, from housecleaning to the family wash, Fels-Naptha lightens all soap-and-water tasks. That's why...

Nothing takes the place of

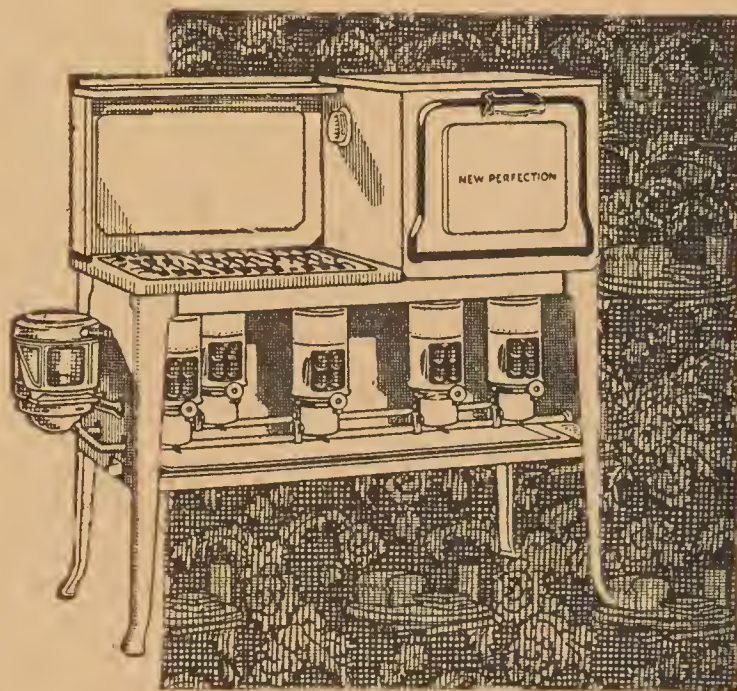
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WOOL BLANKETS, and Colonial Coverlets. BATTING. Made from your own wool. ROBES. Also sold direct from the mill if you have no wool. Beautiful goods that give satisfaction and long wear. Write for catalog and samples. Prices reasonable. WEST UNITY WOOLLEN MILLS, DEPT. G. WEST UNITY, OHIO.

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Compare This Beautiful New Range With Yours



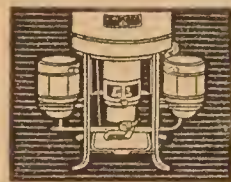
PERFECTION OIL RANGE

COOKING three meals a day, seven times a week, is no fun at best—especially on an old-fashioned range. But on the Perfection, your cooking is done easily and quickly.

It has twenty-seven new features. Insulated "live heat" oven with accurate temperature indicator. All-grate cooking top. Burners that produce a swift, clean heat aided by

the safe and economical fuel, Socony Kerosene.

The new Perfection comes in full porcelain enamel, snow white or with trim of gay color. Some have the durable Perfectolac finish: white, silver gray, or dove gray. Others are in satin black. See your dealer today. Have him show you the wide line of Perfection and Puritan models. All at a wide range of prices.



PERFECTION Water Heaters

Hot water whenever you want it—whether you have a pressure system or kitchen pump. Ask your plumber about the Perfection and Puritan Kerosene Water Heaters. Five sizes and five kinds. Rapid, reliable and moderate in price.



STANDARD OIL COMPANY OF NEW YORK

The Little Shepherd of Kingdom Come *By John Fox, Jr.*

Chad could hardly speak his thanks. He would be in the Bluegrass only a few days, he stammered, but he would go out to see them next day. That night he went to the old inn where the Major had taken him to dinner. Next day he hired a horse from the livery stable where he had bought the old brood mare, and early in the afternoon he rode out the broad turnpike in a nervous tumult of feeling that more than once made him halt in the road. He wore his uniform, which was new, and made him uncomfortable—it looked so much like waving a victorious flag in the face of a beaten enemy—but it was the only stitch of clothes he had, and that he might not explain.

It was the first of May. Just eight years before, Chad with a burning heart had watched Richard Hunt gayly dancing with Margaret, while the dead chieftain, Morgan, gayly fiddled for the merry crowd. Now the sun shone as it did then, the birds sang, the wind shook the happy leaves and trembled through the budding heads of bluegrass to show that nature had known no war and that her mood was never other than of hope and peace. But there were no fat cattle browsing in the Dean pastures now, no flocks of Southdown sheep with frisking lambs. The worm fences had lost their riders and were broken down here and there. The gate sagged on its hinges; the fences around yard and garden and orchard had known no whitewash for years; the paint on the noble old house was cracked and peeling, the roof of the barn was sunken in, and the cabins of the quarters were closed, for the hand of war, though unclimbed, still lay heavy on the home of the Deans. Snowball came to take his horse. He was respectful, but his white teeth did not flash the welcome Chad once had known. Another horse stood at the hitching-post and on it was a cavalry saddle and a rebel army blanket, and Chad did not have to guess whose it might be. From the porch, Dan shouted and came down to meet him, and Harry hurried to the door, followed by Mrs. Dean. Margaret was not to be seen, and Chad was glad—he would have a little more time for self-control. She did not appear even when they were seated in the porch until Dan shouted for her toward the garden; and then looking toward the gate Chad saw her coming up the garden walk bareheaded, dressed in white, with flowers in her hand; and walking by her side, looking into her face and talking earnestly, was Richard Hunt. The sight of him nerved Chad at once to steel. Margaret did not lift her face until she was half-way to the porch, and then she stopped suddenly.

"Why, there's Major Buford," Chad heard her say, and she came on ahead, walking rapidly. Chad felt the blood in his face again, and as he watched Margaret nearing him—pale, sweet, frank, gracious, unconscious—it seemed that he was living over again another scene in his life when he had come from the mountains to live with old Major Buford; and, with a sudden prayer that his past might now be wiped as clean as it was then, he turned from Margaret's hand-clasp to look into the brave, searching eyes of Richard Hunt and feel his sinewy fingers in a grip that in all frankness told Chad plainly that between them, at least, one war was not quite over yet.

"I am glad to meet you, Major Buford, in these piping times of peace."

"And I am glad to meet you, General Hunt—only in times of peace," Chad said, smiling.

The two measured each other swiftly, calmly. Chad had a mighty admiration for Richard Hunt. Here was a man who knew no fight but to the finish, who would die as gamely in a drawing-

room as on a battle-field. To think of him—a brigadier-general at twenty-seven, as undaunted, as unbeaten as when he heard the first bullet of the war whistle, and, at that moment, as good an American as Chadwick Buford or any Unionist who had given his life for his cause! Such a foe thrilled Chad, and somehow he felt that Margaret was measuring them as they were measuring each other. Against such a man what chance had he?

He would have been comforted could he have known Richard Hunt's thoughts for that gentleman had gone back to the picture of a ragged mountain boy in old Major Buford's carriage, one court day long ago, and now he was looking that same lad over from the visor of his cap down his superb

the war was over, the hatchet in Kentucky was buried at once and buried deep. Son came back to father, brother to brother, neighbor to neighbor; political disabilities were removed and the sundered threads, unravelled by the war, were knitted together fast. That is why the post-bellum terrors of reconstruction were practically unknown in the State. The negroes scattered, to be sure, not from disloyalty so much as from a feverish desire to learn whether they really could come and go as they pleased. When they learned that they were really free, most of them drifted back to the quarters where they were born, and meanwhile the white man's hand that had wielded the sword went just as bravely to the plough, and the work of rebuilding war-shattered ruins

cidents of their boyhood. Harry meant to study law, he said, and practise in Lexington; Dan would stay at home and run the farm. Neither brother mentioned that the old place was heavily mortgaged, but Chad guessed the fact and it made him heart-sick to think of the struggle that was before them and of the privations yet in store for Mrs. Dean and Margaret.

"Why don't you, Chad?"

"Do what?"

"Stay here and study law," Harry smiled. "We'll go into partnership."

Chad shook his head. "No," he said, decisively. "I've already made up my mind. I'm going West."

"I'm sorry," said Harry, and no more; he had learned long ago how useless it was to combat any purpose of Chadwick Buford.

General Hunt and Margaret were still away when they got back to the house. In fact, the sun was sinking when they came in from the woods, still walking slowly, General Hunt talking earnestly and Margaret with her hands clasped before her and her eyes on the path. The faces of both looked pale, even that far away, but when they neared the porch, the General was joking and Margaret was smiling, nor was anything perceptible to Chad when he said good-by, except a certain tenderness in his tone and manner toward Margaret, and one fleeting look of distress in her clear eyes. He was on his horse now, and was lifting his cap.

"Good-by, Major," he said. "I'm glad you got through the war alive. Perhaps I'll tell you some day why I didn't shoot you that morning." And then he rode away, a gallant, knightly figure, across the pasture. At the gate he waved his cap and at a gallop was gone.

After supper a heaven-born chance led Mrs. Dean to stroll out into the lovely night. Margaret rose to go too, and Chad followed. The same chance, perhaps, led old Mammy to come out on the porch and call Mrs. Dean back. Chad and Margaret walked on toward the stiles where still hung Margaret's weather-beaten Stars and Bars. The girl smiled and touched the flag.

"That was very nice of you to salute me that morning. I never felt so bitter against Yankees after that day. I'll take it down now," and she detached it and rolled it tenderly about the slender staff.

"That was not my doing," said Chad, "though if I had been Grant, and there with the whole Union army, I would have had it salute you. I was under orders, but I went back for help. May I carry it for you?"

"Yes," said Margaret, handing it to him. Chad had started toward the garden, but Margaret turned him toward the stile and they walked now down through the pasture toward the creek that ran like a wind-shaken ribbon of silver under the moon.

"Won't you tell me something about Major Buford? I've been wanting to ask, but I simply hadn't the heart. Can't we go over there tonight? I want to see the old place, and I must leave to-morrow."

"To-morrow!" said Margaret. "Why—I—I was going to take you over there to-morrow, for I—but, of course, you must go to-night if it is to be your only chance."

And so, as they walked along, Margaret told Chad of the old Major's last days, after he was released from prison, and came home to die. She went to see him every day, and she was at his bedside when he breathed his last. He had mortgaged his farm to help the Confederate cause and to pay indemnity for a guerilla raid, and Jerome

(Continued on Page 22)

Our Next Serial

"The Plains of Abraham"

FOR some time, the entire editorial staff has been reading books, in an attempt to find a serial that would meet the high standard of American Agriculturist. We have found the serial—it is "The Plains of Abraham" by James Oliver Curwood. Many of our subscribers are intimately acquainted with the section in which the scene is laid. To these readers the story will have an especial appeal but we assure everyone that "The Plains of Abraham" is one of the best serials which has appeared in American Agriculturist in years.

It is the story of a family who lived, in early colonial times, near the border line between New York and Canada. "The Plains of Abraham" portrays in a vivid manner the jealousies between the early French and English colonists. Long before war was formally declared between England and France, there was fighting among the colonists.

The hero of the story is a son of a French colonist, but his mother is English. His allegiance is therefore divided for a time, until events decide his course for him. He is finally captured by Indians, and lives with them for some time. The story is intensely interesting. The first installment will appear in the May 4th issue. Do not fail to read it.

length to the heels of his riding-boots. His eyes rested long on Chad's face. The change was incredible, but blood had told. The face was high-bred, clean, frank, nobly handsome; it had strength and dignity, and the scar on his cheek told a story that was as well known to foe as to friend.

"I have been wanting to thank you, not only for trying to keep us out of that infernal prison after the Ohio raid, but for trying to get us out. Harry here told me. That was generous."

"That was nothing," said Chad. "You forget, you could have killed me once and—and you didn't." Margaret was listening eagerly.

"You didn't give me time," laughed General Hunt.

"Oh, yes, I did. I saw you lift your pistol and drop it again. I have never ceased to wonder why you did that."

Richard Hunt laughed. "Perhaps I'm sorry sometimes that I did," he said, with a certain dryness.

"Oh, no, you aren't, General," said Margaret.

Thus they chatted and laughed and joked together above the sombre tide of feeling that showed in the face of each if it reached not his tongue, for, when

began at once. Old Mammy appeared, by and by, shook hands with General Hunt and made Chad a curtsy of rather distant dignity. She had gone into exile with her "chile" and her "ole Mistic" and had come home with them to stay, untempted by the doubtful sweets of freedom. "Old Tom, her husband, had remained with Major Buford, was with him on his deathbed," said Margaret, "and was on the place still, too old, he said, to take root elsewhere."

Toward the middle of the afternoon Dan rose and suggested that they take a walk about the place. Margaret had gone in for a moment to attend to some household duty, and as Richard Hunt was going away next day he would stay, he said, with Mrs. Dean, who was tired and could not join them. The three walked toward the dismantled barn where the tournament had taken place and out into the woods. Looking back, Chad saw Margaret and General Hunt going slowly toward the garden, and he knew that some crisis was at hand between the two. He had hard work listening to Dan and Harry as they planned for the future, and recalled to each other and to him the in-



HEAD MOVER: Try to have patience with him, ma'am. He's new at the game—an' we all have to learn, sometime.—LIFE.

Classified Advertising Rates

Classified ads are inserted at the rate of 7 cents a word. The minimum charge per insertion is \$1. Count as one word each initial, abbreviation and whole number, including name and address. Thus "J. B. Jones, 44 E. Main St., Mount Morris, N. Y." count as eleven words.

Orders for these columns must be accompanied by bank references

AMERICAN AGRICULTURIST

Classified Ads

A Place to Buy, Sell or Trade

Classified Ad Schedule

Advertising orders must reach our office at 461 Fourth Avenue, New York City, not later than 14 days before the Saturday of publication date desired. Cancellation orders must reach us on the same schedule. Because of the low rate to subscribers and their friends, cash or money order must accompany your order.

DOGS AND PET STOCK

DON'T DELAY and be too late, get your English or Welsh Shepherds now. Beautiful pups from natural heelers. A few strict heelbiting trained Shepherds ready to work. GEORGE BOORMAN, Marathon, N. Y.

POULTRY

Baby Chicks, Breeding Stock, Eggs

EVERLAY BROWN LEGHORNS. Tormohlen Famous strain. Baby chicks, eggs for hatching. SUNNYSIDE FARM, Emporium, Pa.

HATCHING EGGS from thrifty Pure Bred Jersey Giants \$1.50 per 15. \$3.00 per 45. Parcel Post, C.O.D. INDIAN LADDER FARM, East Stroudsburg, Penna.

BREEDERS OF PENNSYLVANIA'S Finest Baby Chicks. Excellent quality and sired for productiveness. Heavy breeds, 14c; light breeds 12c. May delivery, 2c less. Hatches each Monday and Wednesday. Illustrative catalog. MILTON POULTRY FARM, Milton, Pa.

FOR SALE—Single Comb White Leghorn chicks. L. H. HISCOCK, Skaneateles, N. Y. Circular on request.

SINGLE COMB REDS—Barred Rocks. Eggs. Chicks. Extraordinary matings. Fine type. Bred for winter production. Catalogue. Low prices. GRAMPIAN HILLS POULTRY FARMS, Gramplan, Pa.

AMERICAN MOTTLED ANCONAS—Record Layers. Lay large white eggs. Extra large type. Exceptional markings. Fine matings. Low prices. Catalogue. AMERICAN ANCONA FARMS, Gramplan, Pa.

PRODUCTION BRED CHICKS that live. Large type S.C.W. Leghorns. \$20-100; \$180-1000; Invest now and take profits in 1929. ADAM SEABURY, Sayville, L. I.

SUNNYFIELD EXTRA LARGE Single Comb Black Minorcas. Exclusively. Chicks. Eggs. Stock. Extraordinary layers. Lay exceptionally large white eggs. Two matings. Low prices. Catalogue. SUNNYFIELD MINORCA FARMS, Gramplan, Pa.

REGAL DORCAS WHITE WYANDOTTES—Eggs, chicks, stock. 256 egg record. Ledger. North American contest. Winter layers. Excellent type. Fine matings. Low prices. Catalogue. KEISER'S WHITE ACRES, Gramplan, Pa.

GIANT LIGHT BRAHMAS—chicks—eggs—extraordinary large breeders—fine color—record layers—standard breed—low price—Catalogue. GIANT BRAHMA FARMS, Gramplan, Pa.

BUCHER SUPER-QUALITY CHICKS from inspected free range money-making stock. Reds. White Wyandottes, White Barred Rocks, Giants, Black Minorcas, Anconas, White and Brown Leghorns. Booklet Free. Low Prices. Pure Breeds. BUCHER BROS., HATCHERY, Dept. C, Bucyrus, Ohio.

CHICKS C.O.D.—100 Rocks or Reds, \$14; Leghorns, \$12; heavy mixed, \$12; light, \$9. Delivery guaranteed. Feeding system, raising 95% to maturity, free. C. M. LAUER, Box 26, McAlisterville, Pa.

WOODSIDE POULTRY YARDS, chicks, Tom Barron S.C. White Leghorns Imported 250-298 egg strain Breeder of leghorns for 28 years. Catalogue. DAVID HAMMOND, Cortland, N. Y.

ROSE COMB BROWN Leghorns. Frostproof egg producers. Very profitable. Baby Chicks. J. M. CHASE, Box 40, Wallkill, N. Y.

CHICKS—PULLETS From Barron's White Leghorns. Imported annually from Barron, England; Big females, long bodies, large eggs. Catalogue free. BISHOP'S POULTRY FARM, New Washington, Ohio.

BABY CHICKS HATCHING Eggs 8 and 10 weeks old Pullets single comb White Leghorns only. Write for price. ALTOONA FARM, R. Neal Marshall, Honesdale, Pa. R. 4.

BABY CHICKS: From heavy laying strains of Rocks and Reds \$12. White and Brown Leghorns \$10. Mixed \$8. prepaid. Member I. B. C. A. SUNNYSIDE HATCHERY, Liverpool, Pa.

POULTRY

Baby Chicks, Breeding Stock, Eggs

COLUMBIAN WYANDOTTES. Large handsome heavy layers, Splendid chicks, right prices. INVALE FARM, Rt. Wallkill, N. Y.

CHICKS: S. C. ENGLISH White Leghorn and common White Leghorns, Barred Rocks and Reds. Bank references. Be sure and get my prices before ordering. CLOYD NEIMOND, McAlisterville, Pa.

PULLETS—Baron and Tancet White Leghorns from four and five lb. breeders. Three to ten weeks old, 27c and up. Free circular. GOODFLOX POULTRY FARM, Leghorn Blvd., Dansville, N. Y.

THOMPSON STRAIN BARRED Rock Chicks: From healthy free range stock April—\$12 per 100. May and June \$10 per 100 postpaid. 100% live delivery guaranteed. Hatching eggs \$6 per 100. Order direct from this add. WEST DENTON HATCHERY, Denton, Md.

TANGRED WHITE LEGHORN Baby Chicks. Direct from the breeder. Same stock as our contest leading pens, carrying three generations of breeding over 250. Large eggs. Every mating brooder tested—vitality and livability assured. Also Ringlet Barred Rocks and Tompkins Reds from real stock. Duck eggs, 11 breeds. SHADYLAWN POULTRY FARM, Hughesville, Pa.

BABY CHICKS 25,000 weekly. White, Brown, Buff Leghorns and Anconas \$12. and Reds, Rocks, Wyandottes, Orpingtons \$14. Per 100. Also Pigeons, Hares, Mice, Parrots. J. A. BERGEY, Telford, Pa.

WHITE ROCK CHICKS, \$16 per 100. L. HAMBLIN, Wilson, N. Y.

STARTED CHICKS two weeks old \$25 per 100. L. HAMBLIN, Wilson, N. Y.

RHODE ISLAND RED Chicks S. C. \$16 per 100. L. HAMBLIN, Wilson, N. Y.

CHICKS, S. C. WHITE Leghorns, special mating, \$15 per 100. L. HAMBLIN, Wilson, N. Y.

CHICKS S. C. W. Legs \$11.00—100; Barred Rocks, and Reds, \$13.00—100; W. Rocks \$14.00—100; Mixed, \$10.00—100. 1 pay postage. 100% live delivery guaranteed. JACOB NIEMOND, McAlisterville, Pa. Box A.

LEGHORN, ANCONAS 10c. Rocks, Reds, Minorcas 12c. Wyandottes 13c. heavies 11c. Light mixed 9c. CONTINENTAL HATCHERY, York, Pa.

SILVER SPANGLED HAMBURG Eggs. Fifteen and thirty lots. Prepaid. Safe delivery. HARVEY CRESSMAN, Richlandtown, Pa.

JERSEY GIANTS 15 Eggs \$1.25; 30-\$2.40 postpaid. WILEY E. HAUGHL, Brogueville, Pa.

LIGHT BRAHMA WINNERS at our leading shows the past 25 years, hatching eggs \$3.00 per 15, \$5.00 per 30 prepaid. KAUYAHOORA FARM, Barneveld, N. Y.

TOM BARRON STRAIN S. C. White Leghorns exclusively. Extra nice healthy chicks—May, \$15. June, \$12. Safe delivery by prepaid parcel post and satisfaction guaranteed. FEEK'S WHITE LEGHORN FARM, Clyde, N. Y.

POULTRY

Turkeys—Ducks—Geese

WHITE WYANDOTTE: MAMMOTH PEKIN Duck eggs. Pearl Guineas eggs. LAURA DECKER, Stamfordville, N. Y.

MAMMOTH WHITE PEKIN Duck eggs for hatching, ten cents apiece, delivered, satisfaction guaranteed. JOS. KENNEL, Atglen, Pa.

PURFERED MAMMOTH BRONZE turkey eggs. "Taker's Bronze Beauties" strain. TROWBRIDGE TURKEY FARM, Sabinsville, Pa.

MAMMOTH BRONZE TURKEY eggs. 10 for \$5. MRS. FLOYD MILLER, Walton, N. Y.

POULTRY

Turkeys—Ducks—Geese

TEN CHOICE BOURBON Red Turkey eggs. \$5. Free range stock. HOMER LEIMAN, Amaranth, Pa.

W. HOLLAND HATCHING EGGS. From Madison Square Garden winners. MRS. A. H. SMITH, Sodus, N. Y.

TURKEY EGGS—from our famous pure bred Mammoth Bronze, Bourbon Red, Narragansett and White Holland flocks. Write WALTER BROS., Powhatan Point, Ohio.

BOURBON RED TURKEY Eggs \$5-10, Giant hen eggs \$1.75-15. GEO. LEIMAN, Amaranth, Pa.

MAMMOTH BRONZE TURKEY eggs from healthy free farm range stock. 100 eggs \$15. 50, \$23.50. 12, \$6. Prepaid. Fertility and safe delivery guaranteed. Valuable instructions with order. HIGHLAND FARM, Sellersville, Pa.

MAMMOTH TOULOUSE GEESE Eggs. From large old breeders. 50-\$23.50. 12-\$6.00. Prepaid. Pekin Duck eggs. 100-\$11.00. 50-\$6.00. 12-\$2.00 prepaid. Ducklings \$30.00. Satisfaction guaranteed. HIGHLAND FARM, Sellersville, Pa.

MAMMOTH WHITE PEKIN Duck Eggs, carefully packed, \$12 per 100. L. HAMBLIN, Wilson, N. Y.

MAMMOTH BRONZE TOMS, and hatching eggs, 45c each. JAMES HOWLAND, Walton, N. Y.

BOURBON RED and White Holland Turkey eggs, from vigorous, pure bred selected birds. \$6.00 per doz. prepaid. JEFFREYS FUR & GAME FARM, Calcutt, N. Y.

FARM EQUIPMENT

ROOFING PAPER, 3-ply, \$1.35 per roll, 100 sq-ft. Prepaid. Asphalt shingles, roofing, paint. Send for price list. WINIKER BROS., Milis, Mass.

SEEDS—NURSERY STOCK

C. O. D. FROST PROOF Cabbage plants. Leading varieties now ready. 500, 65c; 1000, \$1.00; 5000, \$4.50. FARMERS PLANT CO., Tifton, Ga.

SEND NO MONEY. C.O.D. Frost proof Cabbage and Onion plants. All Varieties now ready. 500, 65c; 1000, \$1.00; 5000, \$4.50. STANDARD PLANT CO., Tifton, Ga.

CABBAGE PLANTS, NOW Ready. My frost proof Cabbage plants will head three weeks earlier than home grown plants. Varieties: Jersey and Charleston Wakefield, Succession, Flat Dutch, Golden Acre and Copenhagen Market. Prices by parcel post postpaid: 500, \$1.25; 1000, \$2.25. Express: 1000, \$1.00; 5000, \$4.50; 10,000, \$7.50. Bermuda Onion plants same prices as Cabbage plants. Roots wrapped in moss and shipped promptly. Satisfaction Guaranteed. P. D. FULWOOD, Tifton, Ga.

PAY ON ARRIVAL—Frostproof Cabbage Plants immediate shipment. 75c-1000. EMPIRE PLANT CO., Albany, Ga.

FROSTPROOF CABBAGE PLANTS. Order today. Pay postman, 500-60c, 1000-\$1. POSTAL PLANT CO., Albany, Ga.

HARDY ALFALFA SEED 93% pure \$10.00 per bushel; Sweet Clover 95% pure \$3.00 per bushel. Return seed if not satisfied. GEO. BOWMAN, Concordia, Kansas.

STRAWBERRY, RASPBERRY, BLACKBERRY, Dewberry, Loganberry, Wineberry, Grape, Juneberry plants; Asparagus, Rhubarb, Horseradish roots; Hardy Perennial and Annual Flower plants; Roses, Vines, Shrubs, Hedge plants. Catalogue free. HARRY E. SQUIRES, Hampton Bays, N. Y.

CERTIFIED SEED POTATOES. Smooth white Rurals. Write for prices. H. L. HODNETT & SONS, Fillmore, N. Y.

SEEDS—NURSERY STOCK

OLD FASHIONED HARDY Flower Plants. Hollyhocks, Delphiniums, Bleeding Hearts, Anemones, Blue Bells, Canterbury Bells, Columbines, Monksheads, Hardy Carnations, Hardy Chrysanthemums, Hardy Lilies, Hardy Phloxes, Lupines, Hardy Pinks, Oriental Poppies, and 240 other Perennials that will bloom this summer; Pansies, Asters, Salvias, Petunias, Zinnias, Snapdragons and other annuals; Roses, Vines, Shrubs, Hedge Plants; Berry plants, Asparagus roots. Catalogue free. HARRY E. SQUIRES, Hampton Bays, N. Y.

PREMIER OR HOWARD 17 Strawberry Plants \$1.00 per 100, \$5.00 per 1000. BASIL A. PERRY, Georgetown, Delaware.

GLADIOLUS \$1.00 Blooming Bulbs \$1.00. 12 choice Dahlias \$1.00. Catalogue. 20 Evergreen Trees \$2.00. GLADAILIA FARMS, Chelopee Falls, Mass.

MASTODON EVERBEARING STRAWBERRY Plants \$2.00 per 100, \$15.00 per 1000. Plants set out this Spring will bear quantities of large delicious berries this summer and fall. BASIL A. PERRY, Georgetown, Delaware.

Set Our "FROSTPROOF" Cabbage and Onion plants, and mature crop three weeks earlier 300, \$1.00; 500, \$1.75; 1000, \$2.75; 10,000, \$20. All delivered prepaid. Prompt shipment, good plants delivered or money refunded. J. P. COUNCILL COMPANY, Franklin, Virginia.

DAHLIAS. ASSORTED not labeled. \$1. a dozen prepaid. ANER L. SMITH, Sodus, N. Y.

CERTIFIED SEED POTATOES, Irish Cobblers and original strain Carman No. 3. Buy direct from grower. Write today for prices. N. A. BAKER & SONS, Fairport, N. Y.

SEED CORN. Germination 97%. Grow Oswego Ensilage for quality silage. Write HAYNES SNYDER, Fulton, N. Y.

DAHLIA TUBERS 25-\$2.00. Good large varieties, postpaid. Shrubs, Roses, price list. EDGEWOOD FARM, R. 2, Jamesburg, N. J.

CERTIFIED RUSSSET SEED Potatoes. College inspected. One year from Michigan. Special prices on large orders. J. W. HOPKINS & SON, Pittsford, N. Y.

CORNELL NO. 11 Seed Corn. From the original source of this dual purpose corn. \$3.50 a bushel delivered to your station. R. E. MOSHER, Aurora, N. Y.

A GREEN DAHLIA at last, this marvelous freak of nature and 10 Giant labeled Dahlias \$2.50. Regular value \$7.50. 12 beautiful labeled Dahlias all colors for \$1. worth \$3.50. BOLTS DAHLIA FARM, Stepney, Conn.

FROST PROOF CABBAGE and Bermuda Onion plants. Prepaid mail, 500-\$1; 1,000-\$2. Express, 5,000-\$3.75; 10,000-\$7.50. COLEMAN PLANT FARMS, Tifton, Ga.

EARLY JUNE RED Raspberry sets for sale. The earliest, largest, heaviest bearing berry grown. Send for literature telling what the New York State Experiment Station says of the June, \$20, thousand, \$3, hundred. LESTER BENNETT, Victor, N. Y.

FREE GLADIOLUS BOOK—36 pages, 45 illustrations. Describes 171 exquisite varieties, many new. Tells how to grow. It's free! The famous beautiful Rainbow Collection of thirty bulbs, all different, \$1. postpaid. HOWARD GILLET, Gladiolus Specialist, Box J, New Lebanon, N. Y.

COOK'S CERTIFIED POTATOES. Cobblers and Russets. Better than over. Attractive prices. We pay freight. IRVING E. COOK, Munnsville, N. Y.

Additional Classified Advertising On Page 22

HANDY ANDY Says "Here's How"

To Get Rid of Rats

By Ray Inman

RATS have a destructive craving for change in diet; this time of year, which increases their plundering—

WE BEEN APPOINTED A COMMITTEE TO INFORM YOU YE'D BETTER CHANGE TH' BILLO'FARE AROUND THIS JOINT OR BY GUM EVERY RAT ON TH' PLACE WILL UP AN' WALK OUT ON YE!

GEE WHIZ—THAT WON'T DO! WE GOTTA LOOK INTO THIS

MORAL: IT'S BETTER TO "CLEANIN' UP."

CLEAN UP the premises; burn all refuse; pile lumber off the ground; eliminate all possible harbor for the pest

THIS MAN SAYS YOU CAME AND STOLE EVERYTHING ON HIS PLACE—HOW ABOUT IT?

YER HONOR I WAS ONLY DOIN' HIM A FAVOR. HE SAID HE WISHED SOMEBODY'D COME AN' CLEAN UP HIS PLACE FOR HIM—SO I WENT AN' CLEANED UP EVERYTHING LAST NIGHT. —HE AINT GOT NO GRATITUDE JUDGE!

MORAL: IT'S BETTER TO "CLEANIN' UP."

then get some **RED SQUILL**. mix it with meat or fish and place it around where rats will get it—

GEE, WHAT ARE Y'GONNA DO WITH THE CUTE LITTLE RED SQUIRREL?

DO WITH HIM! —AINT THAT WHAT YOU TOLD ME TA GET TO KILL MY RATS?

RED SQUILL is HARMLESS to MOST ANIMALS—but it is death to rats! (most drug stores carry it)

GREAT SCOTT! PAP, DID YOU EAT THAT MEAT? IT HAD RED SQUILL IN IT—T'KILL RATS!

THATS ALL RIGHT, SON,—IT WONT HURT OTHER ANIMALS

inman



WANTED AT ONCE! 300 More Good Men

in New York and New England

to help introduce and retail Rawleigh's Good Health Products. You will be supplied from our new branch house just opened at Albany. Sell in town or country. Wonderful opportunity. Nothing new—no experimenting. On the market since 1889. Nearly 200 necessities needed daily in every home. Annual Sales over 37 million packages. Largest Company—over 15 million dollars capital—16 great factories and branches. Practically no capital, no experience needed. Quick, easy sales, repeat every 30-60 days. Big pay right from start. Stone, Vt., sold \$212.20; Reagan, N. Y., \$184.40 first week. Profits increase monthly. Thousands make more than they ever could before. You should do as well. Simply follow the same old time-tested Rawleigh Methods which have given consumers best values and satisfaction for 40 years. We supply everything—products, outfit, sales and service methods which secure the most business everywhere. Steady year round—no lay-off—no boss—you are sole owner and manager. For particulars write

THE W. T. RAWLEIGH CO., Inc.

DEPT. D-41AGR ALBANY, N. Y.
MUCH THE LARGEST INDUSTRY
OF ITS KIND IN THE WORLD

The Little Shepherd of Kingdom Come

(Continued from Page 20)

Conners held his notes for large amounts.

"The lawyer told me that he believed some of the notes were forged, but he couldn't prove it. He says it is doubtful if more than the house and a few acres will be left." A light broke in on Chad's brain.

"He told you?"

Margaret blushed. "He left all he had to me," she said, simply.

"I'm so glad," said Chad.

"Except a horse which belongs to you. The old mare is dead."

"Dear old Major!"

At the stone fence Margaret reached for the flag.

"We'll leave it here until we come back," she said, dropping it in a shadow. Somehow the talk of Major Buford seemed to bring them nearer together—so near that once Chad started to call her by her first name and stopped when it had half passed his lips. Margaret smiled.

"The war is over," she said, and Chad spoke eagerly:

"And you'll call me—"

"Yes, Chad."

The very leaves over Chad's head danced suddenly, and yet the girl was so simple and frank and kind that the springing hope in his breast was as quickly chilled.

"Did he ever speak of me except about business matters?"

"Never at all at first," said Margaret, blushing again incomprehensively, "but he forgave you before he died."

"Thank God for that!"

"And you will see what he did for you—the last thing of his life."

(To be Continued Next Week)

Private Line Lacks Service

"PERHAPS my reply to the contest, 'Has The Telephone Saved Me Money' will be found somewhat unusual when I inform you that it certainly has—because I have no telephone!"

"Here are the circumstances: My home is on a farm more than two miles from the village of Oldwick, Hunterdon County, N. J. The New Jersey Telephone Company, with headquarters at Lebanon, N. J. operates (or purports to do so) throughout Hunterdon County and has lines running to Oldwick and other villages within a two or three mile radius of our farm. But the aforesaid Company seems to lack capital, brains, initiative, integrity, one or all, and the service to subscribers has been and still is simply terrible. A few years ago annual subscriptions were matched up from \$12 per year to \$24 with promises of better service. (This was for phones where it seems the whole village was on one line). More recently after much protesting and criticism on the part of subscribers, the Company has agreed to furnish twenty-four hour service (where formerly it was from 7 A. M. to 9 P. M. only) and to install ser-

American Agriculturist, April 27, 1929

vice all day Sunday (where it has been but about an hour at morning, noon and evening). But these reforms, it appears, have failed to materialize to any great extent and service is as bad as ever. The central operator evidently goes to sleep on the job and a mere ringing of the bell for a given period hardly succeeds in arousing her. After a thunderstorm or snowstorm the lines are likely to be down for days or weeks. Furthermore, in recent months several lines appear to have been entirely abandoned. Now without expanding this long letter further, may I restate 'the telephone has saved me money' because under the circumstances surrounding us here, the telephone is practically worse than nothing. On the other hand, in the neighboring counties of Morris and Somerset the New Jersey Bell Telephone Company operates under the backing and resources of the great Bell System and they have good service, at least decidedly so for what could be expected in a sparsely settled country district.

With all due respect for private property rights and small individual initiative, it seems to me that we would be far better off if the Bell System would assume or supercede the present company in our neighborhood and give the residents some real service. Then I could have the privilege of the benefits of the telephone and would take advantage of it at what would prove to be inexpensive rates and our farm and many other isolated ones hereabouts would be made more comfortable and brought nearer to our friends, to doctors, merchants, etc.

—MRS. A. G. L., New Jersey.

Additional Classified Advertising

SEEDS—NURSERY STOCK

SPECIAL LOW PRICES on pedigreed Green Mountains, Russets and Cobblers. Catalogue. ROY HASTINGS, Malone, N. Y.

EARLY VEGETABLE PLANTS. Frostproof Cabbage. Wakefields, Copenhagen, Golden Ace, Flat Dutch, Bermuda Onions, Beets, Lettuce. Postpaid: 100, 40c; 500, \$1.25; 1000, \$2.25. Collect: 1000, \$1.00; 5000, \$4.50. Tomato Plants: Earliana, Bonny Best, Baltimore. Postpaid: 100, 50c; 500, \$1.50; 1000, \$2.50. Collect: 1000, \$1.75; 5000, \$7.50. Write for prices on Potato, Pepper and Egg Plants. Carefully Packed. Varieties Labeled. Delivery Guaranteed. PIEDMONT PLANT CO., Albany, Ga.

GOLDEN BANTAM CORN; Improved, grown from Hill selected seed. \$5.00 bushel. RATH BROS., Pittsford, N. Y.

LARGE GLADIOLUS BULBS. Joy mixture \$2.50 per 100; Glad mixture \$1.25 per 100. Small bulbs, named varieties, ten kinds \$1.50 per 100, delivered, circular free. BRANDON GLADIOLUS FARM, Brandon, Vt.

FREE PLANTS—By C. O. D. mail or express, and charges: 500, 65c; 1,000, \$1.00; 5,000, \$3.75. Free onion plants with every order for Frost Proof Cabbage Plants. EUREKA FARMS, Tifton, Ga.

FOR SALE. Asparagus roots, Mary Washington, one year old, unusually heavy, averaging about one hundred pounds per thousand. Sample sent on request. Write for prices, specifying number wanted. FRANCIS C. STOKES & CO., Seedsmen, 235 South 6th Street, Philadelphia, Pa.

MILLIONS OF OPEN field grown tomato plants, Baltimore, Stone, Earliana, Bonnie Best, Chalk Early Jewel, Matchless, \$1-1000, Ruby King Pepper plants \$2-1000, Potato plants \$1.75-1000, Cabbage plants 75c-1000, Safe arrival guaranteed, all plants ready. SIMS POTATO PLANT CO., Pembroke, Ga.

LORDS GOLDEN AGE extra early yellow sweet corn. Good size, productive, tender, deliciously sweet. The originator has grown it ready for the table 57 days from planting. \$1, quart; \$1.70, 2 quarts; \$2.50, 4 quarts; \$4.50, peck; \$6.50 half bushel; \$12.00 bushel. JAMES E. LORD, Stonington, Conn.

STRAWBERRY PLANTS: Senator Dunlap, 100, 90c; 300, \$2.25; 500, \$3. Premier—Gibson—Big Joe—Cooper—Stevens Late Champion, 100, \$1; 300, \$2.50; 500, \$3.50; 1000, \$6. Everbearing, Champion, 25, 75c; 50, \$1; 100, \$1.50; 500, \$5; 1000, \$10. Mastadon, Everbearing, 25, \$1; 50, \$1.75; 100, \$3; 200, \$5; 500, \$8; 1000, \$16. Figure each variety separate. Write for prices on Black, Purple and Red raspberry plants. Our plants are strictly fresh dug, from new fields. F. G. MANGUS, Maple View, N. Y.

FINE PLANTS ready, open field grown, well rooted, selected, 50 to bunch, varieties labeled separate, packed careful to arrive safely. Cabbage: Early Jersey, Charleston, Wakefield Copenhagen and Flat Dutch postpaid 50, 25c; 100, 35c; 300, 80c; 500, \$1.00; 1000, \$1.75. Express collect, 70c, 1000. Tomato plants: Earliana, June Pink, John Baer, New Stone, Greater Baltimore and Redfield Beauty. Postpaid 50, 30c; 100, 40c; 500, \$1.25; 1000, \$2.25. Express collect \$1.25, 1000. Genuine Marglobe, tomato 5c hundred higher. Peppers: Ruby King, Pimento, and hot Cayenne. Postpaid 50c, 30c; 100, 50c; 500, \$1.50; 1000, \$2.50. Express \$2.00 thousand. Cauliflower plants postpaid: 50, 40c; 100, 75c; 500, \$3.00. E. A. GODWIN, Lenox, Ga.

SEED CORN—CERTIFIED West Branch Sweepstakes for sale, grown by Penna State College instructions. 95 to 100% germination. \$3. per bu. A. L. WINTER & SON, Montoursville, Pa.

GLADIOLUS. FIVE LARGE bulbs of 10 varieties \$1.00 postpaid. FRANCES FLOWER GARDENS, Sardis, Miss.

SEEDS—NURSERY STOCK

APPLE TREES, BALDWIN, Cortland, Delicious, Greening, McIntosh Red, Northern Spy, Wealthy, 2 year, 4 to 6 ft., 25c each. \$20 per 100. Elberta, Hale, Rochester, St. John Peach trees, 3 to 4 ft., 20c. Concord Grape vines 2 years, \$8 per 100, one year \$5 per 100. Hardy Hydrangea 25c each. Evergreens, Shrubs, Roses at special prices. A dollar saved is a dollar made. Send for Catalogue and let us tell you more about our products. THOMAS MARKS & CO., Wilson, Niagara, County, N. Y.

TOMATO PLANTS, Stone and Greater Baltimore. Wakefield Cabbage. 85c per 1000; 500-55c; 200-35c. TRUE PLANT CO., Florala, Ala.

SPRING GROWN CABBAGE plants, leading varieties; 1,000, 85c; 5,000, up, 75c. Early and Late Tomatoes, \$1; Pepper \$2. BURGESS PLANT FARMS, Pembroke, Ga.

SEED CORN—West Branch Sweepstakes for sale. Greatest ensilage corn grown. Germination 98% when tested. \$5.00 per bushel. A. L. WINTER & SON, Montoursville, Pa.

FROSTPROOF CABBAGE PLANTS 75c, 1000; Bermuda Onion \$1.00; Collards 75c; Tomatoes \$1.00; Ruby King Pepper \$2.00; Porto Rico Potato Plants \$2.00. QUITMAN PLANT CO., Quitman, Ga.

DAHLIAS—12 TUBERS, Mixed varieties, labeled, no two alike \$1.25. We grow 500 varieties. Ask for free price list. MOOSE DAHLIA FARM, Wayland, N. Y. Route 3.

4,000,000 SWEET POTATO PLANTS Yellow Jersey, Big Leaf, Up River, \$1.50 per 1000. Gold Skin, Red Nansemond, Naney Hall, and Southern Queen. \$1.75 per 1000. C. E. BROWN, Bridgeville, Del.

CERTIFIED VELVET BARLEY seed \$1.50 per bushel. Beards are smooth and barless. Outfields Oderbrucker by 12 bushels at Ohio Experiment Station, yield 55 bu. to acre. C. M. RICHARDSON, R3, Willoughby, Ohio.

BERMUDA ONION PLANTS—Grow bigger and better Onions. Postpaid: 200-60c; 500-\$1.00; 1,000-\$1.75. Transplanted Cabbage: 50-55c; 100-90c; 1,000-\$7.50. Transplanted Tomato, Pepper, Aster: Three dozen 45c; 500-\$5.00. PORT MELLINGER, North Lima, Ohio.

STRAWBERRY PLANTS, Millions of them, Northern Grown. Howard 17, Meteor, Missionary, Ilaverlands, Gibson \$7.50 per thousand. Senator Dunlap, Warfields \$7.00. Plants grown on new land. State inspected and true to name. Over 30 years in the business. M. A. JENKINS, Bradford, Vt.

BUY GRIMM ALFALFA Seed Now! Lyman's Seed traces to original Grimm stock. Hardest of alfalfas and highest in feeding value. Yields for years without replanting. Seed scarified to increase germination. Also sweet clover and red clover. Order early! A. B. LYMAN, Introducer, Excelsior, Minn.

CAULIFLOWER PLANTS ready May 10th. Field grown. Catskill Mountain Snowball, Long Island Snowball, Extra Early Erfurt \$4.50 per 1000; 500, \$2.50; 200, \$1.50. Cabbage Plants ready May 10th. Copenhagen Market, Early Jersey Wakefield, Glory, Succession, Danish Ballhead, \$2.00 per 1000, 500, \$1.50. F. W. ROCHELLE & SONS, Chester, New Jersey.

VEGETABLE SEEDLINGS—Ready now for you to transplant into coldframes or greenhouse. Peppers—Ruby King, Worldbeater, Bull Nose, Sunnybrook, Sweet Cheese and Chinese Giant. \$3.00 per 1000. Tomatoes—Langdon's Earliana, Marglobe, Jewel, Bonny Best, John Baer, Dwarf Stone, New Stone and Matchless. \$3.00 per 1000. Egg Plant—Black Beauty and New York Improved \$5.00 per 1000. Send for free list of all plants. PAUL F. ROCHELLE, Morristown, N. J.

HELP WANTED

AGENTS: SELL TROUSERS, Overalls, Dry Goods, Etc. Some advertised brands. Write FREEMAN E. HUNTER CO., Riverton, N. J.

AGENTS—Make \$25.00—\$100.00 weekly, selling Comet Sprayers and Autowashers to farmers and Autoists. All brass. Throws continuous stream. Established 35 years. Particulars free. RUSLER CO., Johnstown, Ohio, Box C 12.

MARRIED FARMER for general work; must be good cattle man. P. O. Box 4, Schenectady, N. Y.

SITUATIONS WANTED

DO YOU NEED FARM HELP. We have Jewish young men, able-bodied, some with, but mostly without experience, who want farm work. If you need a good, steady man, write for an order blank. Ours is not a commercial agency. We make no charge. THE JEWISH AGRICULTURAL SOCIETY, Inc., Box A, 301 E. 14th Street, New York City.

EXPERIENCED GARDENERS, FARMERS, Milkers, laborers supplied immediately. INTERNATIONAL LABOR AGENCY, 153 Bowery, N. Y. C.

WANTED TO BUY

WANTED—HAY, GRAIN, Potatoes, Apples, Cabbage, Carrots. Pay highest market prices. THE HAMILTON CO., New Castle, Pa.

WANTED TO BUY old bags. We pay excellent prices. Write for prices. We pay freight. OWASCO BAG CO., Rochester, N. Y.

FARMS FOR SALE

SIXTY ACRES—Fertile. Nearly new house. Twenty acres timber. Good barns, near school. J. I. PHILLIPS, Delmar, Delaware.

DESIRABLE DAIRY FARMS for sale in Erie County, Penna., for a trifle more than the original first mortgages. From 80 to 260 acres in each. Good buildings. Near improved highways, good markets, churches and schools. These farms are bargains as they must be sold this spring. Terms: one-fifth cash, balance in long time mortgages with low interest. THOS. W. SPOFFORD, Agent, 512 Masonic Temple, Erie, Pa.

FARM OF 275 acres, 100 river flat; located ¼ mile from R. R. station; ½ mile from creamery, church, bank, post office, stores; barn will stable 75 head of cattle. Buildings in good condition. 8 miles from County Seat on through macadam road. One of the best farms in the county. HAMILTON J. HEWITT, Agent, Delhi, N. Y.

62 ACRES—Under good cultivation, 7 acres timber. Good buildings, near school, just off improved road, gas lights. EUGENE SINCLAUGH ESTATE, Route 4, Ithaca, N. Y.

DEL-MAR-VA—6,000 SQUARE MILES FINEST AGRICULTURAL OPPORTUNITIES. Within three to ten hours by motor truck over splendid concrete highways to New York, Philadelphia, Baltimore and Washington markets. Pennsylvania Railroad System permeates entire Peninsula. Mild, equable climate. Very little snow and freezing. Farms, town and waterfront homes, low-priced. Good schools, low taxes. Handsome descriptive booklet. FREE. Address 164 Del-Mar-Va Building, Salisbury, Md.

FROM OWNER—Woodlawn, 140 acres, highly cultivated, first class buildings, 16 room colonial house, spring water, every thing available, hard road, adjoining State Game Farm. MILTON MARLATT, Hackettstown, N. J.

MISCELLANEOUS

WANTED USED BAGS any quantity and grade. Highest prices and freight paid. HOFFMAN BROS. BAG CO., 39 Gorham St., Rochester, N. Y.

USED CIVIL WAR ENVELOPES with flags, designs, etc., \$1 to \$15 paid. Other stamps on envelopes before 1871 bought. Three-face lamps and old glassware bought. W. RICHMOND, Cold Spring, N. Y.

BALSAM PILLOWS filled with fresh Adirondack Balsam \$1.25 postpaid. Makes an ideal gift. Fill your own pillow; enough balsam in bulk for two pillows. \$1.00 postpaid. WONDER GIFT SHOP, Box 24, Newcomb, N. Y.

CASH PAID for old pictures published by Currier & Ives or N. Currier or others. Send description, condition, size and price wanted. Write today. NOVAL STEWART, Binghamton, N. Y.

BUY YOUR AUTO, Camp and Bed Blankets direct from Mill. All wool Khaki Camp blankets 3 lbs. 66x90, \$3.25 each. Two for \$6.35; 4 lb. \$4.25, two for \$8.35. Postpaid. Also Auto, Steamer Rugs and Bed Blankets. Satisfaction or money back. ASHWORTH BLANKET MILL, Westbrookville, N. Y.

HONEY, Fine quality clover Autumn flower blend \$5.00 per 60 lbs. J. G. BURTIS, Marietta, N. Y.

FOR SALE—Factory fully equipped; adjacent railroad. Use as creamery, ice cream, or bottling works. Write W. J. CURTIS, Ransomville, N. Y.

WOOL—HIDES—FURS

MUSKRAT FURS WANTED. Black—Large \$3.50 Medium \$2.50. Brown—Large \$2.50. Medium \$1.50. All furs wanted. EVERETTE SHERMAN, Whitman, Mass.

WOOL AND SHEEP Pelts Wanted. 1 specialize in Wool and Pelts. Hundreds of satisfied shippers. Write for prices. ALVAH A. CONOVER, Lebanon, N. Y.

TOBACCO

NATURAL LEAF TOBACCO—Best grade, guaranteed. Chewing, 5 pounds, \$1.00; 12, \$2.00. Smoking, 10, \$1.50. Pipe free. Pay when received. VALLEY FARMERS, Murray, Kentucky.

HOMESPUN TOBACCO—Guaranteed. Chewing, 5 lbs., \$1.25; 10, \$2.00. Smoking, 5 lbs., \$1.00; 10, \$1.50. Pay when received. FARMERS UNION, Mayfield, Kentucky.

GUARANTEED HOMESPUN TOBACCO. Chewing, 5 lbs. \$1.50; 10-\$2.50. Smoking, 10, \$1.75. Pipe Free. Pay Postman. UNITED FARMERS, Bardwell, Ky.

WOMEN'S WANTS

LADIES' FINE LISLE STOCKINGS 3 pair \$1.00. Black, gunmetal, grey, beige, nude, French nude; sizes 8½-10. Good openings for agents. A. H. TALBOT SALES COMPANY, Norwood, Mass.

If There is Anything That You Wish
To Buy, Sell or Trade
Advertise in the
Classified Columns
OF THE
AMERICAN AGRICULTURIST



The Service Bureau

A Department Devoted to the Interests, Welfare
and Protection of A. A. Readers



How Can We Best Serve You?

THE aim of the A. A. Service Bureau is to assist our subscribers in every possible way. Unfortunately, many requests which come to us are of such a nature that we cannot help. We are always glad to try, yet for your information we are suggesting a few of the things we cannot do as well as some we can do.

It would be ideal if our readers would send only complaints on which we could get results. In this way the time of the Service Bureau staff would not be used in handling cases where there is no hope of getting a settlement. At the same time we feel that many readers fail to write to us when we could help. To make a long story short, we would like more letters where we can help and not so many where we cannot.

Some Things We Can Do

1. Report on the reliability of commission merchants in New York City (and other cities so far as we are able to get reports).
2. Investigate the reliability of any commercial firm.
3. Forward complaints about errors or neglect to fill orders, to reliable commercial firms and get them corrected.
4. Help to check up on claims against express and railroad companies.
5. Warn our subscribers concerning unreliable companies and frauds of all kinds.
6. Give personal advice, to the best of our ability on any problem that is troubling you.

Some Things We Cannot Do

1. Attempt to collect personal debts or claims against neighbors.
 2. Handle cases where money is due on notes.
 3. Act as judge as to the value of merchandise purchased by our subscribers.
 4. Handle claims successfully that are over one year old. (The sooner we get a complaint, the better is the chance of getting it settled satisfactorily).
 5. Secure the return of money that has been unwisely invested.
 6. Secure adjustments on complaints that are obviously unreasonable.
- We are at your service. If there is something we can do for you tell us about it.

Ship to Reliable Dealers

I am writing you for aid in collecting \$97.80 for eggs shipped to a retail dairy. I have been shipping to this firm for several months, and have found them very prompt in making returns until lately.

WE were somewhat doubtful that we could get results but one letter to the proprietor of the dairy brought a check and explanation as to the cause of delay.

While selling eggs to the retail stores may return good prices to you, it is difficult to prove their reliability, and there is always the danger of their going out of business without paying their bills. We again suggest that our subscribers write us before doing business with an unknown concern.

Needs "Sales Resistance"

"The best of us make mistakes sometimes and agents have a way of making us sign on the dotted line when we know better."

OUR subscriber signed for a product under the promise that he did not need to pay unless it was satisfactory. The material did not prove satisfactory and our subscriber has agreed to pay them for what was used and return the remainder, but he has been informed that the sale was such that the company cannot accept this proposition.

Human nature seems to be much the same no matter where it is found and we are all too ready to believe what

we are told rather than what the contract or agreement says, only to find later that the company will not stand back of the agent's promises and that we are expected to pay whether we get satisfaction or not.

Our experience has shown that under these conditions the company rarely if ever sues in order to collect, but they do place the account in the hands of a collection agency who writes numerous letters at the rate of about once a month, making all sorts of threats to collect the amount. This is an annoying situation. Our subscribers in similar circumstances must decide for themselves whether they will accept this annoyance or pay the bill. Of course, the best way is to read the agreement before you sign.

Gets Refund Check Promptly

I recently ordered an aluminum griddle from a firm in Buffalo for \$8.40. Owing to bad roads the salesman promised to deliver the griddle to a store in town. He has failed to do this, and has given various excuses. I have written the firm and they ask that I be patient a while longer. Will you see if I can get the return of my money?

AFTER forwarding the facts to the company they immediately favored us with a courteous reply, advising that their agent had previously been instructed to make an adjustment and they had naturally concluded that everything was satisfactorily settled. In view of the inconvenience involved, they forwarded their check for the amount involved.

Stocks As An Investment

A FRIEND has taken us to task for our recent statement that buying stocks is, in effect, loaning money. This reader points out that the purchaser of stocks becomes a partner in the firm, whereas the man who buys bonds is the man who loans money. Technically, this is correct, but the man who invests in a few shares of stock has nothing to say about how the business is conducted, and to all intents and purposes is loaning his money for somebody else to use. In most cases, those who build up a business retain over 50% of the stock, and with it the control of the business.

Again we repeat, invest only in stocks that are listed on the New York Stock Exchange, and then only after you thoroughly understand the nature of the investment. A few good types of investment for most farm readers are:

1. Improvements on the farm.
2. Mortgages on real estate.
3. Savings bank deposits.
4. Building and loan associations.
5. Life insurance.

Persistence Wins

A few months ago I purchased four shirts from a firm in New York City through their agent in Pennsylvania. The merchandise was not satisfactory, and I returned it, together with a letter, but can get no adjustment. As one of your subscribers, I am going to ask what you can do to help me.

AFTER taking the matter up with the company, we were informed that a duplicate shipment had gone forward to the subscriber. The second shipment contained shirts of the wrong size, and consequently were returned. The following letter from our subscriber shows the result of several months' correspondence:

"I received a check of \$11.00 covering the amount I paid. They said they had instructed their agent to return what I paid to him, but he has failed to do so. I am satisfied, however, with this adjustment, and thank you very much for your service. If there are any charges, let me know. I am sure I would never have received a check without your help."

Policy-Dividend Announcement



INCREASE—35%—INCREASE

Another Evidence of the Conspicuous Success of the POSTAL LIFE INSURANCE CO.

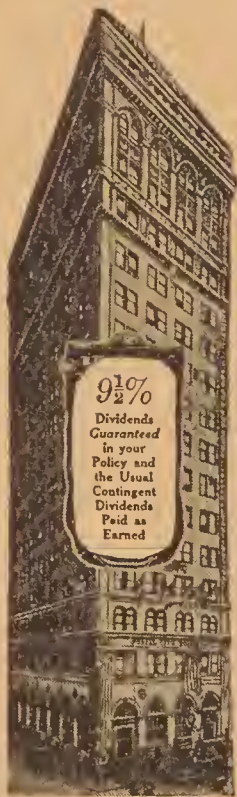
Contingent dividends to policyholders increased by the above percentage are credited to be paid to policyholders for the year 1929. This percentage is an increase over the total paid in the year 1928, and is the definite action taken by the Board of Trustees at the April meeting. This increase of the contingent dividend is effective beginning May 1st, 1929, which date opens the new dividend year. The 9½% dividend guaranteed in the policy is in addition to the contingent dividend.

Insurance in Force, \$56,000,000.

Capital, Reserves and Surplus over \$20,000,000

The excellent trend of the Company taken from its filed financial statement is shown in increased assets—increased income—increased surplus—increased insurance in force.

Conditions Contributing to Low Cost and giving to this non-agency Company increasing popularity



Postal Life Building
Owned by the
Company

- (A) The Decidedly Low Lapse Rate, showing that policyholders prize their policies and keep them in force;
- (B) The Distinctly Low Death Rate, showing that policyholders are well selected and have been benefited by the Company's Health Bureau service;
- (C) The 9½% Guaranteed Dividend, showing how policyholders, acting for themselves in applying for policies, save expense.
- (D) The Contingent Dividend Payments—an increase in 1929 over 1928 of 35%—showing the accumulative non-agency economies.

Is Your Life Insurance Quota Filled?

Nowhere can the average man invest his money so advantageously as in standard life insurance issued by this Company.

Deal with this most modern Company employing the direct method; avail yourself of its economy. A knowledge of its benefits is now very widely spread gaining for it a nationwide membership.

Its twenty-three years of experience have given more than in looks, they record the results of careful tests put into practice in every department of the Company. They will have a telling accumulative effect in future years.

Write for information; get the glow of a personal satisfaction in acting for yourself and saving money.

Simply use the Coupon, or write and say, "Mail me insurance particulars as mentioned in AMERICAN AGRICULTURIST, April 27th. Be sure to give

1. Your Full Name;
2. Your Occupation;
3. Exact Date of Your Birth.

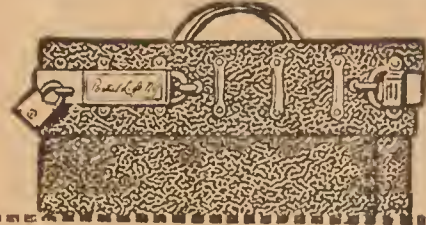
All standard forms of Life and Endowment insurance are issued by this Company and the data as to any of them will be gladly furnished.

When your inquiry reaches us no agent will be sent to visit you. We desire to co-operate with you directly, and have you think out with us your problems, from documentary matter submitted. Because we employ no agents the resultant commission savings go to you. It is the only non-agency life insurance company in America.

POSTAL LIFE INSURANCE CO.

Wm. R. Malone, President

511 Fifth Avenue, Corner 43rd St., New York



Amer. Ag. 4-27 29

Postal Life Insurance Company
511 Fifth Ave., New York.

Without obligating me, please send full insurance particulars for my age.

Name.....

Address.....

Occupation.....

Exact date of birth.....

Amount.....

No more Soaking!

Treat seed potatoes instantaneously with **SEMESAN BEL**

*Saves Seed, Time and Labor
Protects Your Crop Against Seed-borne
Diseases and Increases Yield*

It's so easy—
Just Dip
and Plant



TREAT seed this safe, easy way to protect your white and sweet potato crops against seed-borne disease losses and to increase yield. It is harmless even to sprouted seed. Just use Semesan Bel according to directions! No more time-consuming soaking, for Semesan Bel is *instantaneous*! One man can treat 200 to 400 bushels of seed a day, at very low cost. Get Semesan Bel from your dealer now. Ask him also for FREE pamphlets on Du Bay Seed Disinfectants for other crops—Semesan Jr., for seed corn; Ceresan, for seed grains; and Semesan, for vegetable and flower seeds and bulbs.

Most dealers handle SEMESAN BEL. Those listed below carry a large stock and can quickly supply your needs.

NEW YORK		
COUNTY	DEALER	TOWN
Albany	George H. Price	Albany
Allegany	Rowe & Kennedy	Canaserago
	Kohn's Drug Store	Wellsville
	W. E. Robbins Hardware	Wellsville
	Wellsville Milling Co.	Wellsville
	Hazlett & Chase	Whitesville
Cattaraugus	Economy Drug Store	Salamanca
Cayuga	D. S. Ramsey	Auburn
Chemung	Banfield-Jennings Co-op.,	Elmira
	Geo. W. Peck Co.	Elmira
Chenango	Harold L. Keeler	Norwich
Clinton	J. D. Bowen	Saranac
Cortland	McGraw & Elliott	Cortland
Erie	W. H. Geib & Son	East Aurora
	R. F. Knoche & Son	Hamburg
	W. G. Arthur	Orchard Park
Franklin	Cooks Pharmacy	Chateaugay
	D. Dickinson & Co.	Malone
Herkimer	The Sauer Drug Corporation	Herkimer
Jefferson	Walter N. Bisnett	Watertown
Lewis	F. C. Snyder's Pharmacy	Lowville
Livingston	Geo. W. Peck Co.	Dansville
	Genesee Hardware Co.	Genesee
Monroe	Joseph Harris Co., Inc.	Coldwater
	Burr & Starkweather Co.	Rochester
	Hart & Vick	Rochester
	James Vick's Sons	Rochester
Nassau	Hempstead Seed Co.	Hempstead
	William Kroemer	Hicksville
New York	Max Schling Seedsmen, Inc.	New York
Niagara	The John T. Darrison Co.	Lockport
	James O. Rignel Co. Inc.	Lockport
Oneida	Utica Seed Co.	Utica
Onondaga	Frederick H. Ebeling	Syracuse
	Onondaga Farmers Supply Co., Inc.	Syracuse
Ontario	Peck Hardware Co.	Canandaigua
	Dorchester & Rose	Geneva
Otsego	Kenneth W. Root	Cooperstown
St. Lawrence	The Barr Pharmacy	Canton

NEW YORK		
COUNTY	DEALER	TOWN
Schenectady	Empire Seed Co.	Schenectady
Schoharie	Hoagland's Pharmacy	Cobleskill
Schuyler	W. M. Pellett	Watkins Glen
Seneca	J. F. Farrell	Seneca Falls
Steuben	Hawkins & Hill	Addison
Steuben	B. C. McKay	Atlanta
	Geo. W. Peck Co.	Bath
	Kinkaid Produce Co.	Cohocton
	Peck-Lookup Co.	Cohocton
	Geo. W. Peck Co.	Corning
	Geo. W. Peck Co.	Prattsburg
	C. J. Tierney	Wallace
Suffolk	Long Island Produce & Fertilizer Co., Inc.	Riverhead
Tioga	The Beach Drug Co.	Owego
Washington	Harry W. Baker Ph. G.	Hudson Falls
Wayne	W. G. Carpenter & Co.	Lyons
Wyoming	E. K. Lucas	Gainesville
Yates	Geo. W. Peck Co.	Penn Yan

NEW JERSEY		
COUNTY	DEALER	TOWN
Burlington	Fenimore Brothers	Mt. Holly
	J. S. Collins & Son	Moorestown
Camden	Gardiner Cheeseman	Grenloch
Cumberland	Minches Seed Store	Bridgeton
	I. Serata & Sons	Bridgeton
	S. V. Davis	Shiloh
	Vineland Farmers Exchange, Inc.	Vineland
Gloucester	Reed & Estelow	Mullica Hill
	Ed. Hann	Swedesboro
Mercer	Farmers Co-operative Assn. of Mercer County	Trenton
	M. C. Ribsam & Son's Co.	Trenton
	Jos. H. Courtney & Co., Inc.	Winslow
Monmouth	W. T. Pierce	Allentown
	Rooney & Ely Co.	Englishtown
	Monmouth County Farmers Exchange	Freehold

NEW JERSEY		
COUNTY	DEALER	TOWN
Monmouth	C. H. Roberson	Freehold
	H. B. Kemp	Long Branch
	Reed & Perrine	Tennent
Salem	Andrews and Avis	Elmer
	Garrison's Rexall Pharmacy	Elmer
Salem	G. M. Andrews & Son	Woodstown
	The South Jersey Farmers Exchange	Woodstown

DELAWARE		
COUNTY	DEALER	TOWN
Kent	James B. Bice Co.	Dover
	W. M. Hinkle	Dover
	J. A. Frear & Sons	Dover
	Clarence Voshell & Son	Felton
	W. W. Wilson	Frederica
	Harrington Hardware Co.	Harrington
New Castle	Ellwood A. Pierson	Wilmington
	The Philips-Thompson Co.	Wilmington
Sussex	George E. Swain	Georgetown
	Chipman & Penuel	Laurel
	Collins and Ryan	Millsboro
	Burton Brothers	Seaford

MARYLAND		
COUNTY	DEALER	TOWN
Anne Arundel	Arundel Supply Co.	Annapolis
Baltimore	The Meyer Seed Co.	Baltimore
	Wiseman-Downs Co.	Baltimore
Carroll	King's Pharmacy	Westminster
Cecil	G. A. Allender	Elkton
	C. W. Ashby	Rising Sun
Frederick	P. L. Hargett & Co. Inc.	Frederick
Harford	McComas Bros.	Bel Air
Howard	Patapasco Pharmacy	Elicott City
Kent	Massey & Wilmer	Chestertown
Queen Annes	Queen Annes County FB.	Centerville
Washington	Ernest Miller	Hagerstown
Wicomico	White & Leonard	Salisbury
Worcester	D. H. Bradford & Son	Snowhill

Jobbers for the Du Bay Seed Disinfectants in New York, New Jersey, Maryland and Delaware

NEW YORK		
Gibson-Snow Co. Inc.	Albany	
E. C. McKallor Drug Co.	Binghamton	
Ellicott Drug Co.	Buffalo	
Gibson-Snow Co. Inc.	Buffalo	
Harvey Seed Co.	Buffalo	
Plimpton-Cowan Co. Inc.	Buffalo	

NEW YORK		
Joseph Harris Co.	Cold Water	
The Geo. W. Peck Co.	Elmira	
Hempstead Seed Co., Inc.	Hempstead	
Long Island Drug Co.	Jamaica	
McMonagle & Rogers	Middletown	
Alexander Drug Co.	New York	
Peter Henderson Co.	New York	
Schieffelin & Co.	New York	
Stump & Walter Co.	New York	
York Drug Co.	New York	
Doty & Humphrey Drug Co.	Poughkeepsie	
Gibson-Snow Co. Inc.	Rochester	
Hart & Vick, Inc.	Rochester	
Vick & Dildine Co.	Rochester	
Gibson-Snow Co. Inc.	Syracuse	
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John L. Thompson Sons & Co. Inc.	Troy	
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AMERICAN AGRICULTURIST

\$1.00 Per Year

May 4, 1929

Published Weekly

A Good Road for Every Good Farm

What the Gasoline Tax Will Do for Your County Roads

By DR. C. E. LADD,

*Extension Director, New York State College
of Agriculture*

THE passage of the gasoline tax at Albany this winter may mark the beginning of a great lateral road system spreading out from the trunk line roads already built and reaching to all agricultural neighborhoods in the state. New York has only 30,000 miles of improved roads out of a total mileage of 80,000. These roads have been built as main traffic routes to connect the larger cities and as feeders to carry traffic from the small villages to the nearest cities. For the most part, these trunk line roads are nearing completion. The motorist today can go from any city in the state to any other city without ever traveling on a dirt road.

In spite of this net work of through roads available to the tourist the fact remains that nearly two-thirds of our farms are still on dirt roads. Just as truly as the building of an improved road increases the value of the farms which it passes, so it decreases the value of nearby farms which are left on dirt roads. To be attractive as a business investment or a home, a farm today must be located on a hard road. Yet only one-third of our farms have this advantage.

New York has two important classes of land areas. We have somewhere from two to four million acres of farm land which have now been abandoned and should be reforested. As this land stands today it is a great public liability. Reforested, it will become a great public asset of incalculable value to the state, to the counties and to the townships.

As this area is reforested it will need fewer and fewer roads. It will always need enough roads to give ready access. Roads also serve as a fire protection in such areas. It is probable that there are 5,000 to 10,000 miles of roads in these abandoned farm areas that can be closed up. Many other miles need never to be improved and only a limited number should become hard roads.

New York also has a very large area of fertile farm lands that should be farmed more and more intensively. These are producing the great bulk of our agricultural products today and will continue to do so for

many years. It is these lands that make New York State seventh among the states of the Union in total value of farm products. These lands are not only an asset to the farmers who own them but they are of tremendous economic importance to the city dwellers of the state. These lands are great food producing areas close to a dense city population. This close proximity to a great food supply is of equal importance to city dweller and to the farmer but the actual distance between food supply and food market varies more directly with the depth of the mud than with distance as the crow flies.

A hard surface road and a fleet of motor trucks constitute the most modern transportation system that we know. We need such a transportation system reaching from the cities to most of the farms of the state.

Our vision of the future needs and future developments of our state is seldom good enough to permit us to make sound plans for a generation ahead or a quarter of a century of progress. It is imperative, however, that we look ahead to a time when there will be in this state a much larger city population than there is today, when there will be a very sharp demand for all foods produced on the farms of this state. It is important from the standpoint

of cost of food that this be produced as near to the consumer as possible. It is more important still from the point of quality of the food that it be produced as near to the consumer as possible. More and more the people in our cities are coming to depend upon fruits and vegetables as a main part of their diet. Fruits and vegetables are bulky and costly to ship long distances. Moreover their quality suffers if they are shipped too far. New York State has wonderful possibilities as a producer of fruits and vegetables. Today it ranks very high among the states in the Union in the production of these. It is important to the people in the city that this power to produce fruits and vegetables and other food products be conserved in order to protect the cost of living in cities in future days.

It is equally important to the farmers of the state that they shall hold as their customers people dwelling in our own cities. It gives to the farmers in this state a great market outlet for the high quality food which can be produced close to that market. These great city markets close to the doors of the New York State farmers give them a tremendous advantage.

In other words it is a matter of great concern to both producer and consumer that the farms of this state shall be kept in as high producing condition as is possible. We should look forward to the highest development of the

best land in the state which will mean that this land will be much more intensively farmed in the future than it has been in the past. The potential possibilities for the production of food in this state are tremendous. This state can produce much larger quantities of food than it has produced in past years if this fertile area of farm land is developed to its fullest capacity. It is of great importance to both city and country and to the state as a whole that this shall be done.

No one thing will do more to keep farmers on farms and to keep land under cultivation than to have a hard market road outlet from these farms. With

(Continued on Page 10)



With \$4,800,000 returned to the counties each year from the gasoline tax, it is not too much to expect that in the next twenty years there will be a good hard road to every good farm.

May 7 Is Annual School Meeting Night—See Page 33



All branches on the same tree; all growing out of the Chrysler root principle of standardized quality

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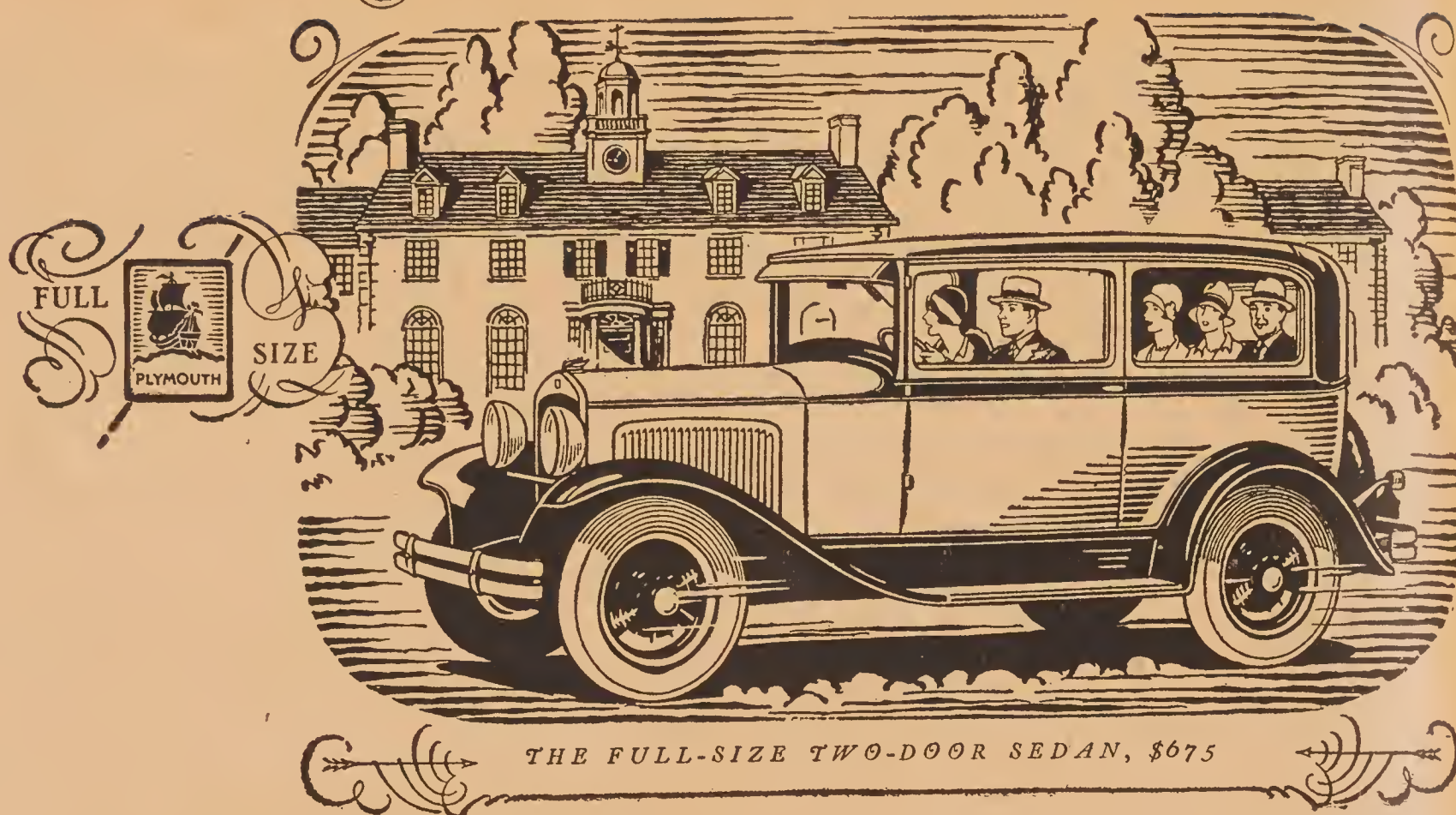
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The moment you step inside the improved Plymouth you are aware of exceptional comforts. In addition to *full-size* roominess, Plymouth has self-conforming seat cushions of lounge-chair restfulness.

Plymouth's new performance is a revelation which every Plymouth dealer in America is eager to demonstrate. Everybody who has even a passing interest in what is happening to promote automobile progress, should see this remarkable car.

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Coupe, \$655; Roadster (with rumble seat), \$675; 2-Door Sedan, \$675; Touring, \$695; De Luxe Coupe (with rumble seat), \$695; 4-Door Sedan, \$695. All prices f. o. b. factory. Plymouth dealers extend the convenience of time payments.



PLYMOUTH—product of Chrysler engineering and craftsmanship—has been so named because its endurance and strength, ruggedness and freedom from limitations so accurately typify that Pilgrim band who were among the first American Colonists.

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How New Jersey Fights Contagious Abortion

An Optional Plan That Gets Results

By W. B. DURYEE

New Jersey Secretary of Agriculture

THE cow that "slinks" her calf has been a problem to dairymen for centuries. As the dairy industry becomes more and more intensive and the costs of milk production increase, the aborting cow becomes a more serious menace. It is now estimated by competent authorities that the economic loss caused by contagious abortion in the United States is *thirty million dollars annually*. The discovery of a specific organism in 1896 that could cause the disease when injected into healthy animals removed the problem from the realm of witchcraft and quackery and placed it in the field of science. Since that time able bacteriologists have been working on means of control that would be practical for the average dairyman who desires to eliminate contagious abortion from his herd and keep it free from contamination. It developed that little could be accomplished in a constructive way if a herd owner, having applied the test to his herd could sell the reactors to unsuspecting buyers.

The most effective and forward-looking step in any state was taken by the Legislature in New Jersey in 1926 when a law was enacted specifying testing procedure and providing for the quarantining of infected animals. This legislation, which is purely permissive or voluntary on the part of the herd owner, placed the responsibility for its operation with the New Jersey Department of Agriculture, which has made it operative under the able direction of Dr. J. H. McNeil,

Chief of the Bureau of Animal Industry. By means of a state appropriation, a laboratory was set up for making the agglutination tests and regulations were promulgated for carrying on the work. The group of dairymen primarily responsible for the legislation were the first to enter into a cooperative agreement with the Department for tests of their herds. At the end of the year 1926, twenty-two herds had been tested under supervision, comprising 671 animals, with

a total of 86 reactors or 12.8%. The work was developed slowly to make sure of the soundness of the methods employed.

At the present time there are fifty herds under supervision, comprising 4,836 animals with a total of 1,283 reactors or 26.6%. Eliminating three large herds, we find that the percentage of infection of the smaller herds, comprising 1,955 animals, is 20.9%. Every herd tested to date has shown infection in some degree.

The actual history of one herd that is now fully accredited will give a concrete example of the method. The owner of this herd had been having trouble with contagious abortion and being desirous of eradicating it made application for the test. A representative of the Bureau of Animal Industry explained the operation of the law and the necessary procedure. He agreed to the requirements and our representative recommended that the herd be placed under State supervision.

The initial test was made January 6, 1927 when twenty of the fifty animals in the herd reacted. These reactors were tagged, removed from the herd and placed in quarantine. The premises were thoroughly cleaned and disinfected. A retest of all the animals was made on March 16, 1927 when the original positive herd again reacted without exception, and a second retest on May 23, 1927 gave the same result—the original positive animals again reacting and the negative ones

(Continued on Page 14)



Contagious abortion causes heavy losses annually in otherwise healthy and productive herds.

Changing a Dairy Farm Into a Sheep Ranch

The Right Man Might Do It But the Side-line Farm Flock Offers More Profit

By MARK J. SMITH

I have in view a rock land farm of 300 acres which has amply fed and wintered 40 milch cows but because of location and labor cost it has been abandoned. The pasture is excellent, high and stony. The tillable land raises good silage, grain and hay. Will this farm pay if stocked with sheep and farmed by a moderately intelligent and highly industrious farmer? If so can you very roughly tell me how many sheep would it carry? How many men would be required to care for them? What might one expect for an income? What is the amount of cash the farm is worth with sheep if it is worth \$8,000 as a dairy farm? I expect no guarantee of any figures you may give me."—H.D.R., New York.

A FARM such as you mention should carry 300 ewes if conducted as a sheep farm. We have men in this state who have averaged \$20.00 a head a year income for a 5-year period, with grade ewes. At present prices I would figure \$10 to \$12 a head as a reasonable expectation from grade ewes. It is very seldom that we see a dairy farm swing over to a sheep farm at full capacity and succeed. In many ways cows are surer animals than are sheep when run in large flocks. The income with sheep is slower and the work is lighter but a hundred things can happen to a large flock of sheep to knock the income.

The small farm flock of say 35 ewes is usually very profitable because of the by-product factor—much of the feed for the farm flock is of a by-product nature such as bean pods, corn fodder, straw and poor pasture land. When we go into the sheep business as such we lose much of the by-product feature and must charge

practically all of the items of expense to the sheep.

One man should do the winter work and it should take the usual number of summer hands to care for the crops. Two hundred and seventy-five to three hundred sheep will eat as much as forty cows outside of some of the concentrates. You ought to have at least one hundred tons of hay or equivalent roughage—silage would help reduce this. The corn plant (ears and stalks) and alfalfa supply more pounds of digestible nutrients per acre than any other two

crops. Now for the man—it all depends upon him—if he is a good cow-man and natural stock-man he ought to make a good sheep-man if he likes them and has the right background. It has always been said that a man should go into the sheep business moderately—buy a few ewes and learn as the flock grows. This results in a small income for a number of years.

If this farm has been abandoned as a dairy farm it is not worth \$8,000, either as a dairy or a sheep farm. If a man is not going to have location he should buy all the sheep land he wants from \$10.00 to \$20.00 an acre. The pasture land alone is hardly worth that. There must be some bottom land.

Good grade breeding ewes are worth \$20.00 a head today. Some have sold for more than that. Of course at this season of the year sheep represent three crops—the wool, unborn lamb and the ewe herself. The country is full of sheep and the industry is expanding. The past five years has been the golden age for well-established sheepmen. Conditions are none too bright. Lamb (dressed) is being imported from countries where \$6.00 shows a profit for a lamb. On January 8 to 10 at Boise, Idaho, the report of the cost of production committee based on cost records of 166,965 ewes in 37 outfits showed a yearly expense per ewe of \$10.06 and an average income of \$11.80. We beat that with our farm flocks but when we come to put twelve to fifteen thousand dollars in the sheep business,

(Continued on Page 15)



"It has always been said that a man should go into the sheep business moderately, buy a few ewes and learn as the flock grows."

Editorial Page of the American Agriculturist

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Credit for New York's New Farm Laws

FARMERS who are beginning to see what the new legislation just passed at Albany will do for New York State agriculture say that these are the most important laws from the farmer's standpoint ever put on the statute books. They will help farmers where the help is most needed, by large reductions in local taxes.

More than this, it is hard even for the most optimistic to realize what these laws are going to do for the district schools and for better roads in the next few years. As Dr. Ladd points out in his interesting article on the first page of this issue, the large sums of new State aid coming back to the counties year after year will make it possible in time to have a good hard road to every good farm.

The question naturally arises, who is responsible for all of the great results for New York farmers? Where should the credit go?

The answer to the question of credit is that no one person or organization deserves all of the thanks. The fine results achieved came from united action and from almost one hundred per cent cooperation from nearly every organization and every leader interested in the success of agriculture.

As our readers know, for years AMERICAN AGRICULTURIST has hammered this question of unfair farm taxes and has pointed out hundreds of times that one of the ways to bring farm relief was to reduce and adjust the farmer's tax burden. These same sentiments were soon taken up and emphasized by the New York State farm Bureau Federation, the New York State Grange, in local grange meetings, and in fact in every place that farmers came together. As a result of all of this discussion, public sentiment has been gradually aroused, and without support of the public for any great movement, nothing can be done.

Finally, this last fall, Governor Franklin D. Roosevelt said that it was time for action, and to him must go the credit for taking the initiative in starting the ball rolling at Albany. After his election, he asked Henry Morgenthau, Jr., publisher of this paper, to call together leading farmers to consider the farm situation. This group consisted of officers of practically every organization in the state, representatives of the State Department of Agriculture and Markets, of the State College of Agriculture and State College of Home Economics, Master Farmers and others not representing any particular organization, and several members of the legislature.

After the Governor assumed office on January 1, he formally appointed this same group as an Agricultural Advisory Commission. A large majority of the members were Republican in their personal sentiments, but as a body the

Commission was strictly non-partisan. The Governor stated several times that he was not interested in what party got the credit but rather in obtaining some real results for New York State agriculture.

The Commission met many times during the past few weeks and as a result of its deliberations, it made eight recommendations for the relief and adjustment of the farmers' taxes and for some other needed legislation. That these suggestions were well founded is proven by the fact that the legislature finally accepted the fundamental principles of seven of the eight and enacted them into laws.

Great credit must go to the leaders and members of legislature itself, for without their judgment, aid and support, of course, these laws could not have been passed. There was considerable disagreement between the Governor and the legislature over the details and the form of the legislation, but not over fundamental principles.

Therefore, we rather deplore the attempt of any organization or any body to claim more than its just share of the credit for what has been accomplished in this State for agriculture this year. As a matter of fact, truth has a great habit of coming out if given time enough, and those who are deserving of credit will get it without fighting too much about it.

In this particular matter, as we have pointed out above, the fine results obtained for agriculture are due to the hard work and united cooperation of many different persons and organizations. The thing for all of us to do now is to continue the splendid work that has been so well started.

How the New Rural School Law Came To Be Passed

INASMUCH as the officers of the Rural School Improvement Society are trying to claim credit for the passage of the recent one-room school bill giving \$2,050,000 more State aid for the one-room school, we think our readers might be interested in the history showing how this fine bill came to be passed.

Let us go back to 1925. In that year, Senator Ernest E. Cole from Steuben County was chairman of the Senate Committee on Education in the legislature. Mr. Cole is a lawyer, but in his earlier days he was a school teacher, and he has never forgotten his interest in school work. Because of his earlier experience, few men in the legislature has a better understanding of or sympathy with rural school conditions. Because of this interest and knowledge, Senator Cole wrote and supported during their passage the series of rural school bills known as the Cole Laws.

These include: First, the so-called Nine Million Dollar State Aid Cole School Law, which very greatly increased the financial aid from the State to schools over what they had received before. This law has been in operation some time and has resulted in material reduction in school taxes, especially in the poorer districts.

The second Cole School Law enlarged the quotas paid by the State to high school districts for the tuition of non-resident pupils, thus making it unnecessary in the great majority of cases for high schools to charge surrounding districts extra tuition for non-residents. This was a long step toward giving country boys and girls the same high school privileges that other young people had.

The third Cole law is the Central School Act, which gives any community the option or privilege of centralizing or consolidating its several districts into one, with the provision, however, that no one-room school where such consolidation takes place can be closed for the small pupils except by the voters in that particular district.

This legislation was a real step in progress for more educational facilities for county children, and in helping to adjust local school taxes.

But Mr. Cole realized at the time, as did many other friends of rural education, that it was not enough and that something more had to be done for the one-room school. The greatest danger to the one-room school was that it was being slowly driven out of existence by ruinous taxation, particularly in the poor districts with small valuations.

Because of his ability as a lawyer and his knowledge of the school situation, Mr. Cole was promoted to succeed Judge Gilbert as Chief Counsel in the Education Department. Here among his many other duties, he began to think and work on some plan to save the rural schools by giving them more State aid.

Last summer, he discussed with the writer the plan for a new rural school bill which became a law this last session. The plan was simplicity itself. It did away with all the many complicated ways of making apportionments of school moneys, and in their place provided that there should be raised \$1300 for the school expenses in each one-room school district, of which the local district was to pay a four-mill tax on its true valuation and the State to pay all of the rest.

As soon as Governor Roosevelt had appointed his Agricultural Advisory Commission, early in January, it took up the problem of finding some way of saving the rural schools by relieving local school taxes. The plan provided by Ernest E. Cole of the State Department of Education was finally accepted unanimously by the Governor's Commission and recommended to the Governor and the legislature. Mr. Cole himself wrote the bill. Of all the different proposals for tax relief which finally passed, this one-room school bill had the least opposition in the legislature. That was because the need was great and because Mr. Cole had written a bill founded on common sense, easily understood, and practical in its workings.

Mr. Cole does not know that this editorial is being written. He would probably ask us not to publish it if he did, but it seems to us a plain matter of justice that rural people should know that the man, whom the officers of the Rural School Improvement Society have picked out to center their attack on, is the very one who is more responsible than anyone else for the most helpful rural school legislation that has ever been passed in this State.

Provincialism Is Disappearing

"The truly rural is an outworn joke and the yokel is like the old oaken bucket—the moldy 'line' of the smart boy of twenty years ago who fled the farm and has never wise-cracked profitably enough to fly back. * * * Beyond the seaboard the old sharp line between town and country blurs. It will soon vanish altogether.

"We are all interurbanites; the farmer who spends his evenings in town and the townsman who leaves the office to streak along the country roads."

—Anne McCormick

in the New York Times Magazine.

ONE has only to look at any well dressed crowd of farm people in a meeting to realize how true the above statements are. The railroad, the automobile, the telephone and the radio are fast wiping out the lines between town and country, between communities and between states. We predict that the time is coming in history when rapid transportation and communication will eliminate many of the boundaries that now separate countries and peoples.

Eastman's Chestnut

LADIES will please skip this corner this time.

If there's anything which worries a woman,
It's something she ought not to know.
But she'll manage to get at it somehow,
If she has the least chance of a show.
Now I'll wager ten cents to a million,
This poem you've already read,
But I knew you'd get at it somehow,
If you had to stand on your head.

News from the Publisher's Farm

AFTER three months of almost constant commuting to Albany, I am glad to have an opportunity to catch up on a lot of my work which, of necessity, had to wait until the Legislature adjourned.

It may be of interest to you to know that during this past week I have received requests for copies of reports of the Governor's Agricultural Advisory Commission from the following organizations: Department of Agriculture, Ottawa, Canada; Legislative Reference Library of Madison, Wisconsin; New Jersey Experiment Station at New Brunswick; State Agricultural Commission at Blacksburg, Virginia; and the College of Agriculture at Cornell. Evidently the work of the Commission has attracted attention in other states. It is encouraging to think that the work which we have accomplished may prove to be helpful in guiding other states who also wish to pass legislation for the men and women on the farms.

Henry Morgenthau, Jr.

of Madison, Wisconsin; New Jersey Experiment Station at New Brunswick; State Agricultural Commission at Blacksburg, Virginia; and the College of Agriculture at Cornell. Evidently the work of the Commission has attracted attention in other states. It is encouraging to think that the work which we have accomplished may prove to be helpful in guiding other states who also wish to pass legislation for the men and women on the farms.

* * *

Summer was with us on April 6th and 7th and for a few days we thought that our apple trees would be in blossom before we could give them even a delayed dormant spray. Following this warm spell, we have had two weeks of cold weather with almost continuous rain and we have been unable to do any spraying. The first spray that we will now be able to apply to our apples will be the pre-blossom or pink spray, using 2½ gallons of lime sulphur, 2½ pounds of arsenate of lead, ¾ of a pint of nicotine sulphate, and 5 pounds of hydrated lime mixed with 100 gallons of water.

The Geneva Experiment Station has laid out a five year experiment in my orchard to learn the relative merits of various forms of nitrogen when applied around apple trees in a sod orchard. They are also going to use complete fertilizers with and without ground limestone. I will watch for the results from this experiment with a great deal of interest.

From the experience that we have had during the last fifteen years in growing apple trees, I am firmly convinced that it is best to cultivate an orchard up to the time that it comes into bearing. I am hopeful that the experiments which are being supervised by the Geneva Experiment Station will show that it is both practical and profitable to keep a bearing orchard in sod through using commercial fertilizers and in this way, cut down considerably the cost of maintaining an orchard once it is in bearing.

I was very sorry to learn that a number of apple orchards in Columbia County were severely injured by freezing.

I hope that this condition is not general throughout the state. We are going to try and ascertain, through the Farm Bureau Managers and the Spray Service men, just how much injury has been caused through freezing to the fruit crop of this state. Just as soon as we secure this information, we will pass it along to our readers through our columns.

* * *

After I decided to go in for producing Grade "A" milk, it did not take very much figuring to prove to me that we could not feed Grade "A" milk to our bull calves, unless we got a much higher price for these calves than we had been receiving in the past. For this reason, I decided that I would offer all bull calves for sale at \$75., if taken before they were thirty days old. I decided I would only make an exception to this rule when a bull calf was born out of one of my outstanding high record cows. In such a case, I would not offer this bull for sale until he was twelve months old. At the time I decided on this new bull policy, I had on hand ten bulls over three months old. I am keeping these until next fall and will offer them for sale at that time. At present, I am completely sold out of bulls under thirty days old and have a waiting list. Recent sales are the following:

Bulls

FISHKILL DEMEER HENGVERELD, H. B. No. 542016, sold to Mr. H. Brinckerhoff, Brinckerhoff, New York.

FISHKILL ALKEN PIEBE, H. B. No. 576591, sold to Mr. C. Leslie Mason, Genoa, New York.

FISHKILL UTRECHT SIR MAY, H. B.

Heifers

FISHKILL NORMI LADY SIR MAY, H. B. No. 1322173, sold to Mr. Robert Hoose, Dryden, New York.

FISHKILL DEKOL HARTOG PIEBE, H. B. No. 1322174, sold to Miss Frances Hoose, Hopewell Junction, New York.

Through bringing twenty-seven head of Jerseys into my herd, we will have for the first time twelve head of pure bred Holstein heifers for sale next fall. These heifers are all daughters of FISHKILL SIR MAY HENGVERELD DEKOL, H. B. No. 430239, and if I had the stanchions or box stalls to put these heifers in, money could not buy them.

Henry Morgenthau, Jr.

Visits with the Editor

I LIKE to have folks feel free to write AMERICAN AGRICULTURIST at any time on any problem that touches your work or your life. We do not pretend to know it all, and you can be sure that your letter will have our sympathetic attention. In this department, once or twice a month, I want to visit with you personally on some of the especially interesting problems suggested in your letters.—E. R. EASTMAN.

* * *

The Dairymen's Problem

DEAR EDITOR:—I agree with you that in the present condition of affairs, a higher price in the fall is the best plan to bring about an adjustment of market conditions to the best interests of the farmers, but why should a man be paid to do what he should do voluntarily?—P. McL., New York.

I FULLY agree with the above letter in theory, but the point is, human nature being what it is, theories do not always work out in practice. It would be much easier to solve the milk shortage problem in the fall by making prices more attractive.

However, it must be said in fairness that this is easier said than done. It is a question whether the dealers are very much worried about where their milk comes from as long as they get it. It is fairly easy to transport it from long distances under present conditions. So it may be a difficult job to get dealers to offer very much higher prices for milk during the short periods, provided they can get it for lower prices outside the present territory.

The point for all dairymen to consider is that unless they do produce

enough milk this fall, western milk and especially cream are going to start coming into this market in large quantities, and instead of being paid more than they now get, there is no doubt that prices will be much less.

Therefore, from one way of speaking, dairymen will be paid more if they produce more at the right time. It is a serious problem.

* * *

Reflections On the Good Old Times

DEAR EDITOR:—I suppose we all have fireside reflections but those of Jared Van Wagenen, Jr., published in the AMERICAN AGRICULTURIST from time to time have been very interesting to me. Perhaps they have caused some of my own.

At least, on this first day of another year with the snow falling too fast for an old man to go into the woods to work, I am constrained to put a few on paper.

I am thinking of a teacher, a girl, a mere child, in a wilderness in Delaware County, New York, only fourteen years old, going a mile every school day, which was then every week day excepting perhaps Christmas, not as a pupil, but as a teacher of a country school, at the price of nine shillings, \$1.25 per week in gold. It was nearly one hundred years ago, and her wages were taken by her father to buy hay to winter a span of old horses, both of which died before spring.

Well, this girl taught school summer and winter eighteen consecutive years, till she was no longer a girl, but "one of the best educated persons in the State of New York", and the first teacher to whom was issued a life certificate to

teach in Delaware County. Are there any such girls now? Any number of them. Given the same environment, the same conditions, they also would make good.

And the wages of the 30's of the last century bring me to reflect upon matters as to what has happened with money during all this time. In 1860, my father bought and set out an orchard of fifty apple trees.

Father hired one of the best workers of that time to dig the holes for setting those trees for fifty cents per day in gold and board. Today I am paying fifty cents an hour for men who could not cut, split and pile a cord of wood while Uncle Cornelius Van Housen would put up two cords.

And yet out of about every hundred men you meet, ninety-nine will say that the value of gold can never change because it is the measure of value itself or at least its value is. The truth is as stated by the London banker, McKuna, "The value of gold does not set the value of money, but just the reverse." The ability to make money earn, sets its value and that in turn sets the value of gold.

This is why it is possible to deflate prices. The operation is performed by inflating the value of money, higher interest rates and calling in loans—a very dangerous business for all parties concerned, a practice which, if indulged in too freely, will bring disaster to any people or nation whatever.

It has stopped snowing and I must close.—W. C. M., New York.

WHAT tragedy is expressed in a few simple words about the girl mentioned in the above letter who worked all winter for wages, only to have her father take them to buy a span of horses—and then to cap the climax, the horses died.

This brings to mind the all too prevalent custom in olden times, which has come down to the present, of the boy or girl's calf becoming the father's cow. Think of the heart-aches, and the discouragement to the youngster to work for a year to raise a nice calf only to have Dad sell it and pocket the money.

(Continued on Page 11).

The Ass and the Fiddler

An Old, Old Poem With a Modern Application

Within the fields one summer day,
A strong-lunged ass began to bray;
The uplands echoed back his voice—
To hear it made his heart rejoice.

"Ah, what a pity!" cried the ass,
"That I should longer feed on grass;
My lungs are strong, my voice is loud,
At concerts I might draw a crowd."

List to my music! how it fills
The valleys sleeping 'mong the hills!
'Twas sweet, I know, for look see what
Grand ears for music I have got!"

A great musician heard the din,
While passing with his violin;
He stopped a while upon the way
And bade the ass to cease to bray.

"My long-eared friend," the fiddler said,
"This neighborhood must wish you dead;
For worse than any sounding brass
Is your coarse braying, Mr. Ass.
If you wish music, cease your din,
And listen to my violin."

He rubbed the rosin on his bow,
He tried the notes, both high and low;
Making a stone do for a chair
He played a grand, soul-stirring air.

Ere he had ceased his tune to play
The ass began again to bray;
No violin, nor song of bird,
Could for a moment then be heard.

At last the old ass dropped his head,
And to the musician said:—
"Music is sound, my friend, you see—

Therefore all sound must music be;
Of mine the world must be proudest,
Because, my friend, it is the loudest."

What more could the musician say?
What further do but let him bray?
He wandered off through twilight dim,
Ass wisdom was too much for him.

Conclusion

How many men we daily pass
Who reason like this braying ass!
They grow to men from braggart boys,
And think that brains must make a noise.
They gain high seats as demagogues;
No mystery their vision fogs;
Whate'er the lack for argument
They give their store of gas a vent,
And wise men whisper as they pass,
"There goes a self-conceited ass."

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A.A.'s Western New York Farm and Home Talk

A Master Farmer Radio Talk

EDITOR'S NOTE:—Some time ago, Frank E. Mullen, Director of Agriculture of the National Broadcasting Company, asked us to name a New York State Master Farmer to give a radio talk on the Montgomery Ward agricultural program, having a hook-up of sixteen broadcasting stations throughout the Central West.

Complying with this request, we asked M. C. Burritt of Hilton, New York, to give the address. We considered it a very fine opportunity to tell many thousands of farmers throughout America something about agricultural conditions here in the East.

Mr. Burritt was introduced to the radio audience by E. R. Eastman, editor of AMERICAN AGRICULTURIST, and his introduction follows:

SINCE earliest times almost every trade and profession except farming have had their master craftsmen. The "master" stood with our fathers in the old days for high ideals, for great ability, fine accomplishment and for much contribution to the general good of the whole community.



M. C. Burritt

But, unfortunately, agriculture, the most important occupation of mankind, has had no designated masters, for to most persons a farmer has in the past been just a man who lived on a farm.

It was left to the Standard Farm Papers of America, of which American Agriculturist is one, to center public attention on farming and to bring honor to outstanding men by the Master Farmer movement. Since its inception in 1925, more than 300 farmers in 21 states have been carefully chosen and in public ceremony awarded the title of Master Farmer.

The Master Farmer movement has emphasized the fact that to succeed in modern agriculture a man must have the same ability, the same education, and judgment necessary to succeed in any other trade or profession.

A Master Farmer must not only be a successful farmer from a dollars and cents standpoint, but in addition he must be a good home-maker and a high class citizen.

It now gives me great pleasure to present to you a man who meets all of these exacting qualifications, a man who owns and operates the fruit farm in New York State on which he was born, a man who believes in the soil and the men who till it, a real Master Farmer,

Maurice C. Burritt
of Hilton, New York.

* * *

Opportunities for Farmers in the East

By M. C. BURRITT

IT IS said that only about 800,000 out of nearly 6,500,000 farmers in the United States are successful in making money and a good living on farms. As a result, our numbers are being constantly thinned out by those, who, unable to meet the more exacting standards of farm efficiency, are removing from farms to cities. One hundred and eighty-eight thousand farmers left American farms in 1928. We who are trying to earn a living and live a satisfying life on farms know that to do it now calls for greater skill and efficiency than ever before. Our farm land in the East, especially our best land, is relatively cheap. One cannot judge by average values, for these are made up of a great variety of good and poor soils, hills and valleys, good and poor locations. In general, the best values for the price are

in the best valley and low-land soils and locations rather than in the cheapest hill lands which are best adapted to pasture and to reforestation. Because these eastern farms were first settled and developed when lumber and labor were abundant and cheap there are frequently to be found on them wonderful sets of buildings, in value far beyond what they could be erected for, although they usually need remodeling. Practically all these lands are well watered and have an abundant rainfall.

Great Markets at Our Doors

Here in the East great markets lie at our very doors. Seventy-five million people now live in the area east of the Mississippi and by 1950 this number will undoubtedly have grown to well over 100,000,000 persons, all of whom must eat farm products. To serve this great population there have been built great networks of railroads and highways. Especially is the mileage of improved roads very large and growing and it will be but a short time until practically all of our best farm land will be located on or very near to hard surface roads. Thus the use of the efficient motor truck is available to practically every farmer.

Our special opportunity as eastern farmers is, of course, the production of perishable products of quality, especially milk, eggs, fruits and vegetables, which can be delivered to market overnight fresh from the farms where they are produced, and at a minimum of transportation cost. There is considerable opportunity also for farmers to retail directly to consumers through roadside markets and direct delivery thus obtaining the full consumer's dollar. The opportunity to produce many specialized crops such as flowers, seeds, cabbage, beans, etc., is also good. And eastern soils and climate are adapted to the production of almost every crop grown in the whole country, including such staples as corn, oats, wheat, hay, etc. The specialized and perishable crops are grown because they are relatively more profitable.

An Advantage Seldom Appreciated

Probably only those who have enjoyed its facilities and who have later been denied them because of removal to a sparsely settled country, really appreciate the great advantages of a thickly settled and well established region. A relatively densely populated area means not only readily accessible markets (often retail markets) at one's door, but taxable property sufficient to provide the conveniences and facilities of life without being prohibitively costly. Where the taxable valuation is \$200,000 or more in a school district, or \$75,000 or more per mile as is frequently the case and especially near large cities, all of these may be available at a total tax cost of not more than \$2 per acre.

And so I am glad that I live and farm in the East and that I am privileged to farm good land that I, and my father before me, have tilled for more than four score years, and to have my children grow up on this same land. A hard surface road, kept open for automobile use the year around, runs by my electric-lighted and powered house and takes me to my local village two miles away. Over it my children ride in comfort to a modern high school. Upon it my produce is easily and swiftly hauled to market in heavy loads. Over this same good road my doctor reaches me easily on ten minutes' call, my fire district truck is available in the same time, and my county traveling library comes to leave my family books to read. And connecting concrete electric lighted highways take me to a large city in 30 to 40 minutes for

(Continued on Page 11)



Latest Type Umbrella Tent. Erects in 3 minutes. Fine waterproofed khaki material; gives full protection in stormiest weather. Shelters several people—saves hotel bills—insures privacy from crowds. Ward's price saves you at least \$15.

All Steel Table and Chairs, easily folded into compact unit. Olive green, with orange trimmings. Strong, light, durable, sanitary. Ordinary price, usually over \$14. Ours under \$10.

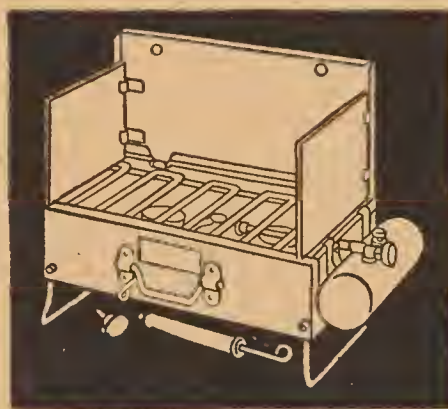
Camper's!

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Genuine Prentiss-Wab-
er's Auto Camp Stove.
Burns vaporized gasoline.
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\$250,000,000 annual business enables us to buy enormous quantities at a time; our savings by this method are passed on to you.

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Lunch Set, with Carrying
Case of enameled fabric
finish. Fully equipped with
triple nickel-plated ware,
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plates, etc. Can also be used
for traveling bag. Our price
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ticles elsewhere. Yet these are but a few from some 40,000 items of Ward merchandise, all priced to bring you substantial savings.

How we can make such low prices for standard high quality, is extremely simple. We buy from the maker direct. Sell to the user direct. Only one small profit in between, instead of several the usual way. Further, a



Double Camp Bed, with
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"On 15 acres of corn, I
lost but 3 or 4 hills"—



writes A. B. Wilmot, of E. Thetford, Vt. Crows and other pests had fairly picnicked on his corn-fields. Then someone told him of a way to coat his seed corn in a mixture that no crows or any other pests would touch, after they once had a taste of it. This corn-saver was Stanley's Crow Repellent.

Mr. Wilmot sent for some. He mixed it with his seed corn. He did not have to wait for it to dry, but planted it at once. And it did not clog the planter. It did not injure the seed corn. It was not poisonous. But it did keep every crow, mole, squirrel and other pest off of his corn-field. Mr. Wilmot is only one of hundreds who have written us that they would never plant a hill of corn again without using Stanley's Crow Repellent. "Money Back" guarantee, based on a 20-year record of performance. Large can, enough for 2 bu. of seed corn (8 to 10 acres), \$1.50. Half size, \$1.00. If your hardware, drug or seed store doesn't have it in stock, order direct. Address Cedar Hill Formulas Co., Box 500M New Britain, Conn.

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Do the biggest, most important job in raising field crops and fruit. Increase yield 50 to 200 per cent. Improve quality. Insure investment by destroying bugs, preventing mold and blight.

Traction Sprayer has 1, 2 or 3 nozzles per row; 4, 6 or more rows per boom. Wheels adjustable to width of rows. 60 to 100 gal. tanks. Double or triple action pumps. Thousands of satisfied users.

Combination and Power Sprayers for orchards, groves, and field crops, have 3 cylinder pump; pressure regulator; several sizes of engines and tanks for pressures 200 to 400 lbs. with spray booms and guns.

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POTATOES

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This seventy bushel EXTRA YIELD amounted to a 22% increase over his yield from potatoes sprayed with a home-made mixture.

PYROX, the scientifically prepared plant spray does three things at once. That is why it is so economical, and helps produce bigger and better crops. PYROX kills bugs, prevents the development of blight and disease, and stimulates plant growth. Does away with the costly labor of home-made spray mixtures, and eliminates the danger of improperly mixed chemicals. Safe and easy to use. Will not wash off. Does not clog sprayer nozzle. Use PYROX this year for BIGGER PROFITS. Now priced lowest in 30 years' successful use. Write us or ask your dealer for the new Spray Guide—free. Bowker Chemical Company, 419 Fourth Avenue, New York.



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With the A. A. Vegetable Grower



The High Cost of Thinning

NOBODY loves
the job of thinning

By PAUL WORK

vegetable crops. The writer does not expect to soon forget a solid week spent on a New Jersey carrot patch some twenty years ago. Furthermore, thinning costs money.



Paul Work

There are several ways in which the grower can minimize the cost of thinning. In the first place, seed ought to be tested, preferably in the soil and with conditions as near as possible to those prevailing where the crop is to be grown. In the second place, soil should be well prepared. Lumpy soil does not give uniform contact between soil and seed, with the result that some seeds start early, some late, and some not at all, thus bringing about an uneven stand. Finally, particular attention should be given to the actual work of sowing. The seeder should be chosen carefully and adjusted as precisely as possible. Many like to try the machine on the barn floor before going to the field. Even depth and firming all help toward an even stand.

Many fail to realize the serious cost of an uneven stand. With some crops, such as potatoes, neighboring plants in partial degree make up for skips, but far more growers have too few plants per acre than too many. With many of our crops a skip in the row is a dead loss. The foliage may seem to partially fill the space and the poor stand may not be conspicuous, but when harvest time comes the yield is not good. Further, the culture of the acre has not cost any less by reason of the missing plants. Accordingly, the cost per bushel or dozen bunches is increased and profits are accordingly reduced.

Fertilizer Costs

Not many of the things that the farmer buys are cheaper than the things he sells. This, however, applies to commercial fertilizers. Assuming the price index for the pre-war period to be 100, the index for all commodities now stands at about 150. Farm products show an index of 135 and 12 fertilizer materials together give an index of 125.

This would seem to suggest that the grower can afford to consider fairly liberal use of fertilizers; of course, avoiding waste and being guided by the value of the products which he expects to sell.

The comparison of the different groups of fertilizer materials is particularly interesting. Inorganic nitrogen including sodium nitrate, both mineral and synthetic, sulphate of ammonia and other manufactured forms is actually cheaper than before the war with an index of 90. Organic nitrogen, on the other hand, stands at about 160, being the most costly of any group of materials. This is largely due to the fact that such materials as tankage, blood, cottonseed meal, and the like have been pre-empted for compounding feeds. Potash is very close to pre-war prices, while phosphoric acid stands at about 112.

Here is information which the vegetable grower may well consider in planning his applications for the coming season.

New Vegetable Research Projects

The farm relief movement in New York brings valuable help to the vegetable growers of the State. Governor Roosevelt has signed bills which have been advocated and furthered at hearings by the N. Y. State Vegetable Growers' Association and which provide something over

\$30,000.00 for research work. About two-thirds of the amount is for the muckland enterprise, which has been sought for two or three years past. This will involve the employment of a man in the Department of Vegetable Gardening at Cornell for fertilizer and other cultural studies, a man for Plant Pathology, work and a man in the Agronomy Department who will be primarily charged with studies of the nature and classification of muck soils.

The remainder of the fund provides for work by the Department of Vegetable Gardening on production and on storage construction and management for potatoes, and also for disease work in the Plant Pathology Department.

The requests for studies in the grading and handling of vegetables did not come thru. This was intended to provide work on the marketing factors which are largely in the hands of the grower. It will probably require another year or two of effort to establish this much needed enterprise.

Nissley on Plant Growing

C. H. Nissley, of the New Jersey Experiment Station, has been known for a number of years for his intensive work on growing of vegetable plants and on suitable structures for this work. His bulletin of the New Jersey Experiment Station (Extension Bulletin 51—"Plant Growing and Plant Growing Structures") has had very wide circulation.

Mr. Nissley is the author of a new book on "Starting Early Vegetable and Flowering Plants Under Glass" which assumes an extremely important place in filling out our literature on vegetable production. A good share of the volume is devoted to construction problems with particular emphasis upon home-made types of sash houses, hotbeds and coldframes. Details and specifications are given quite fully and methods of heating by means of flues and hot water boilers are well described. A section is also devoted to electrically heated hotbeds which are attracting increased attention with lower prices for electric energy.

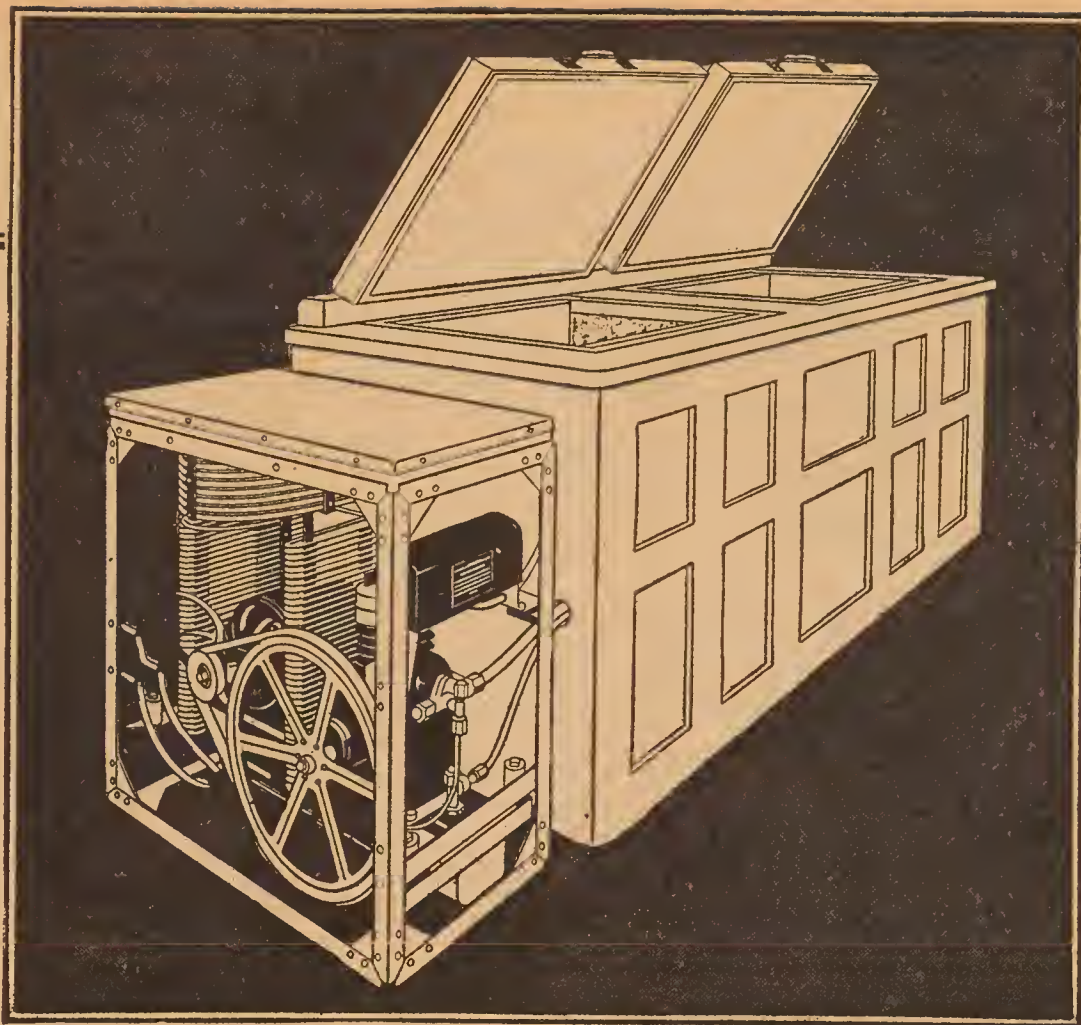
The author deals in a comprehensive manner with the factors involved in securing good plants, beginning with seed and planting, describing the best methods of soil preparation, and the various phases of care and hardening as they progress until they are ready for field setting. Special chapters are devoted to insects and diseases. Other chapters are concerned with the details of methods for plant growing with the different crops of vegetables and a brief chapter considers flowering plants.

The illustrations in Nissley's book are extremely helpful. They really illustrate instead of merely decorating the book as is not uncommon. The author has made good use of the research work which has been carried out in this field. Altogether, the work will prove invaluable to the plant grower. The book is published by the Orange Judd Publishing Co., New York City.

Fertilizer for Peas

What fertilizer is commonly recommended for canning factory peas?

EXPERIMENTS have shown that 200 lbs. per acre of acid phosphate or a complete fertilizer high in phosphorus is likely to prove profitable. The benefit comes partially from the fact that peas that are fertilized are less likely to be damaged by root rot. Peas are easily damaged by direct contact with fertilizer and care should therefore be used in applying it. It is a good plan to broadcast it before the peas are planted.



Frigidaire can be used with any approved tank type milk cooler.

"In a year's time, our Frigidaire milk cooling equipment paid for itself and left a net saving of \$1006^{.00}"

Slosek Brothers, Ludlow, Mass., dairymen, are among the thousands who are making amazing extra profits with Frigidaire. Mail the coupon now for facts and figures on how to save and make money in your dairy.

DO you realize that everyday of the year you are paying for Frigidaire equipment—paying for it without having it? Now it's time to let Frigidaire pay you.

In hundreds of dairies throughout the country, Frigidaire cools milk better and quicker, keeps its bacterial count remarkably low, brings higher prices. It stops spoilage and waste. It saves time, work . . . and money.

Here is a typical example of what Frigidaire will do for the large dairy farm.

Saves \$2371.00 the first year

Let Thomas Slosek give you the facts and figures himself. "Figuring that we used a ton of ice a day at \$3 a ton," he says, "that item cost us \$1095 a year. Cur-

rent for Frigidaire averages \$15 a month or \$180 a year." A saving of \$915 on ice alone.

"When ice was used," Mr. Slosek says, "one man was needed to haul, then to chip, and pack it. When we got Frigidaire we reduced our working force by one man . . . an immediate saving of \$28 a week or \$1456 a year." The Frigidaire equipment cost \$1365 installed. The first year it paid a net profit of \$1006. And after that year all of its tremendous savings became clear profit.

No matter what size your

dairy is Frigidaire will bring you proportionately large savings.

Bacteria count only 3000

The Sunny View Farm of Lexington, Ky., reports a saving in ice cost alone of \$439 a year. Mr. B. F. Wells, the owner, when he wrote to us said, "since I installed Frigidaire, Sunny View Farm has become the only dairy in Fayette County with a certified permit. A recent count by County Health authorities showed only 3000 bacteria per cu. centimeter."

Get the facts. Mail coupon

Have you been overlooking these big extra profits? Have you been paying for Frigidaire without having it? Get all the facts . . . today. And remember, only Frigidaire gives you Frigidaire results. For Frigidaire alone

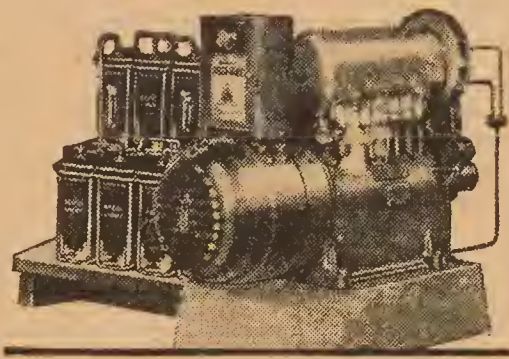
has the backing of General Motors engineers. And Frigidaire alone can give the assurance of dependable, care-free performance afforded by more than 750,000 actual installations.

Equipment for every size dairy

You will find Frigidaire equipment designed for every dairy no matter how large or how small. You will get the same relative savings and economy from every Frigidaire unit.

Frigidaire operates efficiently at remarkably low cost on high line or Delco-Light current. It can be used with any approved tank type milk cooler. It is low in price and you can take advantage of unusually liberal G.M.A.C. terms.

Can you afford not to read the entire story? Get the coupon in the mail today. It involves no obligation whatsoever. Frigidaire Corporation, Subsidiary of General Motors Corporation, Dayton, O.



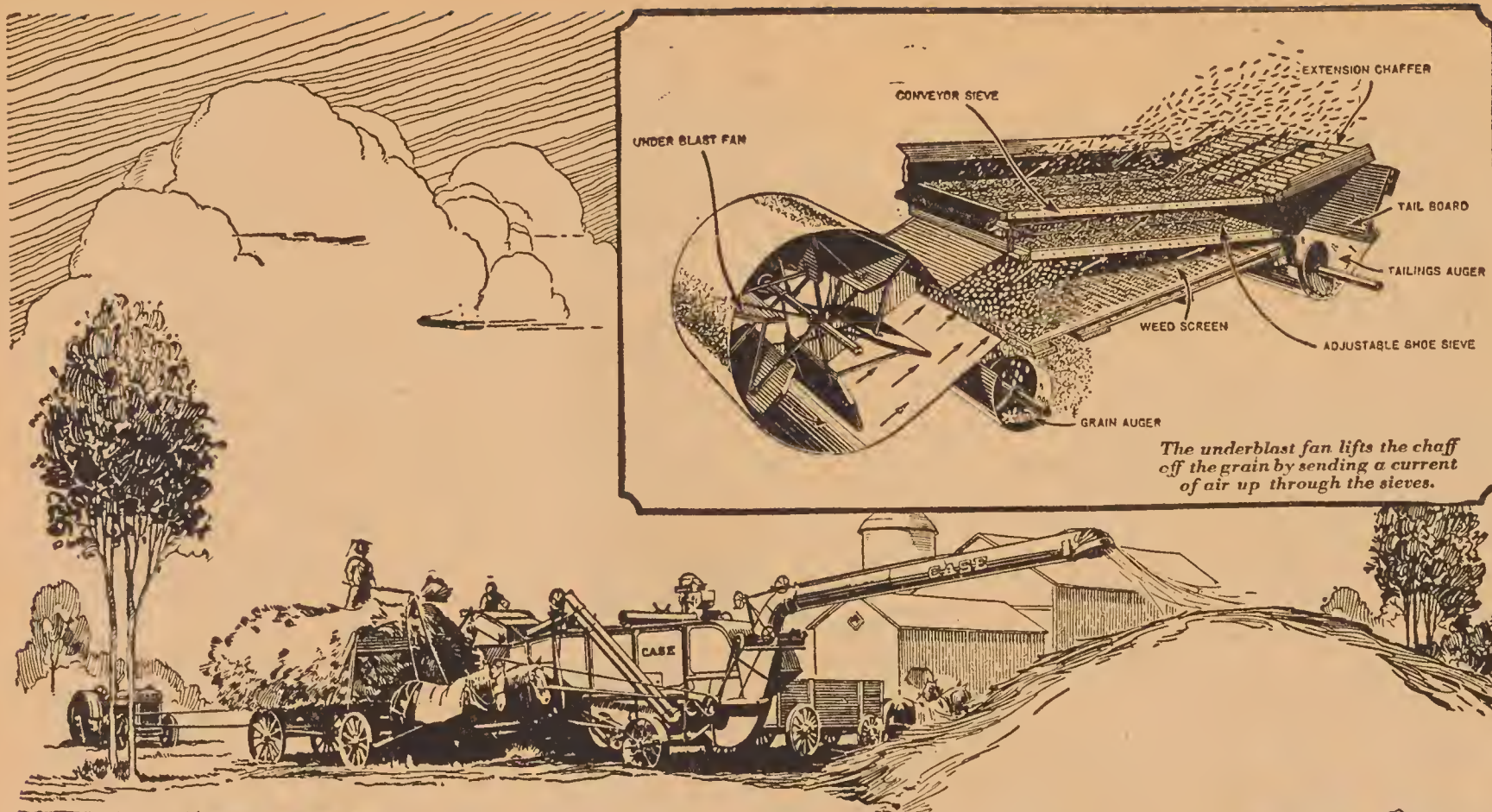
This new 4-cylinder, 1500 watt Delco-Light Power Plant furnishes ample power at low cost.

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Dayton, Ohio.
Show me how Frigidaire milk cooling equipment will make my dairy profitable. Send the facts at once.

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Well Cleaned Grain Sums up Your Profit

"In the 20 years of my threshing experience, I have never run a machine that has the capacity and cleans grain and seeds as well as my Case thresher."
John J. Dobmeier,
Lake Lillian,
Minn.



Established 1842

The New Case Full Line Includes:

Threshers
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Clothing	Fertilizer and Lime	Paint	Seed Disinfectants	Water Systems

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A Good Road for Every Farm

(Continued from Page 1)

added income sufficient to accomplish it, is it within the realm of possibility to look forward to a time when every farm in New York State that is a worth while business and home shall have a market outlet over a hard road?

With the gasoline tax which will be returned to the counties it might be possible to accomplish this in twenty-five years or less if we systematically plan it and the people desire it. It would be worth while for some agency in each county to make a study of its road system. If some roads could be abandoned, these should be marked. Main roads over which the greater amounts of farm products are hauled should be improved rapidly. A thorough study of farm locations should be made to determine the easiest way to provide a hard road outlet for each. It is not always necessary to put a road past a farm in order to do this. Often, extending a road only to a farm will save expense. With such a plan the county has an aim for its road building activities.

This suggestion is not a wild impossibility. Several counties in the United States have already provided complete hard road outlets for their farms. Orleans County in New York State has very nearly accomplished it. England has thousands of miles of highways reaching back to many isolated farms. Often these roads are narrow, crooked, and very steep. In driving 7,000 miles on them I never saw a dirt road. Every English farm that I saw, no matter how isolated, had a hard road market outlet. This meant much to the farmer and just as much to the city consumer. Can we look forward to accomplishing what England has already done?

A lateral road system would be of value to the tourist as well as of economic importance to producer and consumer. Our main line roads are so thickly bordered with roadside stands and sign boards, and traffic is so heavy, that the traveler finds it difficult to enjoy the open country. A lateral road system would spread out this traffic and relieve congestion. It would make it possible to really reach the unspoiled parts of the countryside. People could find roads where they could drive slowly, where they could enjoy nature and where they could get away from the rushing crowd; yet without being buried in mud or blinded with dust. Everyone who has traveled the real open country knows that often the most typical rural scenes and the most interesting views are away from the main routes of travel. A lateral road system would enable people who desired it to really discover the joys of travel through the rural sections of New York State.

The Agricultural Conference Board Organizations in the State and Governor Roosevelt's Agricultural Advisory Committee in their discussions both recognized the need and emphasized the importance of a lateral road system. The legislature recognized this need in legislation. The return of a portion of the gasoline tax to the counties was planned as a measure to help in the development of a lateral road system. During the past legislative session various laws were enacted to relieve counties of a considerable portion or all of the cost of state and county highways. Other laws were enacted which will be of great help in reducing school taxes. All of these are tax relief measures of importance and totaling millions of dollars annually to the rural people.

The gasoline tax itself, however, should be used primarily for road purposes in counties and in state. It is sufficient in amount if kept for road use and expended under a well formulated plan to go a long way towards completing a lateral road system in every county in the state during the next twenty-five years.

Just stop and think for a moment what it would mean to all the people in this state, in city and in country, if every food producing farm had a hard road market outlet.

Visits with the Editor

(Continued from Page 5)

No wonder some of the young folks lost interest in the old farm.

* * *

Dirt Roads and the Gasoline Tax

DEAR EDITOR:—Please inform me what per cent, if any, is appropriated to dirt roads from the gasoline tax, and when available.—A. S. C., New York.

THE new gasoline tax law just passed in New York provides that 20 per cent of the returns shall be returned to the counties for road purposes. There is no direct provision for the town or dirt roads. This is a problem yet to be solved, except that of course every new county road that is built by these larger amounts of State aid from the gasoline tax will take the place of just that much dirt road. So in time as these larger sums keep coming from the State to the counties for road purposes all of the main dirt roads will have hard surfaces.

However, the principal help from the new State laws just passed to farmers who live on the dirt roads will be in reduced taxes. Heretofore, such dirt road farmers have had to pay heavy sums for building State and county highways and have not received much benefit from these highways. Now these local road taxes will be reduced, as will also the school taxes of those who live in one-room school districts.

* * *

"The Best He Ever Tasted"

DEAR EDITOR:—You invite comment on Mr. Hitchings' fine article on destroying old apple trees in a recent issue of AMERICAN AGRICULTURIST. The article as a whole I consider sound and to the point, and the recommendations generally are good; but like any good medicine, should be administered with care and with due regard to needs and conditions of the patient. Some of the suggestions are somewhat discouraging to the many small orchardists in this State, if carried out to the letter. The small grower should study the advice and as far as possible, where conditions permit, put it into effect on his own farm.

To my mind, there are many old orchards that should have gone on the wood pile long ago. On the other hand, there are many small orchards, which, while not young or of a popular variety, are nevertheless, if given fair treatment, an added source of income to the farm. If they were removed, they would leave that farm without fruit, perhaps during the occupancy of the present owner. So I suggest discretion be used in the cutting of bearing trees.

As to the suggestions on the varieties to be discarded, this advice should not be followed until a careful study of local growing and market conditions has been made, as to the adaptability of present varieties.

Take the Wagner for instance, one that Mr. Hitchings recommends discarding. With us here in the lake region, it is one of the best for our local markets, prolific and beautiful. Some that I had last year would make the Hitchings' splendid Spys sit up and take notice.

Then there is poor old Ben Davis. In this section, if the trees are given proper thinning and spraying, we get a product that will always command a market and a fair price. Therefore, I suggest going slow about removing good bearing trees.

As to the sod-mulch method of culti-

vation, one should also study local conditions very carefully before adapting this rather attractive alternative for plowing and harrowing. I would advise anyone contemplating a change of practice in cultural method first to read carefully advice by Joseph Oskamp, under the heading, "The Sod Orchard", published by Extension Service of the N. Y. State College of Agriculture, Ithaca, N. Y. I consider it mighty good.—H. S. F., New York.

EVERY apple grower will agree with the common sense sentiments expressed in the above letter. His reference to the Ben Davis apple reminds me of a story which one of my friends just sent me. Here it is:

A gentleman had prided himself on his knowledge of fruit and boasted to his fellows that he could tell any variety of apple by the taste, even if he were blindfolded. So they covered his eyes and offered him several pieces of different varieties of apples and included a piece of raw potato. The so-called expert pronounced each apple correctly until he came to the potato. Then, after hesitating a moment, he said:

"Well, boys, I guess you got me stuck this time. I do not know what it is this time unless it is a Ben Davis. And if it is, it's the best I have ever tasted!"

* * *

Little Things Make Life

DEAR EDITOR:—I would like to be able to show you some day just how much my husband and myself appreciate your interest in the farmers. Your page is always read first at our house and appreciated, because you write about first some of the small things that happen in our daily life, and second, the most important things.—Mrs. B. B. C., New York.

THIS kind little note especially pleased me because it touches upon the very thing that we are trying to do in AMERICAN AGRICULTURIST; that is, write about the small things that make up the daily routine of the farm and home. Long years of actual experience on the farm and a lifetime of association with farm folks have, I hope, given me some inside knowledge of and sympathy with the sorrows and joys which make up the daily life of my friends who live upon the land.

A Master Farmer Radio Talk

(Continued from Page 6)

business or pleasure; and my children to a university.

Grappling with the problems of making the farm business pay for all these privileges and conveniences and earn a profit in addition has convinced me of the necessity of educational training and good organization to efficiently supplement an inherent love of farming and country living, if I hope to farm successfully. Without such educational preparation and without the effective cooperative farm organizations which serve me to protect and promote my business with insurance and credit, and to assist me to buy and sell collectively with my neighbors, I should hesitate to try to support a family on the modern standard of living by the business of farming, much as I love the life.

With education and organization, however, the East offers to the lover of farming and farm life the great advantages of production near to the great consuming markets and the facilities of the best modes of life without the disadvantages of isolation. A well equipped, well located farm in the East, operated by a well trained, well organized farmer, approximates as nearly as I know it, the ideal life and living.

Good farm machinery means an up-to-date farmer; well-cared-for machinery means a thrifty farmer. Machines give longer wear if they are not left out in the weather.

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MICKY—I don't see why.

"The hole ain't big enough!"

—JUDGE.



How the *Big Business* gets *Big*

THE underlying principle of growth is not so much the consideration of your own profits, but attention to the profits of your customers. If your customers find that your goods or service make money for them, they will continue to be your customers. And as they grow, so will they help you to grow.

That is why it is a wise thing to deal with a big business. Its very size is a guarantee of reliability. In order to become big it has had to consider its customers first. And in order to stay big it must continue its cooperative policy.

A big firm is better able to benefit its customers, too. Because it is large, it has many facilities for improving the quality and lowering the price of its feeds—facilities that are not available to the poultryman and dairyman who mixes his own.

It is able to practice efficiency in buying ingredients, efficiency in production, and efficiency in selling and distribution. All these mean savings—savings that are passed on to the consumer. And those savings come only through size.

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With the A. A.
Dairyman



A Review of Purebred Cattle Prices

PRICES of purebred dairy cattle, including five of the leading breeds, were steady to higher in 1928 than in 1927, according to reports received by the Bureau of Agricultural Economics, United States Department of Agriculture, from individual breeders throughout the country.

Of the 17,136 animals reported sold, 1,439 were Ayrshire, 453 Brown Swiss, 2,621 Guernsey, 8,045 Holstein-Friesian and 4,578 Jersey.

Combining all sales, the 1928 report shows that 90% were sold at private treaty and 10% at auction, compared with 87% at private sale in 1927 and 13% at auction. It also shows that 30% of the purebred dairy cattle reported in 1928 were sold in the North Atlantic States, 11% in the South Central, 51% in the North Central and 8% in the Mountain and Pacific States.

Holstein Prices

Purebred Holstein-Friesian cattle prices were somewhat higher in 1928 than in 1927. A greater gain was made in auction than in private sale prices. However, the number of animals sold, per breeder reporting, was one and one-half less than during 1927.

The 1928 report is based on the sale of 8,045 purebred Holstein-Friesian cattle of different ages, as reported by 866 listed breeders. Combining all sales, 36 per cent sold below \$100 in 1928, compared with 38 per cent in 1927, 59 per cent ranged between \$100 and \$300 compared with 56 per cent the previous year, while approximately the same proportion or 5 per cent sold above \$300 during both years. Of the total number of Holstein-Friesian cattle reported 7,339 or 91 per cent were sold at private treaty and 706 or 9 per cent were sold at auction. In 1927, 85 per cent and 15 per cent, respectively, were sold at private and auction sales.

COMPARATIVE PER CENT OF SALES OF PURE-BRED HOLSTEIN-FRIESIAN CATTLE 1923-1928, BY PRICE RANGES

Year	Below \$50 (Per cent)	\$50 to \$250 (Per cent)	\$250 and above (Per cent)
1923	11.2	69.3	19.5
1924	18.5	73.5	8.0
1925	19.0	73.2	7.8
1926	16.7	80.1	3.2
1927	14.0	77.2	8.8
1928	13.9	76.2	9.9

Guernseys Steady and Higher

The general price trend of purebred Guernsey cattle in 1928 was steady to slightly higher than in 1927. There was, however, a pronounced decline in the auction sale prices, but a small increase in the prices of the much larger number of animals sold at private sale, more than offset this decrease. Notwithstanding the decline from the 1927

levels, the auction sale prices still averaged around \$60 above prices of private sales.

The 1928 report is based on the sale of 2,621 purebred Guernsey cattle of different ages, as reported by 323 listed breeders.

Of the total animals sold, 4 per cent ranged from \$100 to \$300, compared with 57 per cent at the same range in 1927, 10 per cent sold within the range of \$300 to \$500 in both years, while one per cent more or 29 per cent sold below \$100 and 2 per cent more or 7 per cent sold above \$500 in 1928.

Of the total number of Guernsey cattle reported, 16 per cent were sold at auction and 84 per cent at private sale, compared with 14 and 86 per cent, respectively, in 1927.

COMPARATIVE PER CENT OF SALES OF PURE-BRED GUERNSEY CATTLE 1923-1928, BY PRICE RANGES

Year	Below \$50 (Per cent)	\$50 to \$250 (Per cent)	\$250 and above (Per cent)
1923	8.6	58.1	33.3
1924	14.9	64.3	20.8
1925	11.0	65.3	23.7
1926	12.0	65.6	22.4
1927	9.2	68.9	21.9
1928	9.8	68.0	22.2

Jersey Prices Gain

Prices of purebred Jersey cattle were considerably higher in 1928 than in 1927. The number of animals sold, per breeder reporting, was a fraction higher than during the previous year.

The 1928 report is based on the sale of 4,578 purebred Jersey cattle of different ages, as reported by 458 listed breeders.

Of the total sales, 32 per cent sold below \$100, 56 per cent between \$100 and \$300, 5 per cent between \$300 and \$500, and 7 per cent above \$500, while in 1927, 42 per cent sold below \$100, 53 per cent between \$100 and \$300, 3 per cent between \$300 and \$500, and 2 per cent above \$500. The number of Jersey cattle sold at auction during 1928 constituted 10 per cent of the total sales reported compared with 11 per cent in 1927.

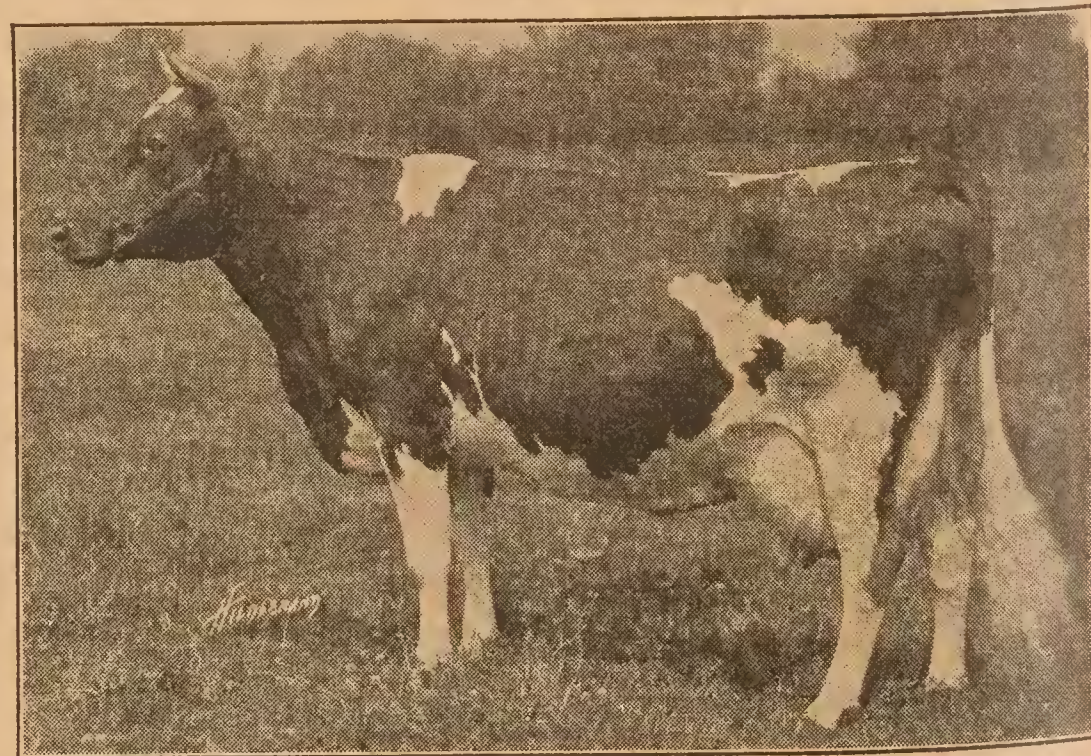
COMPARATIVE PER CENT OF SALES OF PURE-BRED JERSEY CATTLE 1923-1928, BY PRICE RANGES

Year	Below \$50 (Per cent)	\$50 to \$250 (Per cent)	\$250 and above (Per cent)
1923	13.1	62.7	24.2
1924	26.3	66.3	7.4
1925	24.0	71.0	5.0
1926	17.4	76.4	6.2
1927	15.3	76.6	8.1
1928	9.7	71.5	18.8


Brown Swiss Sales Increase

The general price trend of purebred Brown Swiss cattle in 1928 was slightly higher than in 1927. There was, however, a pronounced decline in the

(Continued on Opposite Page)



Mixer May Princess, a purebred Guernsey owned by Emmadine Farms, Hopewell Junction, N. Y. Mixer May Princess has a record of 15620.7 pounds of milk and 779.5 pounds of fat in class A. She also has a fine show record, including Senior and Grand Champion at the National Dairy Show in 1924.



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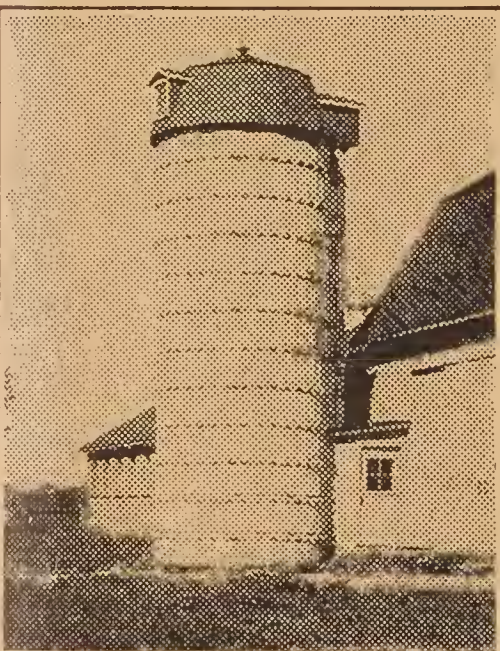
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(Continued from Opposite Page)

auction sale prices, but an increase in the prices of the much larger number of animals sold at private sale caused an advance of about \$5 per head in the general average.

The 1928 report is based on the sale of 453 purebred Brown Swiss cattle of different ages, as reported by 52 listed breeders. Demand for this breed appears to have been sustained, as the average number sold, per breeder reporting, was a fraction higher than in 1927.

Combining all sales, approximately 28 per cent sold below \$100 and 2 per cent above \$500 in both 1928 and 1927, while 64 per cent ranged between \$100 and \$300, and 6 per cent between \$300 and \$500 in 1928, compared with 66 per cent and 4 per cent, respectively, in 1927.

The proportion of total sales of Brown Swiss which were sold at auction in 1928 was 9 per cent, compared with 3 per cent in 1927.

COMPARATIVE PER CENT OF SALES OF PURE-BRED BROWN SWISS CATTLE 1923-1928, BY PRICE RANGES

Year	Below \$50 (Per cent)	\$50 to \$250 (Per cent)	\$250 and above (Per cent)
1923	12.7	71.2	16.1
1924	5.3	91.2	3.5
1925	4.6	81.2	14.2
1926	1.8	90.4	7.8
1927	6.8	83.4	9.8
1928	7.3	76.9	15.8

How Areas Are Organized For TB Eradication

There is quite a bit of discussion in our neighborhood about testing our herds for eradication of TB. We would like to know just what procedure is followed in making the test, how often we will be required to test, who bears the expense, and whether we can be forced to test in case we decide it is not advisable.—D. W., New York.

THE present plan of eradicating bovine TB is to test by areas, usually by townships, because experience has shown that it is difficult to maintain herds free from this disease in localities where the majority of herds are not tested. Many county farm bureaus have committees known as TB eradication committees, composed of members of the farm bureau. Where there is evidence that certain towns are interested in eradicating this disease, a local committee which serves without pay, is first appointed to interview all of the herd owners to see whether they will agree to have the test made. It has been the policy of the State Department of Agriculture not to start tests until a large majority (usually 90%) of the cattle owners wish it.

The Quarantine Law

The law does not provide that a man can be forced to test his herd. However, the fact that a quarantine can be placed on untested herds after the vast majority of herds in a locality have been tested, does practically force a man to test or to go out of the dairy business. Until recently, there was a provision that the Commissioner of Agriculture and Markets could quarantine a herd in a township, after 90% of the herds in the town had been tested. Some time ago, the ruling was changed, so that dairymen who refuse to test can be quarantined after 90% of the herds, or 90% of the cattle in any town or county have been tested. The State Department has used this quarantine only as a last resort.

After it has been decided that a test should be carried on in a particular township, federal or state veterinarians make the first test without cost to the herd owner and follow by a retest in from 60 to 90 days, or in case this is impossible, as soon as a retest can be made. Retests are made every 60 to 90 days until a clean test is passed. An accredited herd certificate is given after two annual clean tests.

Many County Boards of Supervisors have made appropriations to provide for a county veterinarian to work with state and federal authorities until such time as the county becomes a modified accredited area.

Testing has, in the past, been done free of charge for the cattle owner, until the herd was accredited, after which time the cost of testing was met

(Continued on Page 14)

**What Have Pipe Organs . . .
. . . Or Railroad Signals .**



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No matter what condition your wood-stave Silo is in—fallen down, tilted, leaky, battered—it can be put in A. No. 1 condition with this marvelous material—Crainelox Covering.

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This diagram explains. Over your old staves is placed acid and moisture-proof Silafelt. Over this is wound a continuous hooping, making your Silo like a great big barrel that will last for a generation under ordinary conditions. And will produce a better grade of silage every year because it will be at least three times warmer.

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describing Crainelox and mentioning some of its thousands of users—you probably know some of them. Also describing the Craine Line of New Farm Silos.

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Our surprisingly low factory price on this 2-cow Hand Power Milker makes it the lowest priced milker per milking unit ever offered. And for only \$12.50 extra a third cow attachment can be added enabling you to milk 3 cows at once. Thousands in use. Easy to operate.

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No other milker on the market can compare with the PAGE for low price—ease of operation and milking efficiency. We let you prove it before you pay. We will put this PAGE Hand Power Milker in your barn on FREE TRIAL. See the time and work it saves; see how soothing its action on the cows and how sanitary and easy to clean. Then if satisfied, pay only \$5 down, balance in easy monthly payments.

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Should you later wish a PAGE 2 or 4 cow gas engine or electric Milker you can trade in your PAGE Hand Power Milker on very liberal terms.

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No Installation Expense—No Pipes—No Pulsator

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(Continued from Page 13)

by the herd owner. In New York State Governor Roosevelt has just signed a bill providing that the state will, in the future, take care of the cost of testing accredited herds. The accredited herd certificate is good for one year, when a retest is made, except in areas where the infection is reduced to one-half of one per cent or lower. The area is then called a modified accredited area, and cattle are tested only once in three years.

Indemnity for state and federal funds are paid on reactors both before and after the herd is accredited. New York State is among the states allowing the highest indemnity on reacting cattle.

Readers who wish to get more detailed information on the TB eradication progress should write to the State Department of Agriculture and Markets at Albany, N. Y., and ask for copies of bulletin 183 on bovine tuberculosis, and circular 357 on the law relating to diseases of domestic animals.

How New Jersey Fights Contagious Abortion

(Continued from Page 3)

giving no reaction to the test.

The third retest was made on November 1, 1927 of the clean herd including nine young heifers that had not been tested. This test yielded one reactor which was eliminated and the fourth retest of the herd that had passed the test (53 animals) showed no reactors. The owner to increase his herd bought 14 animals from an abortion-free herd in Illinois. These were placed in quarantine and retested on January 12, 1928. No reactors were found. Finally a test was made of the whole augmented herd on May 21, 1928, and 67 animals were tested without a single reactor, and a certificate of full accreditation was issued to the owner immediately thereafter.

The reactors were kept on a quarantined farm where part have since been slaughtered and part are still maintained. The law forbids the sale of reactors except for slaughter or to other quarantined premises.

Does It Pay?

This is a question that the owner must decide for himself. The tests and laboratory work are done without charge but no indemnity is provided by the state to compensate partly the owner for reactors. As the satisfactory nature of the tests becomes established the breeder of purebred stock finds it much easier to sell abortion-free animals. More so-called "average" dairymen are now enrolling, that is the men whose income is from milk rather than from the sale of breeding stock. To the practical dairyman who is raising his own young stock for replacements and additions the system offers him an opportunity to place his herd on a firm foundation. He must assume some loss from reactors since he will receive only beef value from them when they are slaughtered after being milked out. Many believe that this loss is more than paid for by stopping losses due to the disease itself.

The Human Health Angle

There is no blinking the fact that health authorities are discussing the relation of contagious abortion in cattle to human health. Such authorities claim that undulant fever or Malta fever or apparent mild typhoid cases in humans is caused by the same organism. To anyone vitally concerned this agitation must cause apprehension especially when we contemplate the immensity of any general eradication project such as is now being conducted against tuberculosis. The fact that proper pasteurization destroys the B. Abortus organism removes the danger of human infection from the largest portion of our milk supply. Furthermore not all human infections come from cows since handlers of raw pork products have become infected with the type of the disease that occurs in swine.

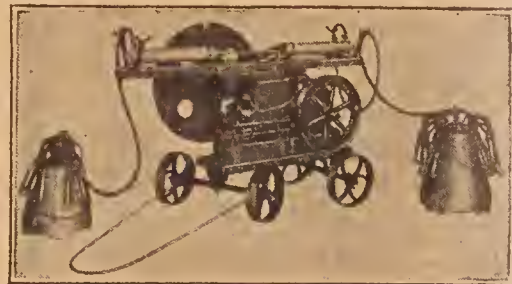
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and double your profits with this wonderful bred, grand individual, your registered Holstein bull, born October 3rd, 1928. Thirty one dams in his pedigree average over 32 pounds of butter in seven days, six hundred pounds of milk, testing over four per cent. Price \$200.00. Pedigree on request.

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Two carloads, fresh and close-up springers, 3 to 6 years old, all Federal tested. Prices from \$135 to \$165. Delivered by truck. E. CLAUDE JONES, Phone 6F5, Craryville, N. Y.

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Pure Bred and High grade T. B. tested Canadian Holstein cows and heifers, fresh and near fresh. Car lots or less. HUTCHINS & LEGGETT, MALONE, N. Y.

Two roan Milking Shorthorn bulls

11 mo. and 8 mo. of age. Well grown. Excellent breeding. Price reasonable. E. LAFLE, Penn Yan, N. Y.

FOR SALE Registered purebred Jersey bull, 18 months old. Price, \$80.00. DONALD KINYON, Route 2, Marietta, N. Y.

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Let us suggest to you as breeders the best kind of a pig to start to raise is a good one. You save time and money. We sell all pigs with a trial of two weeks, and then if dissatisfied, return pigs and we will return your money.

6-8 wks. old, \$5.50 ea.; - 8-9 wks. old, \$6.00 ea. Breeds—Chester and Yorkshire cross, and Berkshire and Chester cross, Crating free. These prices F.O.B. our depot. Will ship any number C.O.D. or send check or money order.

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Buy where quality is never sacrificed for quantity. We sell only high grade stock from large type Boars and Sows, thrifty and rugged, having size and breeding. Will ship any amount C.O.D.

Chester & Yorkshire — Berkshire & Chester 7 to 8 WEEKS OLD \$5.00 8 to 10 WEEKS OLD \$5.50

Also a few Chester barrows 8 wks. old, \$6.50 each Satisfaction guaranteed or money refunded. 10 days trial allowed. Crates supplied free. A. M. LUX, 206 Washington St., Woburn, Mass. Tel. Wob. 1415.

PIGS FOR SALE OLD RELIABLE STOCK

Heavy legged, square backed, Chester and Yorkshire crossed, Poland China and Chester crossed. Barrows, boars or sows 6-8 weeks old \$5.00—8 to 10 weeks old \$5.50 each. Fancy Berkshires, also Chester Whites, 2 months old Sows and unrelated Boars, \$6.50 each. 10 days trial or your money back. Shipped C. O. D. Crating free of charge. Yours for quality hogs.

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Chester and Yorkshire, 7 weeks old \$4.75 Berkshire and Chester, 7 weeks old \$4.75 8 to 9 weeks old, \$5.00

Also few Chester Whites 6 to 7 weeks old \$5.50, and some Jersey Red Durocs 7 weeks old \$5.50. Sold C.O.D. Keep them 10 days, if not satisfied, return them and your money will be refunded. No charge for crating.

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REGISTERED OHIO IMPROVED CHESTER PIGS. The mortgage lifters. When buying, why not buy the best. Seventeen years careful breeding. We ship C.O.D. GEORGE N. RUPRACHT, MALLORY, N. Y.

YORKSHIRES LARGE TYPE. BRED GILTS, best of breeding, 8 months old, weigh 200 lbs. Satisfaction guaranteed. Write for particulars. J. F. SNOW, WEST STEPHENTOWN, N. Y.

Changing a Dairy Farm Into a Sheep Ranch

(Continued from Page 3)

run it with hired help and with the future uncertain because of the expansion stage of the cycle, it makes first mortgage bonds look good. The yearly depreciation of good ewes today should be figured at \$3.00 a head.

The right man could buy this farm at \$15.00 an acre—go on it himself and make a fair labor income for himself and that same man might make it pay fair returns with hired help. The right man can do anything.

* * *

What Causes Young Lambs To Scour?

Could you please tell me what causes young lambs to have the scours? When they are a day or two old they are taken and everything I give them does not seem to do them any good. They die about twenty-four hours after they are first taken and some do not live that long. I have lost four and have another one sick now. I am feeding the ewes the same as all winter, clover hay and oats.—R.S.S., New York.

SCOURS in young lambs must, of necessity, arise from an irritating condition of the stomach or intestines. This could only be caused by the ewe's milk disagreeing with the young lamb—in most cases this would be due to the ewe getting too rich feed or too much of it. You are feeding a great milk-producing ration if your clover hay is good. Leeney, an authority on sheep states that "White Skit" is proved by post mortem examination to be invariably associated with masses of curdled milk in the rumen and a dose of oil in the first instance may succeed in breaking up and carrying away such offending material from the alimentary tract so that digestion, all but impossible before may be resumed. Castor oil is the old standby in the sheepfold for such disorders—sulphate of magnesia is also used.

I would take away all grain from the ewes—if the sheep are in good flesh they will need no grain until the lambs are a week or so old. I do not mean take grain away from ewes before they lamb—if they are in need of it, but as soon as they lamb I would play safe by giving the newly lambed ewes nothing but clover hay until the lamb is surely taking care of the milk. It all depends on the condition of the ewes at this time. There is apt to be more trouble at lambing time from ewes in high condition than with those which are not in such good rig but still in thrifty, vigorous condition. Ewes with an excess of milk should be milked out each day—for the good of both the ewe and the lambs. The happy medium is hard to attain—the better fed ewes have the milk to make the lambs grow faster after they get well started while the ewe in not quite so good condition shows more strain after a little and does not have the milk so usually the man with the heavier milking ewes is the better sheepman.

In these cases, if you have more of them, I would try the castor oil and remove the ewe's grain until the danger is past.—MARK J. SMITH.

What It Costs to Raise a Colt

THE Dominion Experimental Farms of Canada have recently given some figures on the cost of raising horses. Since 1921 thirteen Percheron colts have been raised to the age of two and a half years and complete cost records have been kept on each of them. The average weight at two and a half years was 1517 pounds, and the average feed consumed was 14,921 pounds of hay, 3,664 pounds of oats and 990 pounds of bran. The average cost of raising these colts to the age of 2½ years was \$116.37. It is assumed by the department that the average cost is 40 per cent below the price of similar draft horses on the open market.

If animals are properly cared for a large share of disease troubles will be eliminated. Improper feeding is probably the biggest factor in lowering the resistance of animals.

Government reports show:

Three-Fourths of Wells on Farms are contaminated

diseased animals and birds having access to drinking tanks also pollute the water!

The water you feed your cattle and poultry is dangerous! It is contaminated by millions of germs due to surface drainage, etc.

B-K, a concentrated sodium hypochlorite, fed in the drinking water kills these germs.

The B-K Way of Sanitation is effective in preventing the spread of abortion, calf scours, etc., from infected animals, roup and white diarrhea, etc., in poultry. The barns, platforms, mangers, poultry houses, incubators, brooders, etc., should all be disinfected the B-K Way.

You dilute B-K to use. That is why it is so economical. It is clear as water—won't soil—contains no acid or poison.

The B-K Way of Sanitation, the result of nearly 20 years' research and practical use, is an easy, inexpensive way to prevent disease. Complete direction

charts are included in every B-K package. Your money back if not satisfied.

Write for these free bulletins—all correspondence confidential:

No. 15, Cattle—Selection, Breeding, Sanitation.

No. 213, Poultry Health and Profits.

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B-K is sold by stores carrying Dairy and Poultry Supplies, Feeds, Drugs and Hardware.

General Laboratories
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12 Cows average \$343 Extra Profit

Figuring ALL Costs, that's the AVERAGE extra profit earned by a good silo, properly handled, in Ohio, Penna., Minn. and other Exp. Sta. tests. 35c saved on 100 lb. milk; 150 Gals. more milk per cow; 70 lb. more butter per year; butter costs reduced 10c lb.; corn feed value increased \$4 ton by siloing are all direct results of the silo.

Rib Stone Concrete Stave Silos soon pay their cost. Many exclusive features. First cost is only cost. Absolutely air and water tight; fire and acid proof. The steel reinforced Rib gives added strength, a continuous door, permanent ladder



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"The Best Silos Ever Built"
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all round. RIB STONE, "the silo beautiful" erected complete by us and guaranteed unconditionally.

Globe Wood Silos, with 13 years tested results are now a Rib-Stone product. They permit home construction, hence lower initial financing, and earn profits for their user. Exclusive roof feature gives almost full silo after settling. Adjustable door front take-up device guarantees air-tight doors and frame.

Send at once for our booklet "Silos and Silage" by F. R. Fricks, B.S., also printed matter on these remarkable silos. RIB STONE CONCRETE CORPORATION, Box 402, LEROY, N. Y.

Post Your Farm And Keep Trespassers Off

We have had some new signs made up of extra heavy material because severe storms will tear and otherwise make useless a lighter constructed material. We unreservedly advise farmers to post their land and the notices we have prepared comply in all respects with the laws of New York, New Jersey and Pennsylvania. The price to subscribers is 95 cents a dozen, the same rate applying to larger quantities. Remittance must accompany order.

American Agriculturist
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Sickness and Accident NEW Protection — for \$10 a year

Guaranteed

American Agriculturist Subscribers have the special privilege of examining this new policy for 10 days. Policy pays \$25 weekly and \$1,000 to \$10,000 death benefit. Special features covering hospital bills and any accident. Send for "Facts About New Policy."

E. C. Weatherby
General Agent
Ithaca, N. Y.

Opportunities for Agents in Local Communities

Reviewing the Latest Eastern Markets

Milk Prices

The following are the May prices for milk in the basic zone of 201-210 miles from New York City.

Dairymen's League prices are based on milk testing 3.5%. Sheffield on the basis of 3%.

Class	Dairymen's League	Sheffield Producers
1 Fluid Milk....	3.37	3.17
2 Fluid Cream		2.05
2A Fluid Cream	2.26	
2B Cond. Milk..		
Soft Cheese..	2.51	
3 Evap. Cond. Milk Powder		2.05
Hard Cheese	2.25	

4 Butter and American cheese. Based on New York City Market quotations on butter and American cheese.

The Class 1 League price for May 1928 was \$2.90 for 3.5% milk and Sheffield's \$2.80 for 3%.

The above prices in each class are not the final prices the farmer receives. The final price received from the dealer is the result of the weighted average.

Butter Gains and Holds Steady

CREAMERY	Apr. 24	Apr. 17	Apr. 25, 1928
SALTED			
Higher than extra....	46 -46 1/4	46 -46 1/2	47 -47 1/2
Extra (92sc).....	45 1/2-45 3/4	45 1/2-	46 1/2
84-91 score.....	43 3/4-45 1/4	44 -45 1/4	44 1/4-46 1/4
Lower Grades.....	43 -43 1/2	42 1/2-43 1/2	43 -44

The butter market shows a slight improvement over a week ago as far as price is concerned and from all appearances it is holding the advance firmly. During the week ending April 20, the week's supply of butter was slightly below that of the preceeding week. The weather, for one thing, was against production. Many northern dairy sec-

tions reported snow and low temperatures. The only district that has shown a slight increase has been the South and Southwest. Since then our supplies have not been at all burdensome. In fact, more goods are coming out of storage than are going in. This indicates that consumptive demand is holding up very well. Just how long the situation is going to continue is problematical. The weather is warming up all over the country and the prices from the principal dairy districts indicate a slow but steady increase in the make. There is little likelihood of any material increase before 10 days or two weeks. With average conditions prevailing in the market there seems to be little likelihood of any change in the market.

On April 18, the holdings in the four largest cities totaled 2,344,461 pounds of butter, whereas on the same day a year ago the same four cities held 2,006,232 lbs.

Fresh State Cheese Easier

STATE FLATS	Apr. 24	Apr. 17	Apr. 25, 1928
Fresh Fancy.....	27 1/2-29 1/2	23 -25	22 -22 1/2
Fresh Average.....			
Held Fancy.....	22 -22 1/2	27 1/2-29 1/2	29 -30
Held Average.....			

We hoped last week that the slightly better demand for fresh cheese would wind up in a slightly better price this week, but such did not take place. As a matter of fact, the reverse took place and a somewhat easier tone resulted in a shading of prices. Last week, regular fancy fresh New York State whole milk flats sold at 23c. This week cautious buyers are able to get the same qualities at a half or full cent reduction. It is very fortunate that fresh cheese is being offered in very limited quantities, for the market could not handle it if more were to come forward.

The demand for fine quality early made cheese is fairly satisfactory, sufficient to maintain prices without any difficulty. However, there is an irregular feeling on cured Daisies which is just enough to keep the market slightly uneasy.

Holiday Demand Helps Egg Market

NEARBY WHITE	Apr. 24	Apr. 17	Apr. 25, 1928
Hen'y Sel. Extras....	34 -37	34-36	34 -35
Hen'y Av'ge Extras..	32 -33	33-	33 -
Extra Firsts.....	31 -31 1/2	30-32	31 -32
Firsts.....	30 -	29-29 1/2	30 -30 1/2
Undergrades.....	-30	26-29	26 -31
Pullets.....			
Pewees.....			
NEARBY BROWNS			
Hennery.....	34 -35	34-36	34 -35
Gathered.....	28 1/2-33 1/2	29-33 1/2	29 1/2-33 1/2

The egg market for fancy nearby marks has shown an active upward swing during the last week and prices have advanced on some grades as much as 3 to 4 cents a dozen. An unprecedented demand for fancy, heavy eggs for the Jewish Passover holidays, resulted in a scarcity of nearbys and higher prices ruled on all offerings that showed quality. In fact the demand has been so great, that the stocks have been kept cleared at all times and it

has been with difficulty that the trade could secure its usual requirements.

The advance in egg prices has applied almost exclusively to the choicest offerings from New Jersey, New York and other nearby points. This holiday trade has been unusually heavy this year, and they have taken only those lots that were carefully graded and which ran uniformly to the heavy weights. At the end of the week of April 20, and the early part of the following, prices paid for fancy eggs ruled around 37 and 39 cents a dozen with the two cent premium added, bringing the market up to better than 40 cents a dozen on some pet marks. At this writing (Apr. 25) some pressure is developing.

Egg producers who have been putting up the quality pack have cashed in on the present egg deal and have had the edge on producers from other sections. This week saw the nearby product going above the best from the Pacific Coast. This has been due however, to the special holiday demand.

What the situation will be after this week, is rather hard to determine. There is a note of caution on the part of receivers to make any long range predictions. They are conservative and believe that there is likely to be a recession after this week, with prices going back to their former position. While local producers have been able to receive the bulk of the premium prices of the past few days, there is nothing to justify this high price ruling for the rest of the season. Another factor that has helped the egg situation has been the return of cooler weather.

Holiday Poultry Market Good

	Apr. 23	Apr. 17	Apr. 25, 1928
FOWLS			
Colored.....	35-36	30-32	28-30
Leghorn.....	25-30	28-30	28-30
CHICKENS			
Colored.....			
Leghorn.....			
BROILERS			
Colored.....	30-53	40-55	30-55
Leghorn.....	25-42	35-45	30-45
CAPONS.....	60-65	45-50	30-45
TURKEYS.....	50-60	40-45	18-24
DUCKS, Nearby.....	26-32	26-30	
GESE.....		17-18	

The live poultry market as it worked during the past few days, gives a perfect setting for the "I told you so" boys. The holiday trade was lively. Good stock sold well, and prices held very satisfactorily—up to a certain time. Late Tuesday trade began to slacken off and on Wednesday the 24th things were pretty dull around the market and there was considerable express poultry, especially broilers left over. We advised our readers to get their stock in on the 22nd and not later than the first thing the morning of the 23rd. Late arrivals on the 23rd were lucky to find buyers, and on the 24th it was evident that prices were top heavy.

Storms Help Potato Prices

STATE	Apr. 24	Apr. 17	Apr. 25, 1928
150 lb. sack.....		1.60-1.75	
Bulk, 180 lbs.....			
MAINE			
150 lb. sack.....	2.35-2.60	1.75-2.00	3.10-3.75
Bulk, 180 lbs.....	2.85-3.15	2.00-2.25	4.00-4.60
PENNA.			
150 lb. sack.....			
No. 1.....			
Bulk, 180 lbs.....			
LONG ISLAND			
150 lb. sack.....			
No. 1.....	2.75-3.00	2.00-2.25	4.50-4.75
Bulk, 180 lbs.....	3.25-3.65	2.25-2.50	5.35-5.65

The stormy weather that prevailed during the middle of April, bringing rain, snow, hail and sleet, also brought a ray of sunshine to holders of old potatoes whose stock was easily available to side tracks to be loaded on the cars and shipped into New York. Prices of old potatoes took a real jump. Long Islands advanced to \$3 a 150 pound sack. Maines shared in the glory, and so did fancy States. The improvement in the market was indeed a God-send to potato growers who had the courage to hold on. It was certainly unlooked for and in spite of all the discomforts that the snow and hail brought we could not help but feel glad for those men who were benefited. At this writing, April 25, the market continues to hold fairly steady. Perhaps by the time this reports reaches the reader some-

one will have smeared some grease on the tracks, but while it lasted, the improvement in the potato market was glorious. Once again those who followed the markets religiously over the radio were repaid.

Meats and Live Stock

Live calves did a right-about face during the past week going upward to the tune of about \$2 a hundred. At this writing the market is firm and active

Market Reports Daily by Radio

Up-to-the minute market information and prices are broadcast daily for your benefit by American Agriculturist co-operating with the New York State and Federal Departments of Agriculture, through station WEAf. The reports are broadcast at 12:30 standard time.

with prices well sustained. Common to good stock bringing from \$15.75 to \$18 and prime \$18 to \$19.

Steers are meeting an active demand in a steady market, with good stock selling from \$13.75 to \$14.60.

Some bulls are selling as high as \$10 a hundred with mediums from \$9.25 to \$9.75.

A few good dairy cows are bringing \$8.75 but most of the arrivals are common to medium and bringing from \$7 to \$8.50.

Yearling lambs are a bit irregular. The demand has slackened and about the best price we hear of is \$17.25 with culls selling down to \$10.

Hogs are steady; 85 to 130 lbs. \$11 to \$11.50; 130 to 160 lbs. \$11.75 to \$12; 165 to 220 lbs. \$12.15 to \$12.35.

Rabbits are turning in the buyers' favor, selling at 25 to 30 cents.

Hay Market Firm

With moderate receipts, medium grade hay moving well and timothy No. 1 extremely scarce, the hay market takes on a very satisfactory tone. The Catskill boat carried down to the Metropolitan district limited supplies which did not help to relieve the shortage that existed in New York. As a result prices are holding very satisfactorily. Timothy, No. 1 is bringing from \$26 to \$27 with No. 2 at \$24 to \$25 and No. 3 at \$20 to \$22. Sample hay is \$15 to \$17. Timothy containing mixtures of clover or grass are generally quoted at \$24 to \$26 for No. 1; \$21 to \$23 for No. 2 and \$18 to \$19 for No. 3. Oat straw bringing \$16 with rye at \$22 to \$23.

Pea Beans Firmer

There is a stronger market on pea beans due to advancing prices at primary points. Prices vary from \$10 to \$10.75 depending on quality. This is an advance of 75c since a week ago. Red Kidneys still hold steady at \$7.50 to \$8.25 with Jumbo Marrows from \$12.75 to \$13.50.

Feeds and Grains

FUTURES	Apr. 24	Apr. 17	Apr. 25, 1928
(At Chicago)			
Wheat, (May).....	1.14 3/4	1.19	1.59 3/4
Corn (Mar.).....	.89 3/4	.93 1/4	1.07 3/4
Oats (Mar.).....	.47 1/4	.49 1/4	.64 1/4
CASH GRAINS			
(At New York)			
Wheat, No. 2 Red..	1.41 3/4	1.47 1/4	2.24 3/4
Corn, No. 2 Yel....	1.06 3/4	1.12 3/4	1.30 1/2
Oats, No. 2.....	.60 1/2	.61 1/2	.79 3/4
FEEDS			
(At Buffalo)			
Grade Oats.....	33.50	34.00	41.00
Spring Bran.....	27.50	27.50	38.00
Hard Bran.....	30.00	30.00	40.50
Standard Mids.....	27.00	26.50	37.50
Soft W. Mids.....	35.00	35.00	45.00
Flour Mids.....	33.00	33.00	40.50
Red Dog.....	37.00	37.00	41.50
Wh. Hominy.....	37.00	37.00	42.50
Yel. Hominy.....	37.00	37.00	45.00
Corn Meal.....	38.50	39.00	44.75
Gluten Feed.....	42.50	42.50	57.00
Gluten Meal.....	52.50	52.50	56.00
36% C. S. Meal....	41.50	41.50	62.50
41% C. S. Meal....	44.50	46.00	64.50
43% C. S. Meal....	46.50	49.00	
34% O. P. Linseed Meal.....	52.00	51.00	54.00

On May 8 at 1:30 P. M. a hearing will be held in Commissioner Pyrk's office, Albany, N. Y., on the proposed changes in the New York Retail Egg Grading Law.

SHIP YOUR EGGS

WHITE AND BROWN

To R. BRENNER & SONS

Bonded Commission Merchants

358 Greenwich St., New York City

Live Broilers and Poultry Wanted

HIGHEST PRICES CHECKS SENT DAILY
Oldest Live Poultry house in New York City. Established 1883, offers you an unlimited outlet for your live poultry. Write for shipping tags and free holiday calendar folder K 27.
Krakaur Poultry Co. Inc. Bonded Commission Merchant
West Washington Market, N. Y. City

Ship BROILERS MARKET GOOD

Live and Dressed Poultry, Calves, Lambs and Eggs

Write or wire for quotations, tags, market conditions, etc. Prompt returns—Top prices—Take advantage of 25 years experience. Try us.

JOSEPH C. BERMAN, Inc.,
West Washington Market, New York City

EGG PRODUCERS

Get Best Net Results

by shipping their eggs to a house making a specialty of Fancy Quality White and Brown Eggs. Our 25 Years experience in the business will be of some benefit to you if you ship high quality.
ESCHENBRENNER & CO., INC.
Cor. Reade & Hudson Sts., New York

City Conveniences in the Country



The Abner Carbide Gas Generator answers the question of proper light for your farm home.

Carbide light, the perfect light, is now perfectly produced.

Thousands of farmers have found this method of lighting their home and out-buildings the most modern, efficient, convenient, safe and economical.

The Abner Pit Generator installed outside in the ground requires attention only a few times a year. It is simple and fully guaranteed. It is used for Cooking and Ironing also.

Our "Two-in-One" folder tells all—ITS FREE.

Get it today with our latest catalogue.

ABNER MFG. CO. Wapakoneta, Ohio



Extra MILES IN GUM-DIPPED TIRES

Extra miles because of the extra strength, endurance and outstanding superiority of Firestone Tire construction. First, the scientific twisting of cotton cords for greatest strength and elasticity... Then, Gum-Dipping—the extra Firestone patented process which saturates and insulates every fiber and strand of every cord with pure rubber. Only in Firestone Tires do you receive all the advantages of these extra features of in-built mileage, plus the security and safety of riding on the deep, rugged Firestone non-skid Tread.

Firestone Tires hold all world records for speed, safety, endurance and mileage. See the Firestone Dealer. He will save you money and serve you better.

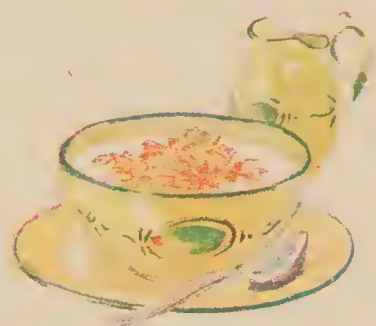
MOST MILES PER DOLLAR

Firestone

Firestone Reaches Around The World To Serve You Better...

IT'S CALLED *"The Wake-up Food"*

NOT JUST BECAUSE YOU EAT IT WHEN YOU *wake up*
 BUT BECAUSE YOU *wake up* WHEN YOU EAT IT



Every bowl of crisp Post Toasties you enjoy is quick new energy. Isn't that cheery breakfast news for the millions who like to eat Post Toasties every day for its delicious, mellow flavor?

Here's a cereal as rich in energy as it is in flavor—as easy to digest as it is to serve. And because it is so easy to digest, its stored-up energy is quickly released to the body. That's why it's called the Wake-up Food.

Pure white hearts of the choicest corn, deliciously flavored, and toasted to delicate crispness—what an ideal energy-breakfast to start off those growing youngsters on their active day of work and play! And what an ideal addition to the morning meal for the husband who *wants* something tempting, and who *needs* something easy to digest, and rich in energy.

Don't forget—there's just one way to get the Wake-up Food. Ask your grocer for Post Toasties—in the red and yellow wax-wrapped package.

POST TOASTIES

© 1929, P. Co., Inc.

The wake-up food



Farm News from New York

The Fight Over Federal Farm Relief is On--County Notes

CONSIDERABLE excitement has prevailed at Washington during the past few days over the form that the farm relief legislation is taking. Two separate bills are now being considered in Congress, one in the Senate and one in the House of Representatives. Most of the features of each of these bills are similar, but the bill before the Senate contains the debenture plan proposed by the National Grange while the House bill does not contain this feature.

The essentials of the debenture plan, with an example of how it might work, is explained on this page.

President Hoover is very much opposed to the debenture idea and has intimated that he will veto it if Congress passes it. The President gives the following reasons why he is opposed:

"1.—The issue of debentures to export merchants and their redemption in payment of import duties amounts to a direct subsidy from the United States Treasury. If the plan proposed be generally applied, it would cost in excess of \$200,000,000 a year.

Lists Evils He Sees

"2.—The first result of the plan would be a gigantic gift from the Government and the public to the dealer and manufacturers and speculators in these commodities.

"3.—If the increased price did reflect to the farmer, the plan would stimulate overproduction and thereby increase world supply, which would in turn depreciate world prices.

"4.—The stimulation of production of certain commodities would disturb the whole basis of diversification in American agriculture.

"5.—Although it is proposed the plan should only be installed at the discretion of the farm board, yet the tendency of all boards is to use the whole of their authority.

Manipulation Feared

"6.—It offers opportunity for manipulation in the export market, none of which would be of advantage to the farmer.

"7.—The provision of such an export subsidy would necessitate a revision of the import tariffs. For instance, an export subsidy of two cents a pound on raw cotton would mean the foreign manufacturers would be receiving cotton at two cents a pound less than the American manufacturer.

"8.—Export bounties are recognized by many nations as one form of dumping. I am advised that a similar action by another nation would be construed as a violation of our own laws.

"9.—A further serious question arises again where the foreign producer of animals would be enabled to purchase feed for less than the American farmer producing the same animals.

Would Increase Taxes

"10.—The plan would require a substantial increase in taxes, as no such expenditure or depletion of revenues as this plan implies could be paid from marginal income of the Government, more particularly in view of the very large increased expenditures imposed by the naval programme, flood control and other branches of farm relief.

"Altogether, from the above reasons, it is my belief that the theoretical benefits would not be reflected to the American farmers; that it would create profiteering; that it contains elements which would bring American agriculture to disaster.

"The introduction of such a plan would also inevitably confuse and minimize the much more far-reaching plan of farm relief, upon the fundamental principles of which there has been general agreement."

The Senate Committee on Agriculture, in spite of the President's opposition, voted in favor of the farm bill with the debenture plan included, so it is now out on the Senate floor for consideration. It is not expected

that the debenture feature will pass the House.

Those who oppose the debenture scheme state that it is even worse than the equalization fee proposed in the old McNary-Haugen Bill. These persons agree with the President that the debenture plan would be an out-and-out subsidy on the part of the government, and moreover a subsidy which would work for the benefit of dealers and profiteers rather than for farmers. They point out that even if farmers should reap some benefit, such a plan would increase over-production without there being any check as was provided in the equalization fee plan against over-production.

However, the debenture plan would

will do the whole New York milk shed good to have a large party go to the National Dairy Show and see what dairymen are doing and thinking about elsewhere.

Write without obligation for further information.

New York County Notes

Cattaraugus County—The Masters' Lecturers' and Secretaries' Conference for Cattaraugus County Grangers will be held with Mansfield Grange April 26 from 10 A. M. until 4 P. M. Mansfield Grange will serve dinner. Elizabeth Arthur, Lecturer of the New York State Grange will be assisted by E. N. Williams, County Deputy, Anthony Covert, Pomona Master,

What the Debenture Plan Is

THE debenture plan for giving relief to agriculture was advocated and supported first by the National Grange, whose leaders claim that this is the only way that tariff can be made really effective for farmers. It has strong support in the Senate but is opposed by the House of Representatives and strongly objected to by President Hoover.

The debenture plan provides for the issuing of debenture certificates to exporters of agricultural products in amounts of one-half of the tariff on such products, such debentures to be redeemed by presentation for payment of import duties.

For example, suppose a farmer has 1,000 bushels of wheat for sale and he sells it to a dealer who happens to be an exporter. Let us say that the largest price that the dealer can get for this grain by exporting it is \$1.25 per bushel. Now let us suppose that the debenture plan is working. The present tariff on wheat is 42 cents a bushel. Under the proposal, the dealer would receive one-half of the 42 cents, or 21 cents, which would be given him not in the form of money but in a so-called debenture certificate. The dealer could then sell these certificates to some importer of any product on which tariff is collected, and the debenture certificates could be used by this importer to pay his tariff charges.

So, if the exporter of wheat can sell his debenture certificates for the full 21 cents, he will receive for his wheat the original \$1.25 paid to him by the foreign buyer plus the 21 cents, the value of his debenture certificate. This, then, would really make the price of his wheat \$1.46 a bushel, and would put him into much better position to offer the original grower farmer a better price.

Eventually, of course, these debenture certificates would be redeemed by the United States Treasury and would be a total loss to the government; that is where the subsidy comes in.

be very simple to work out in practice. The equalization plan was objected to on one ground because it would be impractical to work it out.

We explained last week in these columns what the farm relief bill provides for in addition to the debenture plan. Briefly, there is provision for a Federal Farm Board, composed of five members and a chairman. The bill authorizes an appropriation of \$500,000,000 by Congress to be used as a revolving fund to be loaned for improvement in the marketing of farm products. Close cooperation is provided between the Board and cooperatives. Each large cooperative or group of cooperatives may have an advisory committee work with the Board.

The Board is also supposed to set up a large educational campaign to encourage better marketing methods, including cooperation.

Watch these columns each week for a summary of farm news in Washington. This special session of Congress may well be called a Farm Congress for its chief work will be to try to find some help for agriculture.

Let's Go!

WE have a letter from one of the largest feed manufacturers in the world inviting members of the party who go on the big AMERICAN AGRICULTURIST excursion train to the National Dairy Show in St. Louis in October to visit his plant to see how feed is manufactured.

Already our program is beginning to take shape as more and more letters come in from dairymen telling us that they are planning to go and expect to take the whole family for a vacation. AMERICAN AGRICULTURIST is planning this trip for two reasons. First, we believe farmers have too few good times and vacations, and we want to give you some real fun. Secondly, we believe it

and Mrs. M. M. Saalfeld, Pomona Lecturer, during the session. The past two weeks have been very stormy and unsettled. A few have incubators in operation. Eggs are selling for 25c a dozen. Very little spring plowing has been done due to unfavorable weather. Miss Adele Jor-enby, Randolph, won the county spelling contest and received the \$25 gold piece presented by the Buffalo Evening News. Aloin Carlson, Franklinville, was second and received a gold medal from the same paper. Mary Cleveland, daughter of Dr. and Mrs. E. C. Cleveland won 4th place. William Marvin Jr., local junior student won the oratorical contest recently and meets the school champion orators from eight western New York counties in Buffalo on April 26. The victors there compete in national finals in Washington later.—MRS. M. M. S.

Allegany County—Spring came early to Allegany this year. Meadows and pastures are quite green. Farmers began plowing about April 1. No crops have yet been sown. This section was visited by a destructive electric storm April 6. Rain fell in torrents. Bridges were washed out, cellars flooded and much damage was done by lightning. The canning factory at Wayland is contracting its usual pea acreage. Hay is \$12 a ton. Potatoes are 25c a bushel. The worst farm tragedy which has occurred in this section was on the night of April 7 when a barn floor on the E. L. Root farm in Klipnooky, in which was stabled 12 head of cattle broke loose. Five head were hung in their stanchions, and the remainder fell into the basement together with boards and timber and were injured beyond recovery. Good cows are valued at \$150 and the owners have the sympathy of all.—MRS. O. H.

Genesee County—The Genesee County 4H Dairy Club held a meeting at the Farm Bureau office on April 12. John Willman, livestock specialist at the State College of Agriculture, spoke on the importance of quick development and growth of the dairy cow. There will be a tour of Genesee County by the club on May 25 to inspect a few herds of different breeds. Officers elected were President, Edward Plowe, South Byron, Vice Pres., Wm. Brew, Jr., Bergen, Secretary, Rosa Simmons, Elba, Treasurer, Lavern God-

frey, Bergen. Nearly 600 tons of seed potatoes in this county will be treated by the Farm Bureau this year.—MRS. R.E.G.

Steuben County—After a couple of weeks of warm weather with much rain and heavy thunder storms, we are again experiencing hard winter weather with a heavy fall of snow. Roads are blocked more than any time this winter. Farming is at a standstill. No seeding has been done and will not be done for some time

Agricultural Programs From WGY

12:00 Noon—Eastern Standard Time, daily except Saturday and Sunday—weather report, farm produce report, farm talks.

6:10 P. M.—Eastern Standard Time, daily except Saturday and Sunday—farm produce report, farm talk.

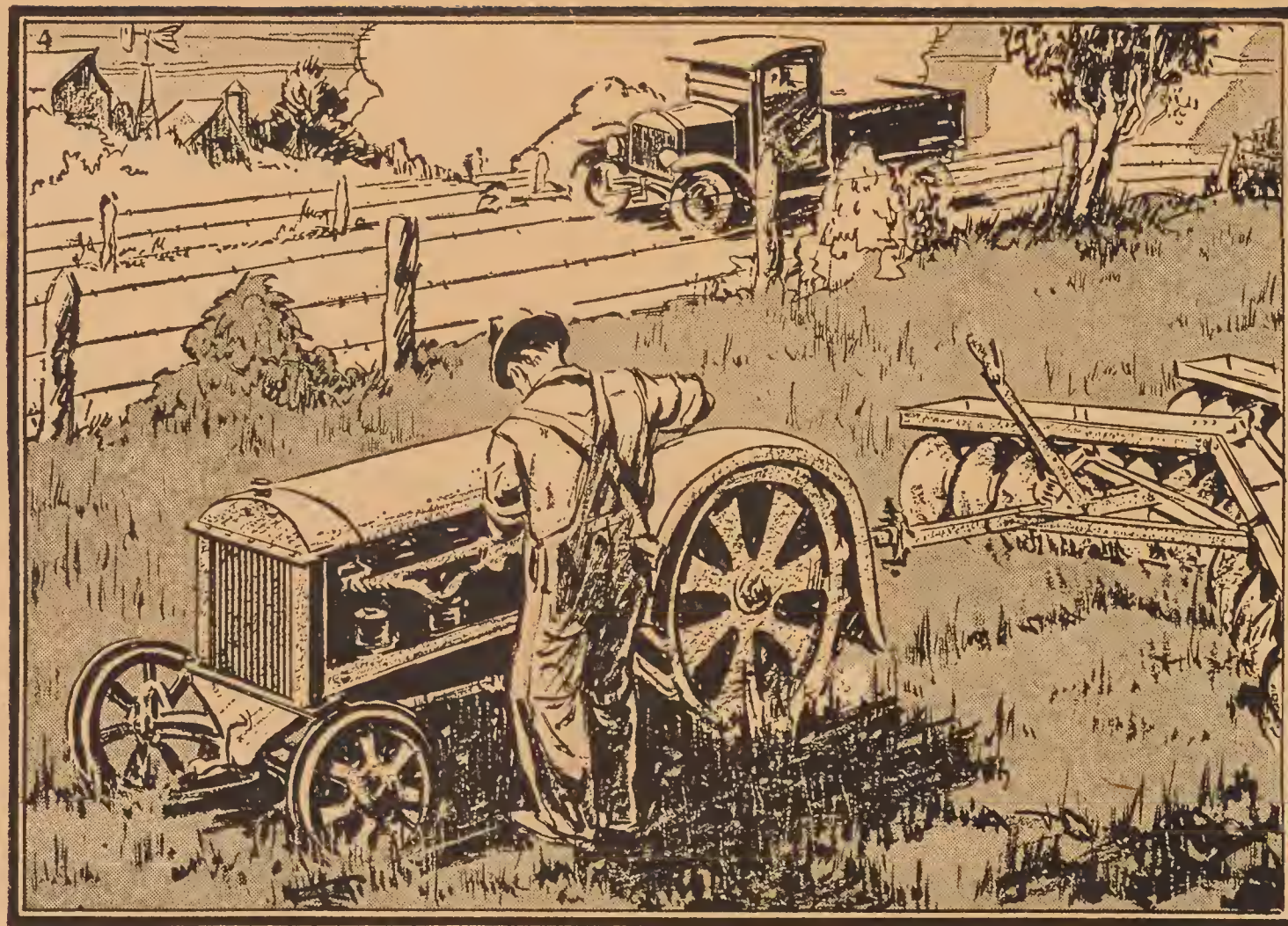
7:00 P. M.—Eastern Standard Time, (8:00 P. M. Daylight Saving Time). Thursday—Half-hour agricultural program.

as the ground is too wet. The season has been very poor for making maple sugar and syrup. Only one half the normal amount has been made. Hens are laying well and eggs are worth from 22c to 25c.—C. H. E.

Tioga County—The snow which commenced arriving April 15, and continued all night and next day has put the hill roads in the worst condition that they have been this year, and it was thought that they were terrible before. Much of the snow is still on the ground. The snow-storm was preceded by a heavy rain which thoroughly soaked all the farm lands. The warm spell which arrived around April 4 started the leaves and the grass and it is feared that this cold spell may kill the fruit trees and buds which were so far advanced. Meteorologist John R. Weeks, Binghamton, states that the precipitation for April has been broken. The total rainfall on April 17 was 4.78 inches and Mr. Weeks gives no hope of better weather soon. Some oats have been sown on the valley farms but snow will not damage oats to any extent. Harry W. Petzold, of the Braedon Farm, Well-tonville, has just completed a test of a 6-year old cow in his herd of 70 cattle, that made a record of 31.25 pounds of butter in seven days, giving 628 pounds of milk. This was the second time this cow has been under test and the test is being continued. Protests have been made against the ruthless felling of shade trees in Recreation Park, Owego. How much of a park would it be with those nice large trees missing—giants that have taken so many years to grow. The second arrest was made April 13 in the case of the Willseyville Creamery swindle. Leon Depew is being held pending an arraignment and investigation for \$10,000 bail. Milton Griffen of Candor, arrested on the same charge and scheme was bailed out and it was by watching Griffen that Depew was caught.—MRS. C.A.B.

Franklin County—Farmers in Franklin County have just commenced to repair their fences and some plowing is being done on high land although it is wet yet. We had a big snow storm April 16 when roads were pretty well drifted and many automobiles stalled on both county and state roads. Feeds and milk have dropped some in price. A good many farmers are short of hay which is being bought from \$15 to \$18 a ton. The potato market keeps about the same. There is a tendency to decrease the acreage this year. The dairymen have recently completed the milk survey for increased fall production which is encouraging. Stock will not be turned to pasture until about May 15.—H.T.J.

Delaware County—As usual there are many changes and sales of farms this spring. Harvey Hoag of Hamden has bought the Roderick Fitch farm at Hawley's Station. The house on this farm attracts considerable attention as it is brick and octagonal in shape. There is a winding staircase from the basement to the top story. Mr. Hoag is one of the leading cauliflower growers in the county and two years ago won a contest sponsored by the leading seedmen. April 16 and 17 brought the worst snow storm in many years for this time of the year. Roads were blocked worse than during the winter.—MRS. E.M.N.



With the A. A.
**FARM
MECHANIC**



Good Parking Place for Soldering Iron

HERE is a very practical idea for other "single iron" home tinsmiths like myself. My heater is usually the stove or a blowtorch, but that iron never has had a home, and it needed



one, for an iron can be an irritating member laying around until it cools off.

I got an old Ford horn; took the upper part of it off, leaving the heavy diaphragm in. I tacked it down thru the screw holes to one out of the way corner of my bench. At last it had a parking place, and a good one, too.—F. B.

Breaking in the New Car

"THE first 500 miles or so is the most important period in the life of a new automobile, and the manner in which the car is driven at that stage determines to a large extent the kind of future service it will give.

"The parts of a new car are carefully and accurately made, but just as a pair of new shoes must be 'broken in' before fitting comfortably, so these new parts must also be adjusted in order to function properly. High points on the bearing must be smoothed out, tool and grinding marks gradually worn away, a high polish acquired."

First, follow explicitly the manufacturer's directions for the 'breaking in' period, which usually is 500 miles. At this point a change of oil is advisable. After this period, and when the engine is warm occasionally accelerate up to 40 or 45 miles an hour. Immediately the speedometer registers 40 or 45 slow down to around 35 miles an hour. This enables the oil to circulate freely among the moving parts.

The short bursts of speed permit the parts to become accommodated to full load operation without danger of burning or sticking, which might occur with continued high speed running.

At the end of the first 1,000 miles the car should be driven back to the dealer for a complete check. See that the valve adjustment is correct, the compression even in all cylinders, the distributor contact points checked. The operation of the steering gear and alignment of the front wheels should be checked, and be sure the nuts which

(Continued on Page 22)

Parabase ... will keep your motor cool

IF your tractor heats up and boils over under heavy loads, perhaps you're using the wrong kind of motor oil.

Lubrication experts now agree that the best motor oils are made from paraffin crudes. Such oils lubricate perfectly . . . reduce friction and keep the motor cool.

Socony Parabase Motor Oils are made from paraffin crudes—particularly suitable for motor lubrication. We honestly believe that no finer lubricant can be made.

So the next time you are near a Socony Station, stop in. Get Socony Special Gasoline and Socony Parabase Motor Oil. Put them in your tractor.

You'll get smoother running, greater power, and longer life for your motor.

SOCONY

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GASOLINE · SPECIAL GASOLINE · PARABASE MOTOR OILS · 990-A MOTOR OIL FOR FORDS

STANDARD OIL COMPANY OF NEW YORK

Buy the Advertised Article!

You want to get full value for every dollar spent. That is natural—all of us do.

You will find it pays to buy standard, trademarked goods. Let The AMERICAN AGRICULTURIST advertising columns serve as your shopping guide. They contain the latest information regarding farm machinery, household helps, work, clothing and other merchandise of interest to farmers.

The American Agriculturist Advertisers Are Reliable

When writing advertisers be sure to say that you saw it in
AMERICAN AGRICULTURIST

SAVE HALF Your Paint Bills USE INGERSOLL PAINT

PROVED BEST by 87 years' use.

ONLY Paint endorsed by Grange for 50 Years.
Made in all colors for all purposes at
WHOLESALE FACTORY PRICES

INGERSOLL PAINT BOOK tells all about Paint
and Painting for Durability. FREE TO YOU with
Sample Cards and our PREPAID FREIGHT OFFER.
WRITE US. DO IT NOW and SAVE MONEY.

PATRONS' PAINT WORKS, Inc.

Oldest Ready-Mixed Paint Factory in America. Est. 1842
252 Plymouth Street, Brooklyn, N. Y.

Each Month
A Selected Value

Beginning in *MAY*
more
**"SOLAR
STRAWS"**

will be worn than any
other straw hat in America

THIS month, when men are buying their new straw hats, we invite you to try on a "Solar Straw." Over 500,000 hats of this make will be sold in the 1213 J. C. Penney stores. That represents more men than wear any other one straw hat.

Why, do you suppose, men all over the United States have chosen "Solar Straws?" We will gladly show you the reasons in the J. C. Penney store near you. "Solar Straws" are made with the same details of quality that you usually find only in expensive hats. Yet they sell for \$1.98 and \$2.98.

They are shower-proof. You don't get a properly weather-proofed straw for \$1.98 in many stores, do you? . . . And "Solar Straws" are comfortable. They are easy on your head because they conform to it, right from the first wearing.

All the new style features are shown in "Solar Straws" at your local J. C. Penney store . . . Crowns are the least bit higher, brims a little narrower, bands a trifle more conservative in coloring than last year. These are genuinely fine hats, sold to you at \$1.98 and \$2.98 by the modern store-keeping methods and Golden Rule policies of J. C. Penney Company.

"Solar Straws" are not the cheap hats you sometimes see advertised at \$1.98. They are selected from the leading makers in America. Instead of buying for one store and paying a high price for them, we buy for 1213 stores and get them at decidedly low prices. Our enormous purchases make a great difference in cost. And the efficiently run J. C. Penney store in your community does not add an unnecessary cent to the manufacturer's price. When you buy with 500,000 other men, you get a better hat and pay less.

Let us be your batter. If we have no store in your town, write us and we will tell you where the nearest

one is located. At the same time we will send you a free copy of our latest "Store News" in rotogravure. It tells you of many other remarkable values. Address J. C. Penney Company, Inc., 330 West 34th St., New York, N. Y.



(At the top) For young men who like a hat with style in every line, here's our No. 2722 in Sand, Neptune Green or Pearl Grey, at \$2.98! . . .

(Above at right) There's good straw in this sailor, "SENNIT," and the conservative lines give it real distinction, yet it costs only \$1.98!

(Above at left) Sudden showers can't hurt this LEG-HORN, for it has the genuine Rainshine finish. Diamond creased telescope crown and fancy band. In natural color or Silver Grey, \$2.98.

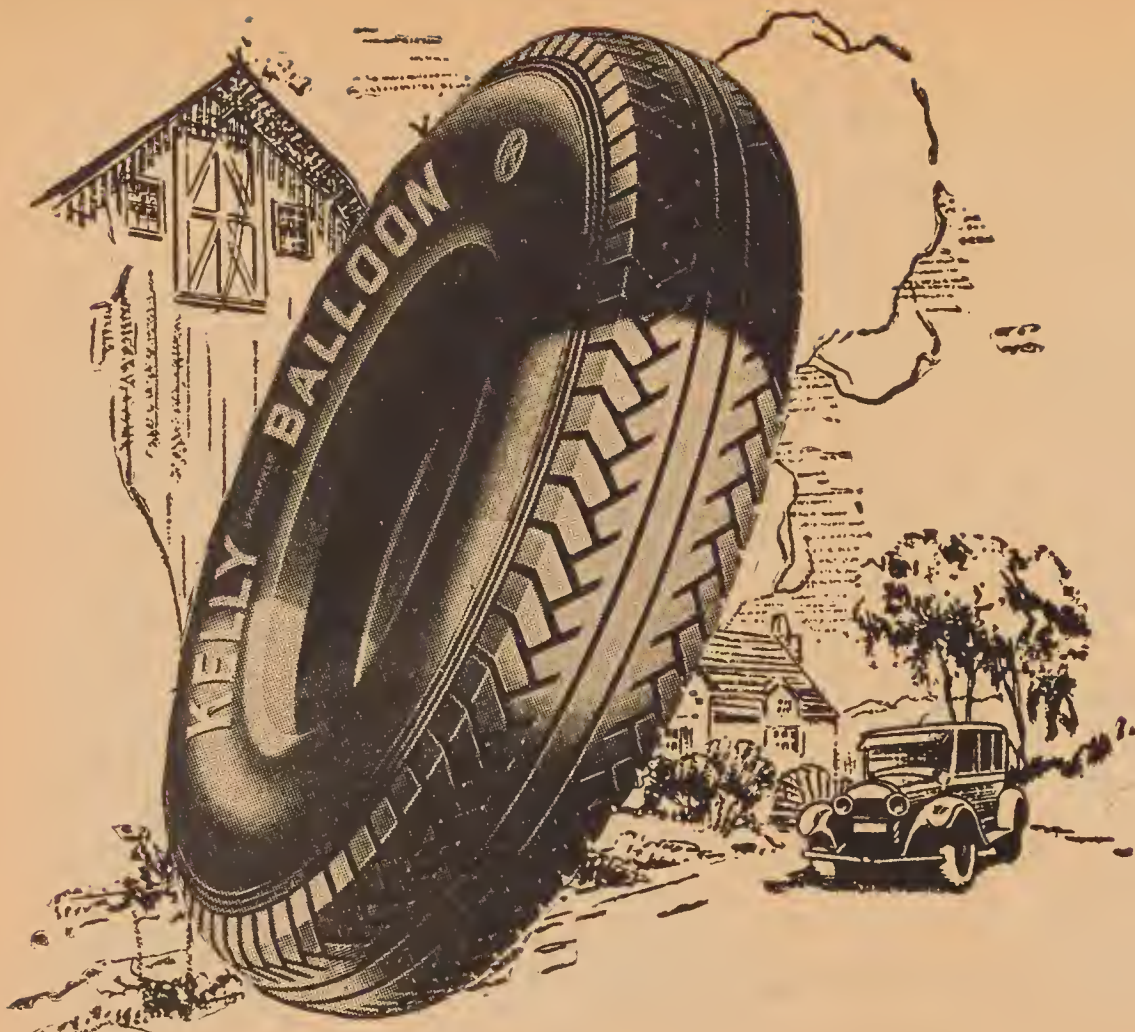
This smaller illustration shows the "AVENUE," a hat you'll be proud to wear any place you go. Patent Milan straw in Sand, Neptune Green or Silver Grey, with new ridged telescope crown, snap brim and fancy band . . . a remarkable value at \$1.98.

There is a J. C. Penney Co. store near you in:

New York	Beaver Falls	Meadville
Amsterdam	Bloomsburg	Monessen
Auburn	Braddock	Mount Carmel
Corning	Bradford	Mount Pleasant
Cortland	Carlisle	New Kensington
Dunkirk	Chambersburg	Oil City
Elmira	Clarion	Pittston
Geneva	Coatesville	Pottstown
Hornell	Donora	Punxsutawney
Ithaca	Du Bois	Shamokin
Kingston	Ephrata	Sharon
Little Falls	Franklin	Shenandoah
Massena	Greensburg	Somerset
Newark	Grove City	Stroudsburg
Newburgh	Hanover	Titusville
Olean	Indiana	Uniontown
Oneonta	Jeannette	Warren
Rome	Lancaster	Washington
Watertown	Lebanon	Waynesboro
Pennsylvania	Lock Haven	Williamsport
Ambridge	McKeesport	

J.C. PENNEY CO. INC. DEPT. STORES

The largest department store in the world . . . under more than a thousand roofs!



You might as well have the best

SOME people shop around for tires under the impression that they are saving money. Others buy Kelly-Springfields—and don't have to pay any more for them.

Contrary to general belief, Kelly-Springfield tires are *not* high-priced. Their reputation has given many people the idea that because Kellys are so good they must cost more.

If you'll drop in and see the nearest Kelly dealer, we believe you'll be surprised to learn how Kelly prices run.

"Kelly dealers everywhere—there must be one in your town"

KELLY-SPRINGFIELD TIRE COMPANY
GENERAL MOTORS BUILDING NEW YORK, N. Y.

KELLY SPRINGFIELD TIRES

BALLOON

McCormick Hotel

CHICAGO

Just a ten-minute walk from the loop—close to everything. Modern and up-to-date in every respect.

No parking restrictions. Excellent garage service.



200 hotel rooms—all with private bath. 300 kitchenette apartments—1 and 2 rooms.

Rates: Hotel rooms, \$2.50 to \$5.00, single.

Apartments, \$28.00 per week and up (two people).

Dining-Room in Connection

HOTEL McCORMICK
Rush at Ontario CHICAGO, ILL.



With the A. A.
**FARM
MECHANIC**

(Continued from Page 20)

hold the wheels on the rear axle are tight and without sign of looseness. Change the oil again.

A car properly broken in and regularly checked at a good service station should give many thousands of miles of carefree operation at a minimum of expense.

Why Cars Start Hard

Weak battery—gravity low plus effect of cold weather which lowers efficiency of battery.

Lubricants too heavy for cold weather causing a drag on all moving parts.

Dirty or worn out spark plugs, also plug gap setting too wide. In low compression engines gap should be .025" and high compression .020".

Excessive use of the choke, causing



A concrete stave silo. This type of construction is relatively new but is giving good satisfaction. It is made of concrete slabs reinforced and held together with steel hoops.

raw charges of gasoline to be drawn into the combustion chambers of the engine and short-circuiting spark plugs.

Insufficient gasoline caused by the choke valve not closing properly.

Breaker points dirty or out of adjustment.

Best Type of Paint Remover

"What do you consider the best to remove old paint from metal and wood surfaces? Will lye injure the metal or wood in any way?"—O. J. S.

THERE are three general methods of removing paint, each of which may be the best in certain particular cases. First is that of burning or softening with a blow torch and immediately scraping off with a scraper or broad bladed knife. This is the method most frequently used by painters on old thick hard paint on siding, doors, and other broad smooth surfaces. It is the fastest and cleanest so far as a muss is concerned and does not injure the surface if skillfully done, but does not make a complete removal and there is grave danger of starting a fire. Also it cannot be used where the surface is uneven.

Another method is that of lye or caustic soda. Farmers Bulletin 1219—recommends about three tablespoons of caustic soda to one quart of a hot boiled starch solution made just as for starching clothes. This should be applied with a cotton swab or a vegetable fiber brush, such as a long handled scrubbing brush. After a few minutes, the softened paint may be scraped or rubbed off. Old paint with several coats may require the second application. Concentrated lye in the proportion of one can to a gallon of water also makes an efficient paint remover and is applied in about the same way. Equal

(Continued On Opposite Page)

CHAMPION

National Change Week...

May 5th
to 11th



Save
the Price of New
Spark Plugs

ONCE again Champion reminds you that to enjoy perfect engine performance during the next twelve months you should install a complete new set of spark plugs now.

You should renew even Champion Spark Plugs which give much better service for a much longer period than any other spark plug.

If you have used your spark plugs more than 10,000 miles, a new set of the new improved Champions will restore new car power and speed and save their cost many times over in less gas and oil used.

Moreover, the far-reaching improvements, the time-tested and exclusive superiorities of the new improved Champions are so great as to warrant immediate equipment with them—no matter what spark plugs you may now be using.

Make Champion National Change Week your yearly reminder to install a complete new set of Champions. It is a proved method of maintaining maximum engine efficiency and economy. Any one of more than 100,000 dealers will be glad to serve you.

CHAMPION

SPARK PLUGS

TOLEDO, OHIO

WINDSOR, ONTARIO

Tune in on the Champion Sparkers' special program over a coast-to-coast hook-up on the N. B. C. Blue Network (33 stations) Saturday night May 4th from 11 to 11:30 p.m. Eastern Standard Time.

(Continued from Opposite Page)

parts caustic soda and quicklime mixed in about three times its volume of hot water is also much used. All of these are very caustic and the hands should be protected by rubber gloves. These caustic solutions can hardly be used on oak or any wood where the natural grain is to be shown, and also have a tendency to raise the grain of most woods. This should be followed by a weak acid wash and usually sand papering will be necessary.

The most satisfactory paint and varnish remover for general work is what is known as a neutral one. Farmers Bulletin 1219 recommends 4 parts benzol, 3 parts amyl acetate or fusel oil, and 1 part carbon tetrachloride or chloroform. This may be applied with a brush and allowed to stand for a few minutes, when the old paint may be removed by scraping with a dull knife or rubbed off with excelsior or steel wool. This natural remover does not affect the wood injuriously, but is explosive and should be used only where there is good ventilation and no open flames or matches. For small jobs it will be cheaper to buy a good varnish remover.—I. W. D.

Battery Rejuvenators Fail to Meet Claims

OWNERS of farm lighting plants and other users of storage batteries are regularly exposed to advertisements of preparations which are alleged to put an end to all battery ills. All sorts of extravagant claims are made for these compounds. They are said to lengthen the life of a battery, charge it in a very short time, prevent sulphation, overheating, and over-charging. In short these mixtures are supposed to make the battery foolproof. But in spite of such sweeping claims the National Better Business Bureau, Inc., has yet to find one from which a battery would derive a single benefit which it would not derive from the standard battery solution.

Salesmen are attempting to sell one such product at the present time by offering to wash out farm lighting batteries and refill them with a "new" electrolyte at a cost of about \$50.00 giving a three year guarantee. It will be found that under the terms of the guarantee, if the battery does not give three years of service after the new electrolyte has been added, the cost of the work and the fluid will be credited on the purchase price of a new battery. Perhaps, then, the scheme resolves itself into a method of selling a new battery.



Radio Questions and Answers

I have a four tube set with 90 volt "B" batteries and 6 volt "A" battery, both of which test full voltage. Can you suggest any way to get more volume from the set? How about the new power tubes?

THE POWER tube does not bring increased volume—it merely improves the tone qualities and permits greater loud speaker volume if the set can deliver it. Any increase in volume in your set must come from other changes. Perhaps your aerial is too small for your location. If you are not bothered at all by interference between broadcast stations you can surely use a longer and higher aerial. Preferably increase the height of the aerial. Have your tubes tested by a reliable dealer and get new ones if necessary. If your set was never able to deliver the volume you desire and works now as well as it did at first, the chances are that the set would have to be improved in design or the aerial enlarged before greater volume could be had. If the set gradually became less and less in

value, either the tubes are now nearly worn out or the set needs a general cleaning to remove dirt and dust and to improve the points of contact such as in jacks, rheostats and sockets.

Stopping Hum from Radio Aerial

"Can you explain the cause and suggest a remedy for our radio aerial humming on cold nights? It sounds through the house and barn to which the other end is attached. Any suggestions appreciated." —R. A., New York.

THIS humming probably is similar to that of a telephone wire, and seems to be due to mechanical vibrations rather than to electrical impulses. Cold shortens the wire and increases the tension, and this makes the vibration more rapid until the pitch becomes high enough to be audible.

One remedy is to loosen the tension

by putting in a light spring where it fastens to the barn or else suspending it with a wire over a pulley. Also it will help if a piece of inner tube or other soft rubber is put under the wires that fasten around the insulators and also if several thicknesses of inner tube are put between the brackets which fasten on the house and barn. There is no need of having an aerial stretched tightly, and slackness and the use of soft rubber will usually cure the worst cases of humming.—I. W. D.

I see advertisements of a condenser to connect across "B" batteries. A claim is made for better tone quality, louder signals, etc. Is this possible?

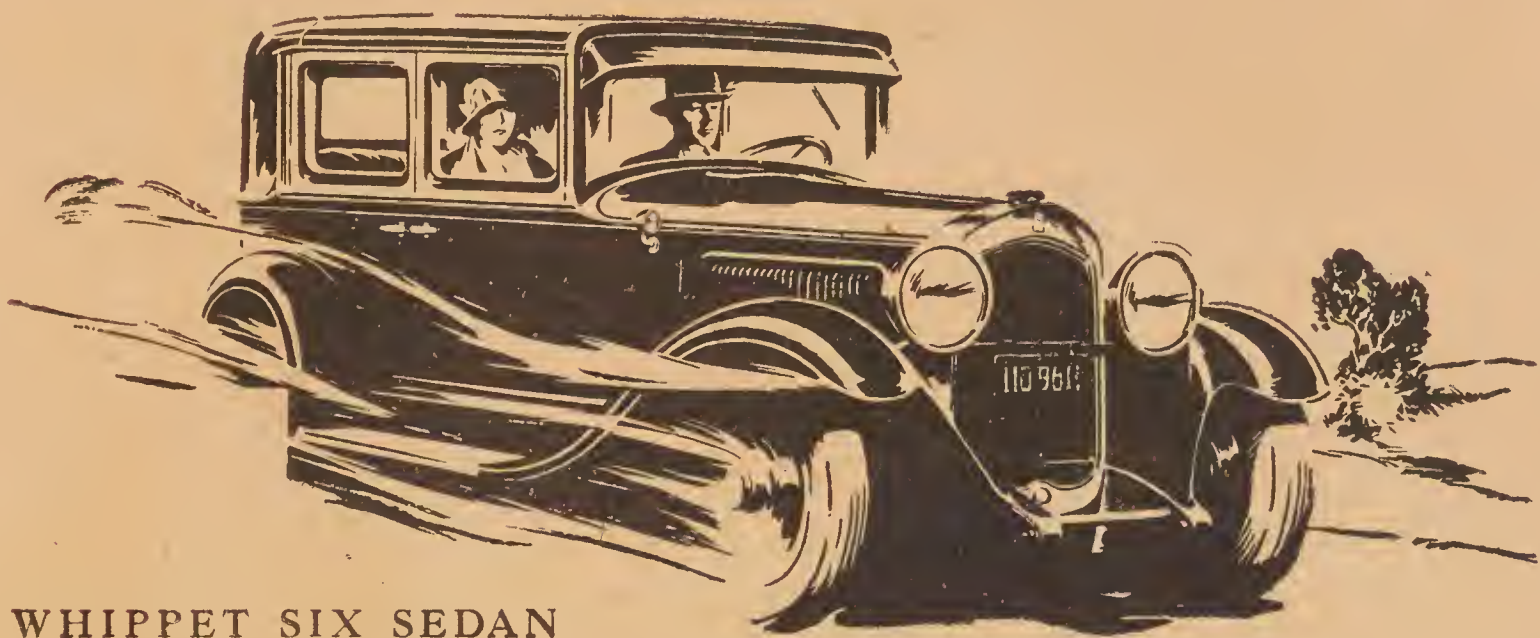
YES, provided the "B" batteries have high internal resistance. Most high grade "B" batteries have a low internal resistance when new, but when getting old the resistance increases. This provides "coupling" between

various stages in the set, as they all use the one "B" battery. A large size fixed condenser, connected from "B" plus 90 to "B" minus will serve to prevent radio frequency and audio frequency impulses from going through the "B" batteries and thus permits much longer service with "B" batteries than is customarily obtained. Old "B" batteries commonly cause the set to squeal or whistle—perhaps you have noticed this. Connecting the condenser across stops this at once and succeeds in permitting use of the "B" batteries till they are run down very considerably. Best size is 2 mfd. or more.

Farmers who use a large number of electrically driven devices on their farms report that they save the cost of many days of hired labor.

EXCLUSIVE VALUES that YOU can check!

NO OTHER SIX AT THE PRICE HAS ALL THESE FEATURES



WHIPPET SIX SEDAN
with 7-bearing crankshaft

\$760

Coach \$695; Coupe \$695; Coupe (with rumble seat) \$725; De Luxe Sedan \$850; Sport De Luxe Roadster \$850 (including rumble seat and extras).

WHIPPET FOUR COACH

\$550

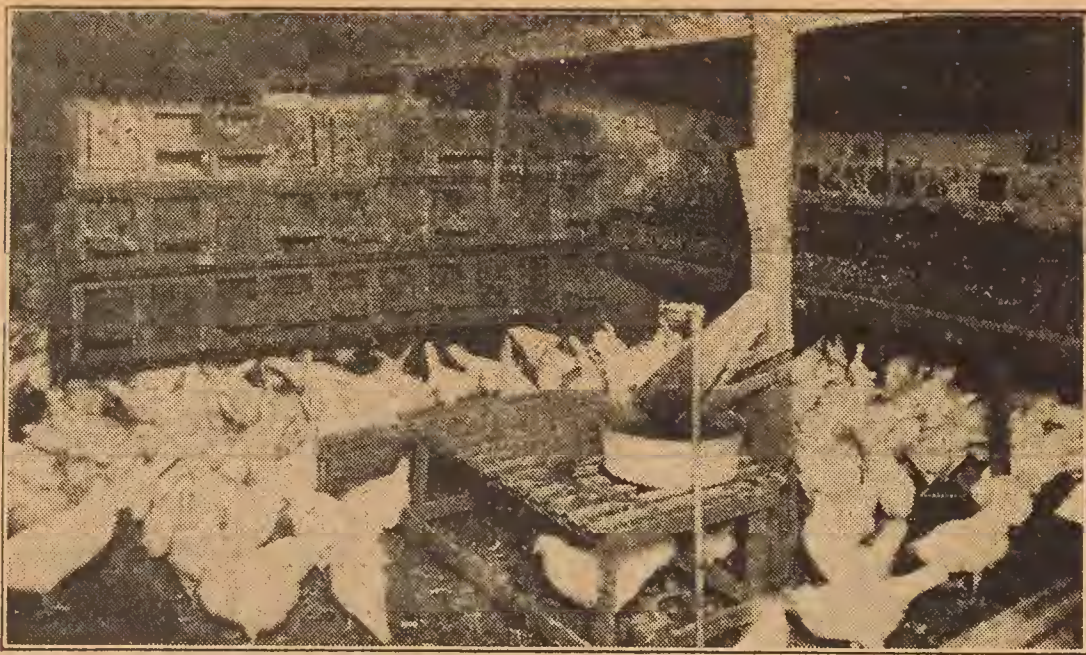
Coupe \$550; 4-pass. Coupe \$580; Sedan \$615; De Luxe Sedan \$695; Roadster \$500; 4-pass. Roadster \$530; Collegiate Roadster \$595; Touring \$495; Commercial Chassis \$380. All Willys-Overland prices f. o. b. Toledo, Ohio, and specifications subject to change without notice.

NEW SUPERIOR

Whippet

FOURS SIXES

PRODUCT OF WILLYS-OVERLAND, INC., TOLEDO, OHIO



Something New in Poultry Feeding

New enough to be still untried by many poultrymen who have not heard of it—old enough to be well past the stage of experimentation.

Simply this—a new source of protein for the laying mash.

DIAMOND CORN GLUTEN MEAL

is an ingredient to supplement the meat scraps or other animal feed in your mash. Diamond contains nearly as much protein, considerably less fibre and more total digestible nutrients than meat scraps and costs only $\frac{2}{3}$ as much. Replace half the animal feed in your mash with Diamond. Feeders who mix their own mashes will find that this practice cuts down the feed bill but keeps up production.

Whether your flock is your chief source of income or a sideline to your herd of cows, our formulas will interest you. They cost less and produce as many or more eggs. Free for the asking.

Write to

Ration Service Dept.

CORN PRODUCTS REFINING CO.

17 Battery Place New York City

AS GOOD FOR POULTRY
AS FOR COWS



40% Protein
Guaranteed



Low prices and speedy shipment on the famous zinc insulated American fence, Banner Steel Posts, etc. have brought us customers all over the East. Buy known quality—the best fence money can buy—costs no more than ordinary fence. Direct prices also on Nails and Staples, Barbed Wire, Concrete Mixers, Wire Rope, Bale Wire, Gas Engines, Huber Tractors, Ann Arbor Hay Presses, Scales, Belting, Oils, Greases, etc. Send your name today for our special Bulletin mailing list.

TUDOR & JONES
Speedy Service Jobbers Weedsport, N.Y.

Debate Outline

Grange Lecturers: Send 2 cents to cover postage and we will send a debate outline on the subject—What Should Congress Do for Agriculture?

AMERICAN AGRICULTURIST,
461—4th Avenue, New York City

AVENARIUS
TRADE MARK
CARBOLINEUM
The Standard Insecticide for 53 Years
Write for Circular
OR MONEY REFUNDED
CARBOLINEUM WOOD PRESERVING CO.
MILWAUKEE, WIS. Dept. 26

applied ONCE A YEAR in Poultry houses
Kills Mites Blue Bugs

WATER PUMPS WATER

night and day with Rife's Hydraulic Ram. No attention, no expense. Write for free catalog.
H. T. OLSEN, 13 PARK ROW, NEW YORK



With the A. A.
Poultry Farmer



Marketing the Broilers

NOW is the time to think about how to dispose of the broiler crop. The following suggestions are offered for consideration:

1. When Should Broilers Be Marketed?

There are two points to consider in deciding upon the most favorable time to market broilers: First, the time of year when prices are best and second the most profitable age at which to market broilers. Broiler prices reach their peak about the middle of April and decline slowly until the end of May, after which prices drop off more rapidly. The old saying is, "Money is made on broilers sold before the Fourth of July." The most profitable age to market broilers is 11 to 13 weeks. The later it gets in the season, the more urgent it is to sell broilers young.

2. Where Should Broilers Be Marketed?

The American people are great followers of style and custom. It has been the general custom for years to ship broilers to New York City and so most everybody does it. How many producers have looked into their local market possibilities? In some instances broilers are shipped back out of New York to smaller cities and towns. In other cases the residents of many upstate towns have not eaten broilers, because they couldn't get them. A day spent in interviewing the local dealers in poultry is very apt to save many producers the cost of shipping to New York. A visit or circular letter to the housewives of the local towns or cities may open up a very profitable outlet not only for broilers, but for all the farm poultry and eggs as well.

3. How Should Broilers Be Marketed?

It is good (market) sense to keep in mind that the complete satisfaction of the ultimate consumer of one's product nets the highest returns. Therefore, every producer should know what the consumer wants and market his broilers accordingly. If the local meat market or housewife want their broilers dressed, the producer should dress them and pocket the cost of this labor. A short fattening period is advisable before killing, when birds are sold dressed. If on the other hand, the prices one receives for dressed broilers does not exceed the price for live by 25%, there is no direct gain by dressing. In shipping birds alive to a distant market it pays to cut down the shrinkage in weight by fastening a quart can (old tomato can) in one corner of the shipping coop, filled $\frac{3}{4}$ full with soaked wheat and oats.

Above all, every producer should know the market value of his broilers and refuse to take less.—J. C. Huttar.

Fryers are immature chickens which weigh from $2\frac{1}{2}$ to $3\frac{1}{2}$ pounds each.

Roasters — Young chickens which weigh $3\frac{1}{2}$ pounds or over are usually called roasters.

Stags are young males which have matured to some extent, show spur development, and have begun to get stringy and hard in flesh. They are less desirable and bring lower prices than soft-fleshed birds.

Springs, Springers of Chickens are those birds hatched during the preceding spring and early summer. One of these terms is sometimes used to designate classes of chickens corresponding to fryers or roasters.

Capons are unsexed male chickens. When marketed at an age of 7 to 10 months they weigh from 5 to 10 pounds each and still retain softness of flesh. Heavier capons usually bring better prices than lighter ones.

Slips are birds which have been caponized but on which the operation was not completely successful. The price of slips is below that of capons.

Fowls are mature females and are generally divided into several grades, according to the weight.

Old Cocks are mature males. They bring the lowest prices of all classes of poultry. Sometimes they are quoted as old roosters.

Ducks are usually quoted as such, but at certain times of the year, spring or "green" ducklings are listed. These may be young ducks which have been grown and fattened quickly (10-12 weeks), or they may be young ducks hatched in the spring and marketed early in the fall.

Geese—"Green" geese are young geese quickly grown and fattened for market. "Noodled" geese of Wisconsin are geese fattened by feeding noodles.

Guineas—In some markets guineas are called "keets" or "guinea keets."

Turkeys are classified into three divisions: Young Hens, which are immature females. Young Toms, which are immature males. Turkeys, which are mature birds.

Milk Fed—A milk fed bird is any bird which has been especially fattened previous to marketing on a soft mash. Although milk in some form is usually contained in the mash it is not necessarily a part of the ration.

Corn Fed—A corn fed bird is any bird not fattened on a soft mash.

Colored as used in quotations applies to all heavy varieties of poultry.

Leghorn refers to all light varieties.

Broilers—Rocks always refers to Barred Plymouth Rocks only. Reds refers to R. I. Reds mostly, but also includes other heavy varieties.

Use Proper Coops for Shipping Live Poultry

The New York State Department of Agriculture and Markets calls to the attention of shippers of live poultry the following specifications for poultry coops made effective January, 1929, by

(Continued on Opposite Page)



A relatively new type of poultry house that is attracting some attention. It is claimed that the pointed arch type of construction saves material and that the ventilation system provides fresh air without the extremes in temperature that go with the open type house.

When writing Advertisers
Mention American Agriculturist

Baby Chicks



CHICKS with vim and vigor

Hatched by men with 19 years experience, from culled flocks, 100 per cent live delivery guaranteed by Prepaid Parcel Post at the following prices:

PRICES FOR MAY

S. C. White Leghorns.....	9c each—	\$ 80.00 per 1000
S. C. Brown Leghorns.....	9c "	80.00 " 1000
Barred Rocks.....	10c "	90.00 " 1000
S. C. R. I. Reds.....	12c "	110.00 " 1000
S. C. Black Minorcas.....	12c "	110.00 " 1000
H. B. Mixed.....	9c "	80.00 " 1000
L. B. Mixed.....	8c "	70.00 " 1000

\$1.00 will book your order. Catalogue free.

THE PENNSYLVANIA HATCHERY
LIVERPOOL, PA.

CHERRY HILL CHICKS

S.C.W. Leghorns—Wyckoff Strain.....	\$10.00
S.C. Everlay Brown Leghorns.....	10.00
Barred Rocks—Wm. Nace's select.....	12.00
S.C. Rhode Island Reds.....	13.00
Mixed or Broiler Chicks.....	7.00

1/2c less in 500 lots. 1c less in 1,000 lots.
25 chicks add 2c, 50 chicks add 1c. Full count.
100% live arrival guaranteed. Parcel Post prepaid.
Bank reference. Order direct from this ad or write for free circular.

CHERRY HILL POULTRY FARM,
WM. NACE, Prop. Dept. A, McAlisterville, Pa.

STOP! LOOK! LISTEN!

Cash or C.O.D.	25	50	100	500	1000
Wh. Wyandottes.....	\$4.00	\$7.50	\$14.00	\$67.50	\$130
Rocks or Reds.....	3.50	6.50	12.00	57.50	110
Wh. Leghorns.....	3.00	5.50	10.00	47.50	90
Heavy Mixed.....	3.00	5.50	10.00	47.50	90
Light Mixed.....	2.50	4.50	8.00	37.50	70

From carefully selected free-range flocks, 100% arrival. Postpaid. Valuable illustrated 96-page booklet FREE. Telling all about poultry.

The Commercial Hatchery,
Box 75-A (The dependable plant) Richfield, Penna.

BABY CHICKS

From Heavy Laying Free Range Flocks

	25	50	100	500	1000
S.C.W. & Br. Leghorns.....	\$3.00	\$5.50	\$10	\$47.50	\$ 90
S.C.B. & Wh. Rocks.....	3.50	6.50	12	57.50	110
Buff Orpingtons & Reds.....	3.50	6.50	12	57.50	110
White Wyandottes.....	3.50	6.50	12	57.50	110
Assorted Chicks.....	2.75	4.50	8	37.50	70

100% prepaid safe delivery guaranteed.

Order from this ad. or write for circular

J. N. Nace Poultry Farm RICHFIELD, Pa.

Ask the Man WHO SELLS IT



L. G. Thomas

SAYS: "NOT BY CHANCE did I join the Sales Force 5 years ago. I CHOSE my employer for very definite reasons:"

1st—Its 87 year old. RECORD of reliability;

2nd—Its PRESENT aggressive, progressive and honest LEADERSHIP;

3rd—The opportunity of promoting worthwhile SERVICE to FARMERS; of doing HEALTHFUL, outdoor work which returns a daily thrill and MORE MONEY than I ever earned before; of dealing with the most wholesome, delightful people on earth—FARMERS. The A. A. Service Man is always welcomed in any community."

If YOU are looking for a growing future, Mr. Thomas' reasons are worth your consideration.

THERE IS AN OPENING FOR A LIVE WIRE SALESMAN
TELL ME why YOU are the MAN we are LOOKING for.

Address

E. C. WEATHERBY,
Sales Manager,

AMERICAN
AGRICULTURIST

ITHACA New York

Send for booklet, "Your Opportunity"

(Continued from Opposite Page)
the American Railway Express Company.

"Coops must be large enough to prevent over-crowding and top of coop must be covered by slats not more than one inch apart or by wire or screen containing meshes not to exceed one inch in size.

"Charges will be based upon the gross weight of coop and contents at the time of shipment.

"Any coop which with its contents exceeds 150 pounds in weight will not be accepted."

The attention of shippers is also called to the following schedule as to the size and contents of coops approved by the Society for the Prevention of Cruelty to Animals. Shippers should see to it that they carefully observe these regulations in order to avoid the possibility of fines.

Coops For—	Not to be less than		
	Inches High	Feet Wide	Feet Long
Turkeys	20	2	3
Geese	16	2	3
Old Roosters	16	2	3
Large Fowls	16	2	3
Ducks	12	2	3
Small Fowls	12	2	3
Spring Chickens	12	2	3

The Contents of Each Such Coop Should Not Exceed:

Turkey Gobblers	5
Turkey Hens	6
Geese, large	6
Geese, medium	8
Geese, small	10
Ducks, large	10
Ducks, medium	14
Ducks, small	18
Roosters and Fowls, 7 to 10 lbs. each.....	8
Roosters and Fowls, 5 to 7 lbs. each.....	10
Roosters and Fowls, 4 to 5 lbs. each.....	14
Roosters and Fowls, 3 to 4 lbs. each.....	16
Roosters and Fowls, 2 to 3 lbs. each.....	18
Roosters and Fowls, 1 to 2 lbs. each.....	20

Check Red Mites Now

THIS is the time of year the careful poultryman takes precautionary measures against a red mite infestation. These parasites, when present, may be found hiding during the day in the cracks and crevices of the roosts, roost supports, nests, and other parts of the house when infestation is heavy. At night the red mites make their way to the roosting fowls or young stock and suck blood from them. A sudden drop in egg production, stunted growth in the young stock, and general weakness in any poultry so attacked, are the more serious results of red mite infestation. To avoid losses hit the mites early and hard.

The liberal use of a strong coal tar product applied thoroughly with a paint brush to all parts of the roosts and roost supports, is recommended as an excellent method of controlling red mite infestation. The important point to remember in the use of any good mite paint is that it must be used early, and applied thoroughly.

Trouble With Aspergillosis

I have a puzzling problem with my chickens and I would surely appreciate it very much if you can help me out. I have a disease in them that I have been fighting for the last three or four years. Just this afternoon I walked out in the yard and picked up one of my nice big roosters and when I held his head down thick waterlike mucus ran out of his mouth and it has an awful odor. His bowels are loose and he just keeps falling away until finally he will die. I am feeding them egg mash with corn at nights. I also have been putting pomegranite of potash in their drinking water the past three weeks.

Do you advise me to get rid of the flock and clean up and buy new stock or would the new ones get the disease running the same yards. I have a nice warm house for them.—Mrs. J.M.S., Delaware.

THE symptoms you give all point to a disease called aspergillosis. The chief causes of this disease are unsanitary conditions, especially food or litters that are moldy. Clean your house thoroughly, bed the birds down with fresh straw and check up on the food they receive. If the ground or yard the birds run in is sour or dirty, it should be turned up and spaded. Feed the birds their egg mash and instead of just corn give them

(Continued on Page 26)



Raise Pullets that Make You Money

THE way Quaker Ful-O-Pep Growing Mash builds deep-bodied, broad-backed productive pullets is simply the result of the formula, and feeding methods, that have been developed by The Quaker Oats Company. The base of this great feed is oatmeal, and as everybody knows there's nothing better than oatmeal for building up young bodies.

But the oatmeal is only a part of the story—to it are added essential proteins, minerals, and vitamin-laden substances that grow big birds with capable frames, with healthy, vigorous organs and flesh.

Pullets raised on Quaker Ful-O-Pep Growing Mash are exceptionally good layers. They lay large eggs with good firm shells.

The cod liver meal in Ful-O-Pep Growing Mash insures that the bird's blood is kept in the very best condition. The birds are not anaemic—they are bigger and stronger and better able to withstand the strain of heavy egg production. See your Quaker Dealer.



In a test conducted at Liberty Villa Farm, fifty pullets raised on oatmeal feeds produced 626 eggs in their first 28 days of egg record. Fifty pullets raised on the same rations—except for the substitution of cornmeal for oatmeal—produced 72 eggs in the same period. Oatmeal builds pullets of the laying type; well-developed, healthy birds that want to work.



Quaker FUL-O-PEP GROWING MASH

THE QUAKER OATS COMPANY, CHICAGO, U.S.A.

BUY QUAKER FEEDS IN STRIPED SACKS

BABY

CHICKS

20TH CENTURY "MARVEL" CHICKS

from Special Mating Imported Barron White Leghorns

This Superb Mating consists of 350 Yearling hens, imported from TOM BARRON, of England. The hens weigh not less than 4½ pounds and up to 6 pounds, and produce better than 250 eggs per year, per hen.

BIG HEALTHY CHICKS FROM THE WORLD'S BEST STRAINS

14 varieties. Matings sired by pure-bred Males from the World's finest Trapped Egg Strains. Dams of high production, 250 to 302 egg lines. Park's, Burroughs, Fishel, Sheppard, Dustin, Pape and others of similar famous breeding.

I Guarantee Satisfaction and give you personal service. Prices reasonable. 100% Live Delivery Guaranteed. Ref: Commercial Bank, Dun or Bradstreet.

ORDER NOW AT THESE LOW PRICES—EFFECTIVE MAY 15

	50	100	500	1000
S. C. White, Br., Buff Leghorns; Anconas.....	\$5.50	\$10.00	\$46.00	\$90.00
Barred and Wh. Rocks; S. & R. C. Reds; Blk. Minorcas.....	6.50	12.00	55.00	110.00
Wh. Wyandottes; Buff Orpingtons; Buff Minorcas.....	7.00	13.00	62.00	120.00
Imported Barron Leghorns; Wh. Minorcas; Park's Rocks.....	8.00	15.00	67.00	125.00

Heavy Mixed, \$10 per 100; Light Mixed, \$8 per 100; W. P. Ducklings, 25c each.

Ship C. O. D. if desired (pay postman on delivery). FREE Illustrated Catalog tells all about our big size Winter Laying Chicks and profits you can make with them. Send for your copy.

20th CENTURY HATCHERY Box R NEW WASHINGTON, OHIO

PINE TREE CHICKS

Reduced Prices on Dependable Chicks

Our reduced May prices are effective this week. Same dependable quality and the same square dealing for which the original pioneer hatchery has long been famous.

Prompt May 7, 8, 9, 15, 16 Deliveries	25	50	100	500	1,000
S. C. White Leghorns.....	\$4.00	\$7.25	\$13.00	\$65.00	\$125.00
Barred Plymouth Rocks & R. I. Reds.....	4.50	8.00	15.00	72.50	140.00
White Wyandottes & White Rocks.....	5.25	9.00	17.00	82.50	160.00
Brown Leghorns & Anconas.....	5.00	8.00	16.00	80.00	155.00
Jersey Giants.....	7.00	13.00	24.00	115.00	230.00
Mixed Chicks.....	3.75	5.75	11.00	52.50	105.00

SPECIAL MATINGS, 4c a chick higher. The aristocrats of chickdom.

All chicks prepaid—safe arrival and full count guaranteed. S. C. White Leghorn Pullets, 10 weeks old; from Special A. P. A. Certified matings. May delivery, \$1 each, express collect.

Pine Tree Hatchery BOX 55 STOCKTON, NEW JERSEY. JOS. D. WILSON, Founder and Owner Since 1892

THE OLDEST HATCHERY IN THE U.S.

WOLF SELECTED CHICKS

CHICKS C. O. D.

Special pen mated and extra high bred chicks at slightly higher prices. Send only \$1.00 and pay Postman the balance.

Shipment made any time you wish.	25	50	100	500
S. C. Wh. Br. & Buff Leghorns, S.C.M. Anconas.....	\$3.25	\$6.50	\$12.00	\$57.50
Bd. & Wh. Rocks, S.C. & R.C.R.I. Reds, Bl. Minorcas.....	3.75	7.25	14.00	67.50
White Wyandottes, Buff Orpingtons.....	4.25	8.00	15.00	72.50
Jersey Black Giants.....	5.00	9.50	18.00	87.50
Assorted Odds and Ends, Mixed Chicks.....	3.00	4.75	9.00	45.00
Assorted Heavy Mixed Chicks.....	3.50	6.00	11.00	55.00

WOLF HATCHING & BREEDING COMPANY, BOX 1, GIBSONBURG, OHIO

QUALITY BABY CHICKS

Five extra given free with every box of one hundred ordered. May hatched chicks, Leghorns, White, Brown, Buff, Black—\$12.00 per 100; Barred Rocks, Reds, Minorcas, Anconas, \$14.00 per 100; White Rocks, Wyandottes, Buff Orpingtons, \$16.00 per 100. April \$2 more, June and July \$2 less. Custom hatching. Eggs for hatching. Odds and Ends, Left Overs, Mixed broiler chicks, Light, 10c; Light and Heavy, 12c; All Heavy, 14c; Better order now. Will send C.O.D. Thousands hatching daily all year around. Active, husky, chicks hatched from healthy free range breeders that will live, grow and lay. Prompt shipments. Postage prepaid. Live delivery. Send for folder. SCHOENBORN'S HATCHERY, 335 Main St., Hackensack, N. J. Phone 1603 or 1604.

TAKE NOTICE 75,000 CHICKS for MAY DELIVERY

	25	50	100	500	1000
S. C. White Leghorns.....	\$3.00	\$5.50	\$10.00	\$47.50	\$90
Barred Rocks or Reds.....	3.50	6.50	12.00	57.50	110
Silver Laced Wyandottes.....	4.00	7.50	14.00	65.00	
Light Mixed.....	2.50	4.50	8.00	37.50	70
Heavy Mixed.....	2.75	5.00	9.50	45.00	85

From carefully selected free range flocks. 100% arrival Postpaid. Write for illustrated catalogue.

The Richfield Hatchery, Box 80, Richfield, Pa.

FreeBooks

Breed squabs and make money. Sold by millions at higher prices than chickens. Write at once for two free books telling how to do it. One is 48 pages printed in colors, other 32 pages. Ask for Books 3 and 4. You will be surprised. Plymouth Rock Squab Company, 334 H Street, Melrose Highlands, Massachusetts. Established 28 years. Reference, any bank.

BABY CHICKS

100% live delivery guaranteed. Order from this ad. or write for free circular. C. P. Leister, McAlisterville, Pa.



FERRIS STRAIN WHITE LEGHORN CHICKS

Our breeders are large birds; long, deep, rectangular bodies. Selected for size, type and egg production. \$10 Per 100; \$47.50, 500; \$90, 1000 Junia Poultry Farm, Box T, Richfield, Pa.

CHICKS 8½c

CLASS A CHICKS at low prices, also pullets. Special discounts. Several varieties. No money down. 100% live arrival; postpaid. Catalog free.

BOS HATCHERY, R 2A, ZEELAND, MICH.

CHIX FROM LARGE BREEDERS

	100	500	1000
Ferris Strain White Leghorns.....	\$10	\$47.50	\$90
Everlay Brown Leghorns.....	10	47.50	90
Basom's Barred Rocks.....	12	57.50	110
Owens' R. I. Reds.....	12	57.50	110
Mixed Chicks.....	9	42.50	80

Our breeders are selected for size, type and egg production. The kind that lay and pay. Send for literature. It's free. Tells all about our great egg machines.

CHIX Junia Poultry Farm, BOX T, RICHFIELD, PA.

SINGLE COMB

White Leghorns Exclusively

3000 breeders on free farm range. Pure Barron English Strain, with trapnest records up to 314 eggs in a year. The large vigorous Leghorns that lay large white eggs. Now booking orders for hatching eggs and baby chicks Mar., Apr., & May delivery. Special feeding directions with all orders. Circular free. Cecil Sherow and Olive Briggs-Sherow successors to

EDGAR BRIGGS, SUNNY BROOK FARM, Pleasant Valley, N. Y. Box 50

BABY CHICKS

FROM A HEAVY LAYING STRAIN. Three years blood tested for white diarrhea and under State supervision. Barred Rocks, White Wyandottes, Reds, White Leghorns. Moderately priced. Write for Catalogue and Prices.

BYRON PEPPER & SONS

BOX 11, GEORGETOWN, DEL.

MAY PRICES

	100	500	1000
S. C. White Leghorns.....	\$9.00	\$42.50	\$80.00
Barron & Wyckoff Leghorns.....	10.00	47.50	90.00
Barred Rocks & R. I. Reds.....	12.00	57.50	110.00
Light Mixed \$8. Heavy Mixed \$10. Our chicks are properly hatched, strong and vigorous. 100% live delivery. Postpaid. Circular free giving full details of all breeds. CLEAR SPRING HATCHERY, McAlisterville, Pa. R. D. No. 2. F. B. Leister, Prop.			

CHICKS, 8c UP HEALTHY, FREE RANGE STOCK

Rocks - Reds - Wyandottes - Leghorns - Mixed Circular and Price List. Delivery Guaranteed. LONG'S RELIABLE HATCHERY, Box 12, Millerstown, Pa.

WYCKOFF and BARRON STRAIN. White Leghorn Chicks for May 9c each; \$80 per 1000. Prepaid and safe delivery guaranteed. Our 19th year. Circular free. \$1.00 books order. THE PENNSYLVANIA HATCHERY, Box W, Liverpool, Pa.

BRED TO LAY BABY CHICKS

Barred Rocks; White Leghorns \$10.00 per hundred for May and June deliveries. 25 chicks \$2.75; 50 chicks \$5.25. Scarborough Poultry Farm, Box A, Milford, Del.

(Continued from Page 25)

this variety: 5 pounds of cracked corn, 2 pounds each of wheat and barley and 1 pound of oats. Be sure that they have plenty of grit and shell before them at all times and that the water fountains are cleaned and kept filled with fresh water.

I feel sure that if you will follow these directions your trouble will stop. —L. H. Hiscock.

The Cost of Producing Eggs

Have any of the state colleges secured the figures on how much it costs to produce eggs?

RECENTLY the New York State College of Agriculture secured such figures through the cooperation of the U. S. Department of Agriculture and the poultry and farm management departments at the college. These figures indicate that in 1926 it cost 41 cents per dozen to produce eggs on Long Island and 39 cents per dozen on up-state farms. These figures were the result of reports from a large number of farms.

Chemical Rids Hens of Lice Overnight

PAINTING a light strip of 40 per cent nicotine sulfate along the top of each chicken roost is an effective method of getting rid of lice.

Special care must be exercised in using the nicotine sulfate, since it is poisonous. The solution must not be allowed to come in contact with the hands or body. It must not be left uncovered in a closed room, as the fumes are dangerous. The solution should be applied just before the hens go to roost and only a thin strip should be painted along the top of the roosts as more might harm the hens.

Teaching the Chicks to Roost

DURING the first two or three weeks young chicks are accustomed to gather into a group upon the floor at night. When they reach four to six weeks of age it becomes necessary for the poultryman to get this group up from the floor if he expects to eliminate serious losses from crowding. Such crowding may occur when the brooder house is kept too warm as well as when a sudden drop in temperature cools the house beyond a point of safety. As the chicks grow older, the group works toward the outer walls at night to obtain cooler surroundings. Should the night prove too warm, those chicks forced against the outer wall become crushed. Chicks over six weeks old, instead of returning to the hover when the house becomes cool, usually crowd in a compact mass against the wall to get warm. Those on the bottom are suffocated and crushed.

Temporary roosts may be constructed about 18 inches high. These should

(Continued on Opposite Page)



30 Years' Experience

in building poultry houses has taught us how to meet the requirements of practical poultrymen. Approved designs; select kiln-dried lumber; expert workmanship. Guaranteed to please.

FREE CATALOG of Poultry and Pigeon Houses, Rabbit Hutches and Dog Kennels. Write today.

E. C. YOUNG CO. 97 Depot Street, Randolph, Mass.

WENE CHICKS

Sharply Reduced May Prices

We are now quoting amazingly low May prices on Wene Blood-Tested Chicks. All S. C. White Leghorns State-Supervised. Our Cross-Bred Chicks make best-paying broilers and soft roasters. Immediate Delivery 50 100 500

White Leghorns.....\$7.50 \$14.00 \$65.00
Rock-Wyandotte.....6.50 12.50 60.00
Cross-Bred.....8.50 16.00 77.50
Straight Rocks, Reds, Wyandottes.....8.50 16.00 77.50
All chick shipments sent postage prepaid—100% live delivery.

S. C. WHITE LEGHORN PULLETS—State supervised, 8-10 weeks, \$15.00 per 100. f.o.b. Vineland, N. J. Immediate delivery.

FREE FOLDER and Mating List.

WENE CHICK FARMS

Dept. D, Vineland, N. J.

18 Years

REDBIRD FARM BABY CHICKS

Hatched from our own 260-egg strain of S. C. R. I. Reds, famous thruout the country for high production, vigor and size. Our 4,000 breeders averaged 60% for December and 65% for January.

LARGEST RED FARM IN NEW ENGLAND

Each year our entire stock is state tested for B. W. D.—trapped, bloodline, disease free. 100% live delivery guaranteed. Catalog free.

REDBIRD FARM, WRENTHAM, MASS.

Chicks C.O.D.

Immediate delivery. Leghorns \$13 per hundred. Hatched from healthy Mountain-Bred, 5 lb., tested, 2 and 3 year old breeders. Order quick, pay post man and have your own Heavy-weight pullets laying in five months time. Our customers do it. So can you. \$63 for five hundred. Satisfaction guaranteed. A postal card will do.

FARM SERVICE ROUTE A10 TYRONE, PENNA.

BABY CHICKS

PROMPT DELIVERY—WILL SHIP C.O.D.

	50	100	500	1000
White and Bd. Rocks.....	\$6.50	\$12.00	\$57.50	\$110.00
S. C. R. I. Reds.....	6.50	12.00	57.50	110.00
S. C. White Leghorns.....	5.50	10.00	47.50	90.00
Heavy Mixed.....	5.50	10.00	47.50	90.00

PINECREST POULTRY FARM & HATCHERY Herbert Miller, Prop. Box 12, Richfield, Pa.

LEGHORN CHICKS

FROM my own range raised healthy disease free breeding flock, \$14.00 per hundred.

L. W. HAMBLIN WILSON, N. Y.

BABY THIS IS MY CHIX

	100	500	1000
Cash or C. O. D.			
Barred Rocks.....	\$12.00	\$57.50	\$110.00
Tancred Strain S.C.W. Leghorns.....	10.00	47.50	90.00
Heavy Mixed.....	9.00	42.50	80.00
Light Mixed.....	8.00	37.50	70.00

These chicks are from free range and heavy egg producing flock. 100% live delivery guaranteed to your door. Write for Special Mating prices.

FRANK NACE, Cocolamus, Pa., Box No. 120

BABY CHICKS ORDER DIRECT from this ad. and save time.

	25	50	100	500	1000
Free Range Bred					
Wh. & Brown Leghorns.....	\$2.75	\$5.25	\$10.00	\$47.50	\$90
Anconas & Black Leghorns.....	2.75	5.25	10.00	47.50	90
White & Barred Rocks.....	3.25	6.25	12.00	57.50	110
Col. Wyand. & R. I. Reds.....	3.25	6.25	12.00	57.50	
Heavy Mixed Broilers.....	3.00	5.75	11.00	52.50	
Light Mixed Broilers.....	2.25	4.25	8.00	38.75	75
Full count and quality guaranteed. Catalogue free. Hatchery Chicks					
For Greater Profit					

ULSH POULTRY FARM & HATCHERY Port Trevorton, Penna. Box A

DUCKLINGS

Mammoth White Pekins, \$28.00 per hundred.

L. W. HAMBLIN WILSON, N. Y.

TURKEYS

TURKEYS Esbshade's Famous Bronze Strain is proving its superiority with growers everywhere. Eggs and Baby Turkeys. Good hatches; safe and live delivery guaranteed. Instructions free with orders. Catalog.

ESBENSHADE TURKEY FARM, Box A, Ronks, Pa.

When Writing Advertisers, Be Sure to Mention American Agriculturist

BABY



CHICKS

FINGER LAKE REGION BABY CHICKS

with an official record. Ask for our Baby Chick Book describing our Pedigreed Cornell Chicks from stock that has laid from 200 to 312 eggs in their pullet year and mated to breeders that have averaged over 200 eggs in their pullet year. Also describes our 144,000 egg hatchery with 22 years' experience in hatching Baby Chicks. Leghorns, Reds, Rocks, Wyandottes, Minorcas, and Giants. The home of better chicks at lower cost.

THE DERROY TAYLOR CO.,
NEWARK, NEW YORK

BABY CHICKS

hatched by the best system of incubators from high class bred-to-lay stock. White, Brown, Buff Leghorns, Anconas \$14.00 per 100; Barred, White Rocks, Minorcas, Reds \$16.00 per 100; White Wyandottes, Buff Orpingtons \$17.00 per 100; Giants \$20.00 per 100; Heavy Broilers \$12.00 per 100; Light Broilers \$10.00 per 100; Pekin Ducklings \$30.00 per 100. Add 25c on orders for less than 100. Safe delivery guaranteed by parcel post.

Nunda Poultry Farm, Desk H, Nunda, N. Y.
Member of the International Baby Chick Ass'n. and the N. Y. State Co-Operative Chick Producers Ass'n.

200,000 CHICKS 1929

Goodling's Super Quality. Healthy, Strong and Vigorous

	50	100	500	1000
Single Comb, White Leghorns.....	\$6.50	\$12.00	\$57.50	\$110
Barred Plymouth Rocks.....	7.00	13.00	62.50	120
S.C. Rhode Island Reds.....	8.00	15.00	75.00	
Broiler Chicks, Heavy Breed.....	5.50	11.00	52.50	100
Broiler Chicks, Light Breed.....	5.00	10.00	47.50	90

Order direct. Prepaid 100% live delivery guaranteed. Circular Free.

THE VALLEY HATCHERY Box A, R. No. 1, RICHFIELD, PA.

PENNA. "State Supervised" CHICKS

Flocks inspected by officials from the Penna. Dept. of Agriculture. Our 19th year. Get our low prices on Reds, Rocks, Leghorns and Minorcas. Member I.B.C.A.

Catalogue free.

THE KEYSTONE HATCHERY,
(The old reliable plant) RICHFIELD, PA.

BETTER BABY CHICKS

\$12 to \$25 per 100

Barred and White Rocks, White and Columbian Wyandottes, R. I. Reds, Jersey Black Giants, Black Minorcas, White and Brown Leghorns, Mottled Anconas, 20,000 Weekly. Finest purebred, heavy producing, free range stock, under State inspection. 100% Safe delivery guaranteed. Catalog free.

ULSTER POULTRY FARMS, Box 40, WALDEN, N. Y.

BABY CHICKS

13 Leading Varieties—White Leghorns, Black Minorcas, Rocks, Reds, Wyandottes, Hamburgs, Speckled Sussex, Buff Orpingtons.

\$9.00 per hundred and up.

Free Catalog and Price List

Lantz Hatchery, Tiffin, Ohio

BARRED ROCK CHICKS

A large modern Breeding Farm and Hatchery devoted exclusively to the production of BARRED PLYMOUTH ROCKS.

MARVEL POULTRY FARM, GEORGETOWN, DEL.

CHICKS

Pure bred. Blood tested free range breeders. Leghorns, Anconas, 10c. Rocks, Reds, 12c. Wyandottes, Orpingtons, Minorcas, 13c. Black Giants, 18c. 100% live delivery. Valuable Chick Manual Free.

Seidleton Farms, Washingtonville, Pa.

RHODE ISLAND REDS Vt. Certified: Tested free from B.W.D. Males from 200-300 egg hens. Pullets: Started Chicks: 3000 Baby Chicks weekly: Circular.

ASCUTNEY FARMS, A10, HARTLAND, VT.

DUCKLINGS

\$33; EGGS \$14-100 "Duck News" Free.

ROY PARDEE,
Islip, L. I., N. Y.

SPECIAL FALL

prices for breeding Turkeys, Geese, Ducks, and Guineas. Write your wants and for mailing list.

PIONEER STOCK FARM, TELFORD, PA.

Hampton's Black Leghorn Day Old Chicks. The Kind that lay. Circular free. A. E. HAMPTON, Box A, Pittstown, N.J.

To benefit by our guarantee of ads, say "I saw your ad in American Agriculturist"

(Continued from Opposite Page)

extend out from the rear wall and slope toward the stove on the front end. Wire must cover these roosts to prevent chicks from getting underneath. At night one may take advantage of the natural tendency of the chicks to spread out and with a little help push them up the wire onto the roosts. By this method they will take to roosting more readily than if allowed to congregate in the corners of the house under roosts without wire covering. During the day the roosting arrangement may be hooked up to permit more room.

By teaching the chicks to roost early, we keep a circulation of air under their bodies and prevent severe losses from suffocation, which often exceed, by far, ordinary brooding losses.—C. N. ANDERSON.

Litter for the Brooder House

THERE is no best litter to use in the brooder house, but there are certain requirements a litter must meet to be satisfactory. It should be light in weight, thus allowing the droppings and dirt to work to the floor so the chicks are less likely to come in contact with contaminated material; it should be absorbent, and therefore capable of keeping the floor of the brooder house dry; cheap, so one can afford to replace it every five days after the first four weeks; and should be clean, which means free from mold, mustiness, and dust.

Shavings, cut straw, and cut hay meet these requirements. These are not the only materials that one can use, but they are among the best. Straw or hay used for litter, should always be cut. If the straw or hay is cut it becomes matted and covered with droppings and is therefore of no value for litter.

Preventing Cannibalism

TAIL picking and cannibalism of chicks can largely be avoided by a few precautions. Crowding must not be tolerated; 250-300 chicks are enough for one brood. Ample hopper space to accommodate all the chicks at one time until they are at least four weeks of age should be provided. Cock-erels at this age or as soon as the sex can be determined should be removed. Cod liver oil to make up 2 per cent of the mash should be given, beginning with the first feeding. Enough perching space should be provided when chicks are six weeks old.

Green feed may be supplied in any form, or alfalfa leaf meal fed in the mash. Never permit the mash hoppers to become empty or the water vessels to become dry.

A Sun Porch for the Chicks

THE importance of keeping growing chicks away from soil contaminated by older birds has led to new methods of raising them under confinement. Two new developments which proved very satisfactory last year were the use of false floors in the brooder house, made of wire screen of one-half inch mesh, and of sun porches on the south side of the brooder house. With these two precautions plus proper care and feeding, chicks have been raised practically to maturity without setting foot on the soil.

The false wire floors are sanitary because they are self-cleaning and thus check the spread of parasites and disease. The wire is attached to wooden frames which hold it four or five inches above the floor. Sun porches in front of the house may have either wire or wooden floors and are screened in to keep out older chickens and other intruders.

Hall's Chicks

Leghorns-Reds-Rocks-Wyandottes

"WELL BRED FROM WELL BREEDERS"

New England Accredited stock. All breeders 100% White Diarrhea free

Week of	Grade	S. C. W. LEGHORNS	S. C. R. I. REDS	BARRED ROCKS	WHITE WYANDOTTES
May 6	A.....	16.00	20.00	22.00	25.00
	Special Matings.....	19.00	23.00	25.00	28.00
May 13	A.....	15.00	18.00	20.00	23.00
	Special Matings.....	17.00	20.00	23.00	26.00

Prices are per hundred. For orders of 25 chicks add 75c. For orders of 50 chicks add \$1.00.

We ship Prepaid and guarantee safe delivery

Everyone answering this advertisement will receive FREE our suggestions for brooding, feeding and rearing chicks.

Hall Bros.

POPLAR HILL FARM
BOX 59 WALLINGFORD CONN.

EIGENRAUCH FARMS

RED BANK,

NEW JERSEY

18TH YEAR

breeding White Leghorns for size, vigor and heavy production of large White EGGS. 8,000 LAYERS are housed on our farm.

Our Chick Guarantee

100% satisfactory arrival on the exact date we promise shipment. Every chick sold by us is hatched from eggs laid by breeders on our own farm.

Write for Free Folder and Prices on Pullets and Chicks

EIGENRAUCH FARMS Dept. G, Red Bank, N. J.

National "Superbred" Chicks

Insure your future poultry profits by ordering NATIONAL "SUPERBRED" CHICKS NOW

	50	100	500	1000
S. C. White, Brown and Buff Leghorns.....	\$6.75	\$13.00	\$62.00	\$120.00
Tancred & Hollywood White Leghorns.....	7.25	14.00	67.00	130.00
Barred & White Rocks, R. I. Reds.....	7.75	15.00	72.00	140.00
Wh. Wyandottes, Buff Orpingtons.....	9.00	17.00	82.00	160.00

Light Mixed—\$9.00 per 100. Heavy Mixed—\$10.00 per 100. Also Black Minorcas, White Minorcas, Anconas, Blue Andalusians and Jersey Black Giants. Send for our free catalog and prices on our Special Mated Chicks. We guarantee 100% live delivery. Member International Baby Chick Association.

NATIONAL CHICK FARMS, BOX 408, MIFFLINTOWN, PENNA.



Fairport Quality Chicks

are bred to make money for you. Strong, healthy, vigorous from the world's best and heaviest laying strains such as—Tancred, Ferris, Owen Farms, Daniels, Thompson, Martin, Shepard, Fishel and others. Free range flocks, scientifically culled and supervised. Smith Hatched. 100% live delivery guaranteed. 16 breeds 9c and up. Postpaid. Members International Baby Chick Association. Send now for free poultry book and prices. Buy Hatchery Chicks for Greater Profits.

FAIRPORT HATCHERIES Box 44 Fairport, N. Y.



Here: Nearly Everyone Raises

Full Blooded "AMERICAN" Quality Chicks

Write now for our new low prices. Your opportunity to get our special flock mating chicks at utility prices. Chicks shipped C. O. D. Catalogue and prices on request. 100% live arrival guaranteed. 15 breeds. Write now.

American Chickeries, Box 214, Grampian, Pa.



Schwegler's "THOR-O-BRED" BABY CHICKS

"LIVE AND LAY"

THEY LIVE because they are bred from healthy, free range breeders that have thrived and gained in vigor for generations. They LAY because they are from selected and tested high egg power stock. White, Brown and Buff Leghorns, Barred and White Rocks, R. I. Reds, Anconas, Black Minorcas, Buff Orpingtons, White Wyandottes, 12c and up. 100% live delivery guaranteed. Postpaid. Member International Chick Assn. Write today for FREE Chick Book.

SCHWEGLER'S HATCHERY, 204 Northampton, BUFFALO, N. Y.



BABY CHICKS

	25	50	100	500
White Leghorns.....	\$2.75	\$5.25	\$10.00	\$47.50
Barred Rocks.....	3.25	6.25	12.00	57.50
Rhode Island Reds.....	3.25	6.25	12.00	57.50
Heavy Mixed.....	2.75	5.25	10.00	47.50
Light Mixed.....	2.50	4.75	9.00	42.50
Pekin Ducklings.....	7.50	14.50	28.00	
Mixed Ducklings.....	6.50	13.00	25.00	

John Shadel Hatchery McAllisterville, Pa. Route 2.

Pennsylvania Co-Operative Leghorn Farms

Breeding COCKERELS with RECORDS to 303 EGGS. PURE TANCREED-HOLLYWOOD-BARRON STRAINS White Leghorns—Brown and Buff Leghorns—QUALITY EXTRAORDINARY—PRICE WAY DOWN—SHIP C. O. D. Get our prices quick.

Pennsylvania Co-Operative Leghorn Farms, Box 314, Grampian, Pa.

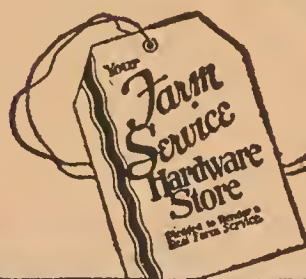
When writing advertisers be sure to say that you saw it in AMERICAN AGRICULTURIST

We Lighten Your Daily Burdens



REMEMBER the first time you ever used a food chopper to cut up the leftover meat for supper and how you wondered why you had spent so many hours and so much labor chopping it by hand in a wooden bowl? The chances are you bought the chopper in one of the hardware stores which are now so well known as "Farm Service" Hardware Stores. In bringing you that new device we took just one of the thousands of steps that we are constantly taking to help you make housekeeping an easier job. In our stores—remember there is one not far from you—we have many such conveniences to lighten your daily burdens and it is always a pleasure to have you come in and see them. At this time of the year you should be interested in a good gasoline or kerosene stove for they are surely a blessing during the hot summer months. The new styles have many improvements and are so safe, quick and dependable that you will learn to save many hours that you now spend in cooking and cleaning. It costs you nothing to come in and let us demonstrate them—why not early next week?

Look for
this tag
in their
window.



Your Farm Service HARDWARE STORES

Where prices are lower because you get personal help in the selection and maintenance of your purchases.



Prevents Rust Cleans and Polishes **FYR-PRUF** Stove and Nickel Polish

*Absolutely Fireproof, Dustless ~
Odorless, and gives a Beautiful
Luster ~ Only 15¢ per can ~
at all dealers*

WANTED

Your old and new
address if you are
moving this Spring.

AMERICAN AGRICULTURIST
461 Fourth Ave. New York



Cuticura SOAP

Fragrant, Antiseptic
Cleansing and Beautifying



**PARKER'S
HAIR BALSAM**
Removes Dandruff—Stops Hair Falling
Restores Color and
Beauty to Gray and Faded Hair
60c. and \$1.00 at druggists.
Hiscox Chem. Works, Patchogue, N. Y.

Cushion Comfort

Colored Covers Afford Decorative Note

WE have reason to be thankful that the day of elaborate over-trimmed cushions is past. They were made for adornment but not for comfort. You could not take a painted satin covered one and sit on it or tuck it round your neck without feeling that you were committing one of the unpardonable sins.

Cushions can be usable and beautiful also, brightening up a room and giving it an air of comfort that makes one feel at home.

Velvet or velveteen is splendid for covers and if of good quality will last

thentic information as to the propagation and culture of the various plants for the home, both indoors and out. The excellent illustrations are of great help in showing how to get best effects from flower plantings. Chapters are devoted to the topics of organizing a garden club and a community flower show, with its management exhibits and judging.

That part of the book devoted to arrangement of cut flowers in the home will appeal to every home-maker, while the information concerning the growing and care of house plants is no less valuable. It is very convenient to have in one condensed volume, lists of good varieties, methods of culture and how to keep healthy our flower friends of all kinds.

Professor Volz's experience as teacher in Cornell, Illinois and Iowa besides his correspondence through magazine contributions enables him to interpret the needs of both professional and amateur growers.

Kitchen Improvement Contest

For this, the fourth letter-and-sketch Kitchen Improvement Contest conducted by the New York State Federation of Home Bureaus, American Agriculturist giving the four state prizes, the following counties have enrolled: Cortland, Rensselaer, Cattaraugus, Chautauqua, Allegany, Chenango, Wayne, Tompkins, Monroe, Tioga, Onondago, Broome, Gates, Otsego.

For the completed Kitchen Contest, the Federation giving a twenty-dollar prize, four counties have enrolled.

Little Cooks Write

And still our little cooks write for scrapbooks! These books are just right to hold the pages of recipes for little cooks which appear each month in American Agriculturist. It is better to send the ten cents for your book in time to get all the recipes as they appear. Address Betty American Agriculturist, 461 Fourth Ave., New York City.

and look well for many years. A pretty idea is to use velvet in three colors in the bolster form of cushions. Three shades of brown or green are lovely.

A few yards of bright cretonne will make a change for the summer months. Furnishing damask is another useful and cheap material. Washable cushion covers can be made so that they are as easily removable as pillow slips. The material must be cut to the width desired and one side cut one and a half inches longer than the other. Make allowance also for an inch hem at the top. Stitch down hems and sew the other three sides together. When the case is turned right side out one hem will fold over the other one. Sew in position one inch from each end to keep them tidy. When the cushion is in place snaps or small loops and buttons will close the opening.—Mrs. T. T., Canada.

To Make Homes Music Centers

"Hear music—Make music—Enjoy music" is the slogan of the National Music Week Committee which is observing the week of May 5-11 as a time for all to take part in making music as well as hearing it. Nowadays it is so easy to get our entertainment ready-made that we are tempted to sit and listen instead of taking part ourselves. But music is such a vital part of our lives that we need to encourage active participation in its production by parent and child, by home and community.

The National Music Week Committee, 45 West 45th Street, New York City has a fine list of suggestions and materials which may be used in rural districts for observing Music Week. Their folders "Special Activities for schools during National Music Week" and "Home Night in National Music Week" may be had by requesting them from the Committee at the address given above.

New Gardening Book

Home Flower-Growing (\$3.50), is a new addition to MacMillan's Rural Science Series, written by Emil C. Volz, professor of floriculture at Iowa State College. To this volume the amateur gardener can turn for au-



INFANT'S CARRIAGE SET NO. 1911
will be most welcome to the young mother as it comprises a lovely set for Baby's carriage. It is stamped on good quality of pique and can be obtained in either yellow, tan, or Nile green. It consists of carriage robe, carriage pillow, bib, tray cloth, baby shoes, baby jacket, and a special doll all stamped for embroidery. Price postpaid \$2.00. Address Embroidery Department, American Agriculturist, 461 Fourth Ave., New York City.

Aunt Janet's Counsel Corner

An Orderly and Beautiful Room is Always a Restful Place

UPON a rocky New England hill farm from which a scant livelihood has been wrested by successive generations of plucky and persistent farmers lives a young woman who is a true daughter of her line. Not strong physically, cut off from much companionship by the loneliness of the farm and the constant driving work, she has steadfastly refused to let herself become just a discouraged, drudging woman.

She has given, it would seem, every ounce of her strength and courage to the daily round of family and household duties for which she and a semi-invalid mother are together responsible. Yet by some miracle she has always kept a tiny spark of energy, a reserve of fresh enthusiasm for something beside that daily round, something of the mind and spirit which might so easily become dulled from sheer physical fatigue.

It may be a few chapters of a recent book, or part of an embroidery design, or an old chair scraped and newly painted in the bright, modern fashion. There are few with whom she can talk over the book, or who will come to see the new table runner or re-painted chair, but from every

crowded day she saves a few precious moments for a little unhurried delving into some such occupation.

What has most interested me from year to year as I have visited the lonely farmhouse is the gradual evolution of this young woman's room. A teen-age girl when she first moved in, she decorated it with banners, calendars, pictures, post cards, magazine covers, snapshots, mottoes and "souvenirs." Now it is one of the most beautiful and restful rooms I have ever

boast some of the more modern pieces that other farm homes add from time to time.

There is an old wooden bed, one of the sort that had high head and footboards, and is now considered anything but beautiful. But it is enameled in a soft ivory, not so white as to hurt the eyes, yet always spotlessly clean, and over the covers is an old-fashioned unbleached muslin spread knotted in a soft rose color.

There is a square bedside table, also ivory-enameled and made from an old washbowl stand. It holds a small pottery lamp with a rose shade and a book or two.

A dresser, a larger table, a low wicker chair with cretonne covered cushions and one straight chair comprise the rest of the furniture. Most of the pieces have served many, many years, yet somehow they always seem fresh and new. Rose curtains of a soft unfading silk material give the windows a soft light, and two shelves for books, between the windows, are of a convenient height for the not-so-tall owner of the room. The walls are papered in a soft, light gray pattern and on the floor are small braided rag rugs.

Fortunately, "beauty is not a matter of dollars, but of sense!"—AUNT JANET.



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Children are hard enough on clothes without adding wash-tub rubbing to the wear. So do the family wash with Fels-Naptha—good golden soap combined with plenty of naphtha, the dirt-loosener "dry cleaners" use. You get the extra help of soap and naphtha working together—and together they remove even ground-in dirt without hard rubbing. For tub and for washing machine...

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New Softness



2779



Tiers for the Junior



2774



PATTERN No. 2774 copies the elder mode with its belt at normal waistline and the double circular tiered skirt. Made up in the pretty printed materials, any young girl would feel very correct in a dress of this design. The pattern cuts in sizes 6, 8, 10, 12 and 14 years. Size 8 requires 2 1/2 yards of 40-inch material with 1/8 yard of 27-inch contrasting. PRICE 13c.

seen in any of the countless homes I have visited in city or country. I believe that having her own room, loving it and really living in it has had a great share in the development of an awkward, self-conscious rather unhappy girl into the splendid woman I now find in charge of the farmhouse on the hill.

It has been at times, and as the mood seized her, a haven of refuge, a battleground, an experiment field, a dream-castle and actually almost a living comrade. Into it has gone much of the planning and the achievement of those scant daily moments of leisure, and somehow their quiet spirit seems to have passed into the entire room.

Do you want to know what it is like, this room that has meant so much in a woman's life? It contains no unusual pieces of furniture, no startling decoration. Indeed, so poor is the farm land from which the living of the family must come that very, very little money has been available for "extras" and the room cannot even

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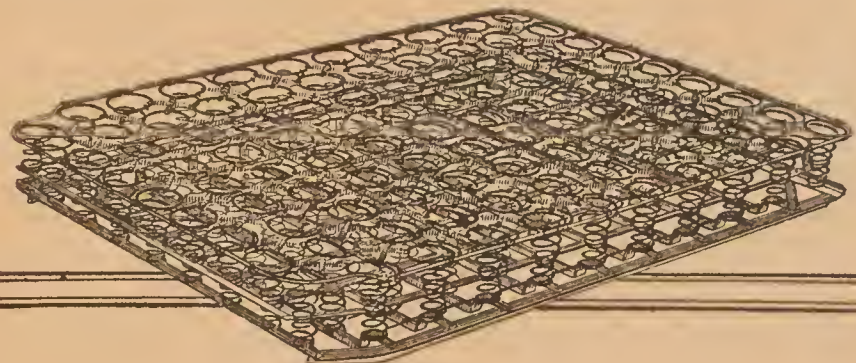
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PATTERN No. 2779 with its attractive front closing and soft fullness in the skirt will appeal to women who prefer conservative lines. Dull black silk crepe with vestee of eggshell crepe silk would make a very attractive combination for this design. The pattern cuts in sizes 16, 18 years, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 36 requires 3 1/2 yards of 40-inch material with 1 1/2 yards of 3-inch lace and 3/8 yard of 40-inch contrasting. PATTERN PRICE 13c.

TO ORDER: Write name, address, pattern sizes and numbers clearly and correctly and inclose with remittance in stamps or coin (although coin is sent at own risk). Add 12c for one of the new fashion catalogues and send to Pattern Department, American Agriculturist, 461-4th Avenue, New York City.

The Little Shepherd of Kingdom Come *By John Fox, Jr.*

THEY were crossing the field now. "I have seen Melissa," said Margaret, suddenly. Chad was so startled that he stopped in the path.

"She came all the way from the mountains to ask if you were dead, and to tell me about—about your mother. She had just learned it, she said, and she did not know that you knew. And I never let her know that I knew, since I supposed you had some reason for not wanting her to know."

"I did," said Chad, sadly, but he did not tell his reason, Melissa would never have learned the one thing from him as Margaret would not learn the other now.

"She came on foot to ask about you and to defend you—against me. And she went back afoot. She disappeared one morning before we got up. She seemed very ill, too, and unhappy. She was coughing all the time and I wakened one night and heard her sobbing, but she was so sullen and fierce that I was almost afraid of her. Next morning she was gone. I would have taken her part of the way home myself. Poor thing!" Chad was walking with his head bent.

"I'm going down to see her before I go West."

"You are going West—to live?"

"Yes."

They had reached the yard gate now which creaked on rusty hinges when Chad pulled it open. The yard was running wild with plantains, the gravelled walk was overgrown, the house was closed, shuttered, and dark, and the spirit of desolation overhung the place, but the ruin looked gentle in the moonlight. Chad's throat hurt and his eyes filled.

"I want to show you the last thing he did," said Margaret. Her eyes lighted with tenderness and she led him wondering down through the tangled garden to the old family graveyard.

There was the grave of the Major's father which he knew so well; next that, to the left, was a new mound under which rested the Major himself. To the right was a stone marked "Chadwick Buford, born in Virginia, 1750, died in Kentucky"—and then another stone marked simply:

Mary Buford.

"He had both brought from the mountains," said Margaret, softly, "and the last time he was out of the house was when he leaned here to watch them buried there. He said there would always be a place next your mother for you. 'Tell the boy that,' he said." Chad put his arms around the tombstone and then sank on one knee by his mother's grave. It was strewn with withered violets.

"You—you did that, Margaret?"

Margaret nodded through her tears.

The wonder of it! They stood very still, looking for a long time into each other's eyes. Could the veil of the hereafter have been lifted for them at that moment and they have seen themselves walking that same garden path, hand in hand, their faces seamed with age to other eyes, but changed in not a line to them, the vision would not have added a jot to their perfect faith. They would have nodded to each other and smiled—"Yes, we know, we know!" The night, the rushing earth, the star-swept spaces of the infinite held no greater wonder than was theirs—they held no wonder at all. The moon shone, that night, for them; the wind whispered, leaves danced, flowers nodded, and crickets chirped from the grass for them; the farthest star kept eternal lids apart just for them and beyond, the Maker himself looked down, that night, just to bless them.

Back they went through the old gar-

den, hand in hand. No caress had ever passed between these two. That any man could ever dare even to dream of touching her sacred lips had been beyond the boy's imaginings—such was the reverence in his love for her—and his very soul shook when, at the gate, Margaret's eyes dropped from his to the sabre cut on his cheek and she suddenly lifted her face.

"I know how you got that, Chad," she said, and with her lips she gently touched the scar. Almost timidly the boy drew her to him. Again her lips were lifted in sweet surrender, and every wound that he had known in his life was healed.

"I'll show you your horse, Chad."

They did not waken old Tom, but went around to the stable and Chad led

"Yes, you must go down in the mountains first," Margaret was saying, "and see if there is anything you can do for the people who were so good to you—and to see Melissa. I am worried about her."

"And then I must come back to you?"

"Yes, you must come back to see me once more, if you can. And then some day you will come again and buy back the Major's farm"—she stopped, blushing. "I think that was his wish, Chad, that you and I—but I would never let him say it."

"And if that should take too long?"

"I will come to you, Chad," said Margaret.

Old Mammy came out on the porch as they were climbing the stile.

"Ole Miss," she said indignantly,

might disturb the dead girl's sleep, the two talked on the porch. Brokenly, the old woman told Chad how the girl had sickened and suffered with never a word of complaint. How, all through the war, she had fought his battles so fiercely that no one dared attack him in her hearing. How, sick as she was, she had gone, that night, to save his life. How she had nearly died from the result of cold and exposure and was never the same afterward. How she worked in the house and in the garden to keep their bodies and souls together, after the old hunter was shot down and her boys were gone to the war. How she had learned the story of Chad's mother from old Nathan Cherry's daughter and how, when the old woman forbade her going to the Bluegrass, she had slipped away and gone afoot to clear his name. And then the old woman led Chad to where once had grown the rose-bush he had brought Melissa from the Bluegrass, and pointed silently to a box that seemed to have been pressed a few inches into the soft earth, and when Chad lifted it, he saw under it the imprint of a human foot—his own, made that morning when he held out a rose-leaf to her and she had struck it from his hand and turned him, as an enemy, from her door.

Chad silently went inside and threw open the window to let the last sunlight in: and he sat there with his face as changeless as the still face on the pillow, sat there until the sun went down and the darkness came in and closed softly about her. She had died, the old woman said, with his name on her lips.

Dolph and Rube had come back and they would take good care of the old mother until the end of her days. But Jack—what should be done with Jack? The old dog could follow him no longer. He could live hardly more than another year, and the old mother wanted him—to remind her, she said, of Chad and of Melissa, who had loved him. He patted his faithful old friend tenderly and, when he mounted Dixie, late the next afternoon, Jack started to follow him.

"No, Jack," said Chad, and he rode on, with his eyes blurred. On the top of the steep mountain he dismounted, to let his horse rest a moment, and sat on a log, looking toward the sun. He could not go back to Margaret and happiness—not now. It seemed hardly fair to the dead girl down in the valley. He would send Margaret word, and she would understand.

Once again he was starting his life over afresh, with his old capital, a strong body and a stout heart. In his breast still burned the spirit that had led his race to the land had wrenched it from savage and from king, had made it the high temple of Liberty for the worship of freemen—the Kingdom Come for the oppressed of the earth—and, himself the unconscious Shepherd of that Spirit, he was going to help carry its ideals across a continent Westward to another sea and on—who knows—to the gates of the rising sun. An eagle swept over his head, as he rose, and the soft patter of feet sounded behind him. It was Jack trotting after him. He stopped and took the old dog in his arms.

"Go back home, Jack!" he said.

Without a whimper, old Jack slowly wheeled, but he stopped and turned again and sat on his haunches—looking back.

"Go home, Jack!" Again the old dog trotted down the path and once more he turned.

"Home, Jack!" said Chad.

The eagle was a dim, black speck in the band of yellow that lay over the rim of the sinking moon, and after its flight, horse and rider took the westward way.

Beginning Next Week

"The Plains of Abraham"

THE last installment of "The Little Shepherd of Kingdom Come" appears in this issue. We know you have been looking forward to the first installment of "The Plains of Abraham" which will be printed next week. You will enjoy this tale of New York State and colonial times and we believe that you will agree that it is one of the finest serials ever printed in American Agriculturist. You will follow the amazing adventures of Jeems Bulain, his uncle, Hepzibah, Toinette and Shindas until the very end of the story.

Many spots in northern New York where Jeems spent his boyhood will be familiar to our readers. Others in central New York will recognize the location of the Indian village where Jeems and Toinette spent some time following their capture by the Indians. Do not fail to read the first installment which will appear in next week's issue.

out a handsome colt, his satiny coat shining in the moonlight like silver. He lifted his proud head, when he saw Margaret, and whinnied.

"He knows his mistress, Margaret—and he's yours."

"Oh, no, Chad."

"Yes," said Chad, "I've still got Dixie."

"Do you still call her Dixie?"

"All through the war."

Homeward they went through the dewy fields.

"I wish I could have seen the Major before he died. If he could only have known how I suffered at causing him so much sorrow. And if you could have known—"

"He did know and so did I—later. All that is over now."

They had reached the stone wall and Chad picked up the flag again.

"This is the only time I have ever carried this flag unless I—unless it had been captured."

"You had captured it, Chad."

"There?" Chad pointed to the stile and Margaret nodded.

"There—here—everywhere."

Seated on the porch, Mrs. Dean and Harry and Dan saw them coming across the field and Mrs. Dean sighed.

"Father would not say a word against it, mother," said the elder boy, "if he were here."

"No," said Dan, "not a word."

"Listen, mother," said Harry, and he told the two about Chad's ride for Dan from Frankfort to Lexington. "He asked me not to tell. He did not wish Margaret to know. And listen again, mother. In a skirmish one day we were fighting hand to hand. I saw one man with his pistol levelled at me and another with his sabre lifted on Chad. He saw them both. My pistol was empty, and do you know what he did? He shot the man who was about to shoot me instead of his own assailant. That is how he got that scar. I did tell Margaret that."

"my Tom say that he can't get nary a trifin' nigger to come out hyeh to wuk, an' ef that cawnfiel' ain't ploughed mighty soon, it's gwine to bu'n up."

"How many horses are there on the place, Mammy?" asked Dan.

"Hosses!" sniffed the old woman. "They ain't nary a hoss—nothin' but two ole broken-down mules."

"Well, I'll take one and start a plough myself," said Harry.

"And I'll take the other," said Dan. Mammy groaned.

And still the wonder of that night to Chad and Margaret!

"It was General Hunt who taught me to understand and—forgive. Do you know what he said? That every man, on both sides, was right—who did his duty."

"God bless him," said Chad.

XXXI

THE WESTWARD WAY

MOTHER TURNER was sitting in the porch with old Jack at her feet when Chad and Dixie came to the gate—her bonnet off, her eyes turned toward the West. The stillness of death lay over the place, and over the strong old face some preternatural sorrow. She did not rise when she saw Chad, she did not speak when he spoke. She turned merely and looked at him with a look of helpless suffering. She knew the question that was on his lips, for she dumbly motioned toward the door and then put her trembling hands on the railing of the porch and bent her face down on them. With sickening fear, Chad stepped on the threshold—cap in hand—and old Jack followed, whimpering. As his eyes grew accustomed to the dark interior, he could see a sheeted form on a bed in the corner and, on the pillow, a white face.

"Melissa!" he called, brokenly. A groan from the porch answered him, and, as Chad dropped to his knees, the old woman sobbed aloud.

In low tones, as though in fear they

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GLADIOLUS \$1.00 Blooming Bulbs \$1.00. 12 choice Dahlias \$1.00. Catalogue. 20 Evergreen Trees \$2.00. **GLADAILIA FARMS,** Chicopee Falls, Mass.

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CERTIFIED SEED POTATOES. Irish Cobblers and original strain Carman No. 3. Buy direct from grower. Write today for prices. **N. A. BAKER & SONS,** Fairport, N. Y.

DAHLIA TUBERS 25-\$2.00. Good large varieties, postpaid. Shrubs, Roses, price list. **EDGEWOOD FARM,** R. 2, Jamesburg, N. J.

A GREEN DAHLIA at last, this marvelous freak of nature and 10 Giant labeled Dahlias \$2.50. Regular value \$7.50. 12 beautiful labeled Dahlias all colors for \$1. worth \$3.50. **BOLTS DAHLIA FARM,** Stepieney, Conn.

FREE GLADIOLUS BOOK—36 pages, 45 illustrations. Describes 171 exquisite varieties, many new. Tells how to grow. It's free! The famous beautiful Rainbow Collection of thirty bulbs, all different, \$1. postpaid. **HOWARD GILLET,** Gladiolus Specialist, Box J, New Lebanon, N. Y.

COOK'S CERTIFIED POTATOES. Cobblers and Russets. Better than ever. Attractive prices. We pay freight. **IRVING E. COOK,** Munsville, N. Y.

LARGE GLADIOLUS BULBS. Joy mixture \$2.50 per 100; Glad mixture \$1.25 per 100. Small bulbs, named varieties, ten kinds \$1.50 per 100, delivered, circular free. **BRANDON GLADIOLUS FARM,** Brandon, Vt.

FOR SALE. Asparagus roots, Mary Washington, one year old, unusually heavy, averaging about one hundred pounds per thousand. Sample sent on request. Write for prices, specifying number wanted. **FRANCIS C. STOKES & CO.,** Seedsmen, 235 South 6th Street, Philadelphia, Pa.

MILLIONS OF OPEN field grown tomato plants, Baltimore, Stone, Earliana, Bonnio Best, Chalk Early Jewel, Matchless, \$1—1000, Ruby King Popper plants \$2—1000, Potato plants \$1.75—1000, Cabbage plants 75c—1000. Safe arrival guaranteed, all plants ready. **SIMS POTATO PLANT CO.,** Pembroke, Ga.

GLADIOLUS, FIVE LARGE bulbs of 10 varieties \$1.00 postpaid. **FRANCES FLOWER GARDENS,** Sardis, Miss.

APPLE TREES, BALDWIN, Cortland, Delicious, Greening, McIntosh Red, Northern Spy, Wealthy, 2 year, 4 to 6 ft., 25c each, \$20 per 100. Elberta, Hale, Rochester, St. John Peach trees, 3 to 4 ft., 20c. Concord Grape vines 2 years, \$8 per 100, one year \$5 per 100. Hardy Hydrangea 25c each. Evergreens, Shrubs, Roses at special prices. A dollar saved is a dollar made. Send for Catalogue and let us tell you more about our products. **THOMAS MARKS & CO.,** Wilson, Niagara, County, N. Y.

Additional Classified Advertising

On Page 31

HANDY ANDY Says "Here's How"

To Eradicate Fleas

By Ray Inman

FLEAS DEVELOP IN DIRT AND DEBRIS

to eliminate them, clean refuse out of infested buildings

BOSTON, MASS.

ST. LOUIS, MO.

CLEAN, N.Y.

COLLARBUTTON, ALA.

SHINBONE, VT.

WHERE BODY WAS FOUND

Sprinkle

WHERE THE SAM HILL DIDJA GIT THEM FLEAS IN THE FIRST PLACE, IRV?

OFF THE BUFFALO ON A NICKEL, I WAS CARRYIN' AROUND!

Better still

REMOVE ANIMALS & SPRINKLE CALCIUM CYANIDE ON FLOOR

(ONE POUND TO EACH 400 SQ. FT.)

THIS, FERG, IS CALCIUM CYANIDE. IT'S TOUGH ON RATS, MICE, LICE, FLEAS, GROUNDHOGS, WEASILS, BUGS, ANTS, FLIES, SKUNKS, WEENILS, CHIPMUNKS AND MOLES

YEAH?—WELL IT WON'T DO ME NO GOOD—ALL I GOT IS WARTS!

KEEP ALL ANIMALS AND PERSONS OUT OF BUILDING 12 HOURS

AIR IT WELL BEFORE RETURNING THEM

HOW DO YOU EXTERMINATE YOUR FLEAS ADRIAN?

WITH MY FLEA FLUTE.

WHEN I WALK THROUGH TH' BARN PLAIN THIS FLUTE THE FLEAS HEAR IT AND COME HOPPIN' AFTER ME. I LEAD 'EM TO THE OL' BACK PORCH BENCH WHERE AUNT MINNIE, WHO WEIGHS 250 LBS. COMES OUT AN' SITS DOWN ON 'EM. THAT GIVES 'EM FLAT FEET. NO A FLAT FOOTED FLEA CANT HOP, AND A HOPLESS FLEA IS HOPLESS. HE'S LIKE PUTTY IN YOUR FINGERS. -WHAT? YOU NEVER HAD PUTTY IN YOUR FINGERS? SHUX! WHATSA USE O' TALKIN TO YOU

Additional Classified Advertising

SEEDS—NURSERY STOCK

SPRING GROWN CABBAGE plants, leading varieties; 1,000, 85c; 5,000, up, 75c. Early and Late Tomatoes, \$1; Pepper \$2. **BURGESS PLANT FARMS**, Pembroke, Ga.

SEED CORN—West Branch Sweepstakes for sale. Greatest ensilage corn grown. Germination 98% when tested. \$3.00 per bushel. **A. L. WINTER & SON**, Montoursville, Pa.

FROSTPROOF CABBAGE PLANTS 75c, 1000; Bermuda Onion \$1.00; Collards 75c; Tomatoes \$1.00; Ruby King Pepper \$2.00; Porto Rico Potato Plants \$2.00. **QUITMAN PLANT CO.**, Quitman, Ga.

4,000,000 **SWEET POTATO PLANTS** Yellow Jersey, Big Leaf, Up River, \$1.50 per 1000. Gold Skin, Red Nansemond, Nancy Hall, and Southern Queen. \$1.75 per 1000. **C. E. BROWN**, Bridgeville, Del.

BERMUDA ONION PLANTS—Grow bigger and better Onions. Postpaid: 200-60c; 500-\$1.00; 1,000-\$1.75. Transplanted Cabbage: 50-55c; 100-90c; 1,000-\$7.50. Transplanted Tomato, Pepper, Aster: Three dozen 45c; 500-\$5.00. **PORT MELLINGER**, North Lima, Ohio.

STRAWBERRY PLANTS, Millions of them, Northern Grown. Howard 17, Meteor, Missionary, Haverlands, Gibson \$7.50 per thousand. Senator Dunlap, Warfields \$7.00. Plants grown on new land. State inspected and true to name. Over 30 years in the business. **M. A. JENKINS**, Bradford, Va.

BUY GRIMM ALFALFA Seed Now! Lyman's Seed traces to original Grimm stock. Hardest of alfalfas and highest in feeding value. Yields for years without replanting. Seed scarified to increase germination. Also sweet clover and red clover. Order early! **A. B. LYMAN**, Introducer, Excelsior, Minn.

CAULIFLOWER PLANTS ready May 10th. Field grown. Catskill Mountain Snowball, Long Island Snowball, Extra Early Erfurt \$4.50 per 1000; 500, \$2.50; 200, \$1.50. Cabbage Plants ready May 10th: Copenhagen Market, Early Jersey Wakefield, Glory, Succession, Danish Ballhead, \$2.00 per 1000. 500, \$1.50. **F. W. ROCHELLE & SONS**, Chester, New Jersey.

LORDS GOLDEN AGE extra early yellow sweet corn. Good size, productive, tender, deliciously sweet. The originator has grown it ready for the table 57 days from planting. \$1, quart; \$1.70, 2 quarts; \$2.50, 4 quarts; \$4.50, peck; \$6.50 half bushel; \$12.00 bushel. **JAMES E. LORD**, Stonington, Conn.

STRAWBERRY PLANTS: Senator Dunlap, 100, 90c; 300, \$2.25; 500, \$3; 1000, \$5. Premier—Gibson—Big Joe—Cooper—Stevens Late Champion, 100, \$1; 300, \$2.50; 500, \$3.50; 1000, \$6. Everbearing, Champion, 25, 75c; 50, \$1; 100, \$1.50; 500, \$5; 1000, \$10. Mastodon, Everbearing, 25, \$1; 50, \$1.75; 100, \$3; 200, \$5; 500, \$8; 1000, \$16. Figure each variety separate. Write for prices on Black, Purple and Red raspberry plants. Our plants are strictly fresh dug, from new fields. **F. G. MANGUS**, Maple View, N. Y.

MARY WASHINGTON ASPARAGUS roots \$1.25 per 100; \$8., per 1000. **BASIL A. PERRY**, Georgetown, Delaware.

SEND \$1 for 12 Labeled Dahlias, flowers of marvelous beauty, all colors, regular value \$3.50. **BOLTS DALLIA FARM**, Stepney, Conn.

CAULIFLOWER PLANTS, 100-60c; 1,000-\$4.00; 5,000-\$18.00. Cabbage plants, 100-40c; 1,000-\$2.50; 5,000-\$10.00 prepaid. **E. FETTER**, Lewisburg, Pa.

STRAWBERRY PLANTS, Bubach, Corsican, \$1.25 per 100 postpaid. Delicious, Warfield, Dunlap, \$1.00 per 100. Free circular. **W. G. SEUBERT**, Camden, N. Y.

FROSTPROOF CABBAGE PLANTS 75c, 1000; Bermuda Onion \$1.00 Collards 75c; Tomatoes \$1.00; Ruby King Pepper \$2.00; Porto Rico Potato Plants \$2.00. **QUITMAN PLANT CO.**, Quitman, Ga.

FINE OUTDOOR GROWN Cabbage Plants—300, 75c; 500, \$1.00; 1000, \$1.50 prepaid. 5,000, \$5.00 expressed. Tomato & Onion Plants \$1.50 thousand. Pepper and Sweet Potato Plants \$2.50 expressed. All now ready. Prompt shipments, good delivery guaranteed. **OLD DOMINION PLANT COMPANY**, Franklin, Va.

FINE FROSTPROOF CABBAGE and Onion Plants—Copenhagen Market, Ballhead, Wakefields, etc. 300, \$1.00; 500, \$1.50; 1000, \$2.50; Prepaid, 10,000, \$10.00 Expressed. Tomato Plants—300, \$1.50; 500, \$2.00; 1000, \$3.50 Prepaid, 10,000, \$15.00 Expressed. Pepper & Sweet Potato Plants—500, \$2.50; 1000, \$4.00 Prepaid, 10,000, \$25.00 Expressed. Transplanted Tomato and Pepper Plants 100, \$1.50; 500, \$5.00; 1000, \$8.00; 5000, \$35.00. Good delivery guaranteed or money refunded. **J. P. COUNCILL COMPANY**, Franklin, Va.

VEGETABLE SEEDLINGS ready now for you to transplant into cold frames or greenhouse. Peppers—Ruby King, Worldbeater, Bull Nose, Sweet Cheese, Sunnybrook, and Chinese Giant \$3.00 per 1000. Tomatoes—Langdon's Earliana, Penn State Earliana, Marglobe, Chalk's Early Jewel, Bonny Best, John Baer, Stone and Matchless \$3.00 per 1000. Egg Plant—Black Beauty and New York Improved \$5.00 per 1000. Send for free list of Transplanted and Potted Plants ready for field setting. **PAUL F. ROCHELLE**, Morristown, N. J.

CERTIFIED BERRY PLANTS, Columbian purple also Kansas, Cumberland, Plum Farmer, Black Caps. Prices 60c doz. \$3 hundred delivered. **CHAS. WHEELER**, Mannsville, N. Y.

CERTIFIED LATHAM AND HERBERT RASPBERRIES, Howard 17 and Mastodon Strawberries, Washington Asparagus. Other leading varieties Raspberries, Strawberries, Blackberries, Fruit trees, Shrubs, Evergreens, etc. Prices low. Everything guaranteed. Send for price list. **BERT BAKER**, Hoosick Falls, N. Y.

FREE GLADIOLUS BOOK—36 pages, 45 illustrations. Describes 171 exquisite varieties, many new. Tells how to grow. It's free! The famous beautiful Rainbow Collection of thirty bulbs, all different, \$1. postpaid. **HOWARD GILLET**, Gladiolus Specialist, Box J. New Lebanon, N. Y.

HELP WANTED

SINGLE MAN WANTED on farm \$60 per month and board. Must be good milker and quick and willing worker. No old men or boys answer. State age, nationality and when available. **CHESTER SMITH**, Cold Spring, Putnam Co., N. Y.

SITUATIONS WANTED

DO YOU NEED FARM HELP? We have Jewish young men, able-bodied, some with, but mostly without experience, who want farm work. If you need a good, steady man, write for an order blank. Ours is not a commercial agency. We make no charge. **THE JEWISH AGRICULTURAL SOCIETY, Inc.**, Box A, 301 E. 14th Street, New York City.

EXPERIENCED GARDENERS, FARMERS, Milkmen, laborers supplied immediately. **INTERNATIONAL LABOR AGENCY**, 153 Bowery, N. Y. C.

AGENTS WANTED

AGENTS: SELL TROUSERS, Overalls, Dry Goods, Etc. Some advertised brands. Write **FREEMAN E. HUNTER CO.**, Riverton, N. J.

BIG OIL CORPORATION wants county manager. \$50 weekly commission. Earnings start immediately. Good for \$5000 yearly. We furnish everything, deliver and collect. Capital or experience unnecessary. **Fry-Fyter Co.**, 1884 Fry-Fyter Bldg., Dayton, Ohio.

AGENTS: \$16 day and New Buick Auto Free. Sell groceries. Over 400 items used daily every home. Steady all year job. Your own groceries about half price. Send for samples. **HARLEY COMPANY**, Dept. E-2265, Dayton, Ohio.

WANTED TO BUY

WANTED—HAY, GRAIN, Potatoes, Apples, Cabbage, Carrots. Pay highest market prices. **THE HAMILTON CO.**, New Castle, Pa.

WANTED TO BUY old bags. We pay excellent prices. Write for prices. We pay freight. **OWASCO BAG CO.**, Rochester, N. Y.

FARMS FOR SALE

62 ACRES—Under good cultivation, 7 acres timber. Good buildings, near school, just off improved road, gas lights. **EUGENE SINCEBAUGH ESTATE**, Route 4, Ithaca, N. Y.

FARM FOR SALE 5%, general farming, poultry, garden trucking, muskrat farming. **E. L. GROSS**, Clymer, N. Y.

VILLAGE FARM 100 acres, 14 milk cows, horses, 40 hens, equipment. \$6500, \$1000 down. \$250 yearly. Write **MR. DOUGLAS**, Herkimer, N. Y.

LIVE GOOD WHILE MAKING A GOOD LIVING ON THE DEL-MAR-VA PENINSULA. Low-priced, productive land, town and waterfront homes. Three to ten hours to largest Eastern markets by motor or Pennsylvania Railroad. Very little snow and freezing. Finest concrete highways. Good schools, low taxes. Handsome descriptive booklet, FREE. Address 164 Del-Mar-Va Building, Salisbury, Md.

COD LIVER OIL

Pure Golden Cod Liver Oil for poultry animal feeding. Richest known anti-rachitic and growth promoting food. Five gallons \$6.75, 10 gallons \$13., at New York, special prices on barrels. **CONE IMPORT COMPANY**, 624 Kent Ave., Brooklyn, N. Y.

MISCELLANEOUS

WANTED USED BAGS any quantity and grade. Highest prices and freight paid. **HOFFMAN BROS. BAG CO.**, 39 Gorham St., Rochester, N. Y.

USED CIVIL WAR ENVELOPES with flags, designs, etc., \$1 to \$15 paid. Other stamps on envelopes before 1871 bought. Three-face lamps and old glassware bought. **W. RICHMOND**, Cold Spring, N. Y.

BALSAM PILLOWS filled with fresh Adirondack Balsam \$1.25 postpaid. Makes an ideal gift. Fill your own pillow; enough balsam in bulk for two pillows. \$1.00 postpaid. **WONDER GIFT SHOP**, Box 24, Newcomb, N. Y.

BUY YOUR AUTO. Camp and Bed Blankets direct from Mill. All wool Khaki Camp blankets 3 lbs. 66x90, \$3.25 each. Two for \$6.35; 4 lb. \$4.25, two for \$8.35. Postpaid. Also Auto, Steamer Rugs and Bed Blankets. Satisfaction or money back. **ASHWORTH BLANKET MILL**, Westbrookville, N. Y.

HONEY. Fine quality clover Autumn flower blend \$5.00 per 60 lbs. **J. G. BURTIS**, Marietta, N. Y.

FOR SALE—Factory fully equipped; adjacent railroad. Use as creamery, ice cream, or bottling works. Write **W. J. CURTIS**, Ransomville, N. Y.

KEOUGH'S—Poul remedy. For fowls or hoof rot. Used by farmers for over 25 years. Satisfaction or money back. Get a bottle at your druggist or feed dealer or send one dollar for a bottle. **KEOUGH PHARMACAL COMPANY**, Box A, New Berlin, N. Y.

TOBACCO

NATURAL LEAF TOBACCO—Best grade, guaranteed. Chewing, 5 pounds, \$1.00; 12, \$2.00. Smoking, 10, \$1.50, pipe free. Pay when received. **VALLEY FARMERS**, Murray, Kentucky.

HOMESPUN TOBACCO—Guaranteed. Chewing, 5 lbs., \$1.25; 10, \$2.00. Smoking, 5 lbs., \$1.00; 10, \$1.50. Pay when received. **FARMERS UNION**, Mayfield, Kentucky.

GUARANTEED HOMESPUN TOBACCO. Chewing, 5 lbs. \$1.50; 10-\$2.50. Smoking, 10, \$1.75. Pipe Free. Pay Postman. **UNITED FARMERS**, Bardwell, Ky.

CIGARS FROM FACTORY—Trial 50 large Perfectos postpaid \$1.00. **SNELL CO.**, Red Lion, Pa.

WOMEN'S WANTS

SPECIAL VALUE, while they last. 6 Piece Ruffled Cottage Sets Neatly made of good quality White Muslin. Size of Lower Curtain 33x30. Size of Upper Curtain 44x31, 3 inch Ruffle. Tiebacks, 11x11 and Headed per set 50c. 6 Turkish Towels size 20x36 splendid Quality Double Loop Pure White unhemmed. Pay postman \$1.00 plus postage. Silks or velvets, large package 25c postpaid. **NATIONAL TEXTILE CO.**, 95 B Street, South Boston, Mass.

The Question Box



EDITOR'S NOTE: The editorial staff of **AMERICAN AGRICULTURIST** is always ready to aid readers by answering questions on farm problems. Questions are answered by personal letter. Only questions that are of general interest to readers are printed so it is necessary that all letters be signed with your full name and address.

* * *

Installing Tile Drains

At present prices, is it probable that it pays to install tile drainage?—**J. W.**, New York.

FOR a number of years during the World War the amount of tile drainage put in was rather small due to the heavy cost. At the same time, those who had installed drainage several years before certainly profited heavily from it. Under present conditions there may be some doubt as to whether it pays the general farmer to install a complete system of tile drainage. We do believe it would pay well to drain wet spots on general or dairy farms. It is also probable that it will pay to tile drain muck soils on other land that needs drainage and has a very high acre value if it is put in shape for proper production. Tile drains are a long-time investment and as such, all factors should be carefully considered before coming to a decision.

It Helps to Know Fertilizer Ingredients

Is it important to know the ingredients contained in a mixed fertilizer?—**I. W.**, New York.

AT one time considerable emphasis was given to the fact that an open formula for fertilizer enabled the purchaser to know what ingredients are used and to avoid those which contain heavy amounts of low grade materials. Recently, however, the importance of knowing ingredients has been emphasized from another angle. For example, sulphate of ammonia is better than nitrate where there is danger of potato scab. At the same time, cauliflower needs a sweet soil and should not be fertilized heavily with a fertilizer containing much sulphate of ammonia.

Sow Fails to Raise Pigs

I have a sow that has had two litters of pigs last summer. She had nine pigs, they lived about two weeks and then commenced to die. The first you would notice they would commence to squeal, roll on their sides and die. I fed separator milk, after she farrowed then ground oats and barley and separator milk with oats and barley before she farrowed. This spring she had ten pigs. I hardly fed anything but milk from separator and lost every one the same as before. She was not very fat. She is a big milker. What is the matter?—**F. O.**, New York.

IT is very evident that for some reason the sow is definitely at fault for the loss of the pigs. There is really nothing wrong with the ration you mention provided the proportion of separator milk to the grain was about right. There is of course a possibility that your separator milk had been overheated in pasteurization but you can readily find out if this was true. Such feeds as separator milk however, can be easily overfed especially if they constitute the major portion of the ration. We have been able to produce symptoms in the pigs very much as you mention by feeding the sows highly on such feeds as beef scraps. We noticed considerable dysentery among the pigs and you will recall probably whether your pigs were affected this way or not. Of course it is just possible that the sow's milk is not right and that you could not correct it with any kind of feeding.

I suggest that you do not give your sow very much grain this summer and that she be given a run and pasture. Under such conditions she would not

need more than a couple of pounds of oats and barley a day to which has been added about a gallon of skim milk. Let her rustle for the rest of her diet. If bran is available mix some bran with the oats and barley if you do not have good pasture. As farrowing time approaches, if the sow has not taken on sufficient condition you may raise the feed to about double the weight stated.

If this condition occurs again this coming fall I think I would conclude that the sow is not normal and that it would not pay to rebreed her.—**PROFESSOR R. B. HINMAN**.

Fall Best Time to Seed Lawns

When is the best time to seed a lawn? What fertilizer or manure is best to use and what is a good grass seed mixture to sow? What is the right amount to sow?—**L. F.**, New York.

CONTRARY to the general idea, the fall is a better time than spring to start a lawn. This is mainly because weeds will cause less trouble in the fall. The work should be done in August so that the grass will get a good start before winter. There is nothing better than well rotted manure for the lawn but in using it, care should be taken that a lot of weed seeds are not added. Pulverized sheep manure is good but it seems hardly advisable to buy it to use on farms as the cost is a little high. Droppings scraped from the dropping boards in the hen house will be free from weeds. If commercial fertilizer is used, nitrate of soda will be good if a grass lawn is wanted while if clover is also sown, acid phosphate will also be needed.

Considerable risk is taken in buying lawn grass mixtures especially in small packages. They are likely to contain some weed seeds and some grass seed that is not suited for lawns. A mixture of two parts Kentucky Blue grass to one part of Red top makes a good mixture. White clover may be added if desired. One ounce per square yard is the proper amount to seed.


Roughage for Growing Heifers

Is it advisable to feed growing heifers heavily on roughage?—**M. W.**, New York.

ROUGHAGE in generous quantities is believed to develop the digestive capacity of heifers. It is, however, important that good roughage be used if the heifer is expected to grow rapidly. Good clover or alfalfa hay will be relished at an early age and silage can be fed after the heifer is six months old.




"Peppermint, me eye!"—**LIFE**.



The Service Bureau

A Department Devoted to the Interests, Welfare and Protection of A. A. Readers



The New York School Meeting Law

THE New York State Education Law provides that the annual school district meetings shall be held the first Tuesday in May and that unless some other place and time of meeting has been fixed at the previous meeting, it should be held in the schoolhouse at 7:30 P. M. It is provided that the meeting must be held on this date and no one, either the trustee or the district itself, is legally entitled to change the date or place. No one has authority to hold the meeting at an earlier hour than 7:30, but in case the business is delayed to an unreasonably late hour it provides a chance for anyone to make an appeal to the Commissioner of Education and gives the Commissioner an opportunity to declare the meeting illegal.

While the Law states that it is the duty of the district clerk to give notice of the time and place of the meeting by posting five notices in five conspicuous places at least five days before the date of the meeting, one of them being posted on the front door of the schoolhouse, failure of the clerk to post these notices does not make the meeting illegal or ineffective, because the Law specifically fixes the time of the annual meeting.

The Order of Business

If the trustee is present he calls the meeting to order. If he is not present the clerk acts in the capacity, but in case neither of these are present, any legal voter of the district may call the meeting to order. A qualified voter is then nominated as chairman and on election conducts the meeting. The district clerk acts as clerk of the meeting and keeps an accurate record of all proceedings. Reports are then given by the trustee, collector, treasurer and by special committees if any have been appointed.

It is of interest to note that the

by general taxation or received from the state toward the support of the Rural School Improvement Society or any similar organization.

At the annual meeting the trustee is expected to give an estimate of the amount of money necessary to be raised for the coming school year. The meeting takes action on this statement and votes to raise the tax for the purpose mentioned. If the meeting should fail to vote the tax, the trustee may still issue a tax list for all expenses which the Law specifically authorizes him to make, such as teachers' salaries,

High Spots in the Law on School Meetings

1. District school meetings occur at 7:30 p. m. on the first Tuesday in May; this year on May 7.
2. The trustee calls the meeting to order. If he is not present the clerk (or if he also is absent) any legal voter may call the meeting to order.
3. Office holders must be voters in the school district and must be able to read and write.
4. A voter at school meeting must:
 - a. Be a citizen of the United States, at least 21 years old.
 - b. Have resided in the district for at least 30 days, prior to the meeting.
 - c. Must have at least one of the following qualifications:
 1. Own or lease taxable property in the school district.
 2. Be a parent of a child of school age.
 3. Have a child of school age residing with him or her.
 4. Own personal property assessed for at least \$50.00.

NOTE: Read the article on this page for more detailed qualifications of voters.

ies, installation, repair and maintenance of toilets and amounts not exceeding \$50 for repairs to the schoolhouse. In case the district superintendent should order repairs to be made, the trustee has the right to expend an amount not exceeding \$200 without the vote of the district.

Who Can Hold Office?

Every school district officer must be a resident of the district and a qualified voter. At the same time no person is eligible to hold a district office who cannot read or write and no person can hold more than one office at a time.

In order to make the election of officers absolutely legal it is necessary to elect them by ballot. The Law specifically states that it is not in accordance with the Education Law to ask the clerk to cast one ballot where it appears that there is only one candidate for an office. Two inspectors of election should be appointed to receive the ballots and the clerk of the meeting must keep a record of every person whose vote shall be received. The meeting may vote for candidates for all the district offices on one ballot or may vote for each officer separately. When the ballot is closed, the inspectors should count the ballots without opening them and compare the number of ballots with the names on the list which the clerk has prepared. If the number of ballots is equal or less than the number of names on this list, the inspectors count them and announce the result to the chairman of the meeting, but if the ballots exceed the number of names on the list, the inspectors draw from the box the number of ballots in excess and destroy them, and then proceed to count them and announce results to the chairman. To be elected, a candidate must receive a majority of all the votes cast.

The clerk of the meeting is required to give notice in writing to any person elected to district office in case this person is not present at the meeting. The clerk should also report to the town clerk, the names and addresses of district officers and to the county treasurer the names and addresses of those who are elected district treasurer and collector.

The general qualifications of voters

in district school meetings are as follows. Voters must be citizens of the United States and at least twenty-one years of age. In addition to these two qualifications the voter must have resided in the district for a period of at least thirty days prior to the meeting. Voters must have at least one of the four following special qualifications:

1. Owns, leases, hires, or is in the possession under a contract of purchase of, real property in such district liable to taxation for school purposes; but the occupation of real property by a person as lodger or boarder shall not entitle such person to vote. (Under the first clause persons who hold a joint deed or joint lease may each vote.)

2. Is the parent of a child or children of school age, provided such child or children shall have attended the district school in the district in which the meeting is held for a period of at least eight weeks during the year preceding such school meeting. (Under this provision both father and mother may vote.)

3. Not being the parent, has permanently residing with him or her a child or children of school age who shall have attended the district school for a period of at least eight weeks during the year preceding such meeting. (Under this provision but one person may vote, namely, the head of the household.)

4. Owns any personal property assessed on the last preceding assessment roll of the town exceeding \$50 in value, exclusive of such as is exempt from execution.

Qualified voters may vote on any question brought before any annual or special school meeting; it is not essen-

Attend Your District School Meeting!

ONE of the questions asked of all Master Farmer candidates last year, was "How many times in the past five years have you failed to attend your annual school meeting?" It was interesting to find that failure to be present at this important local meeting was the exception rather than the rule.

We urge all readers of American Agriculturist to make their plans so that it will be possible for them to attend their local school meeting on Tuesday evening, May 7.

tial that a person be a taxpayer to vote on propositions for raising money by tax on the district. Women possessing any of the above qualifications are entitled to vote.

The Right to Challenge Voters

Any qualified voter in a school district has the right to challenge the vote of anyone at the meeting. The person who is challenged cannot be asked any questions as to his qualifications as a voter, but the chairman can require him or her to make the following declaration:

"I do declare and affirm that I am, and have been for 30 days last past, an actual resident of this school district, and I am qualified to vote at this meeting."

If the person makes the declaration his vote is received. If he refuses to make it the vote is rejected. Anyone who makes a false declaration of his right to vote after being challenged is guilty of a misdemeanor and anyone not qualified to vote and who casts a vote at any school meeting is liable to the amount of \$10 to be sued for by the supervisor of the town.



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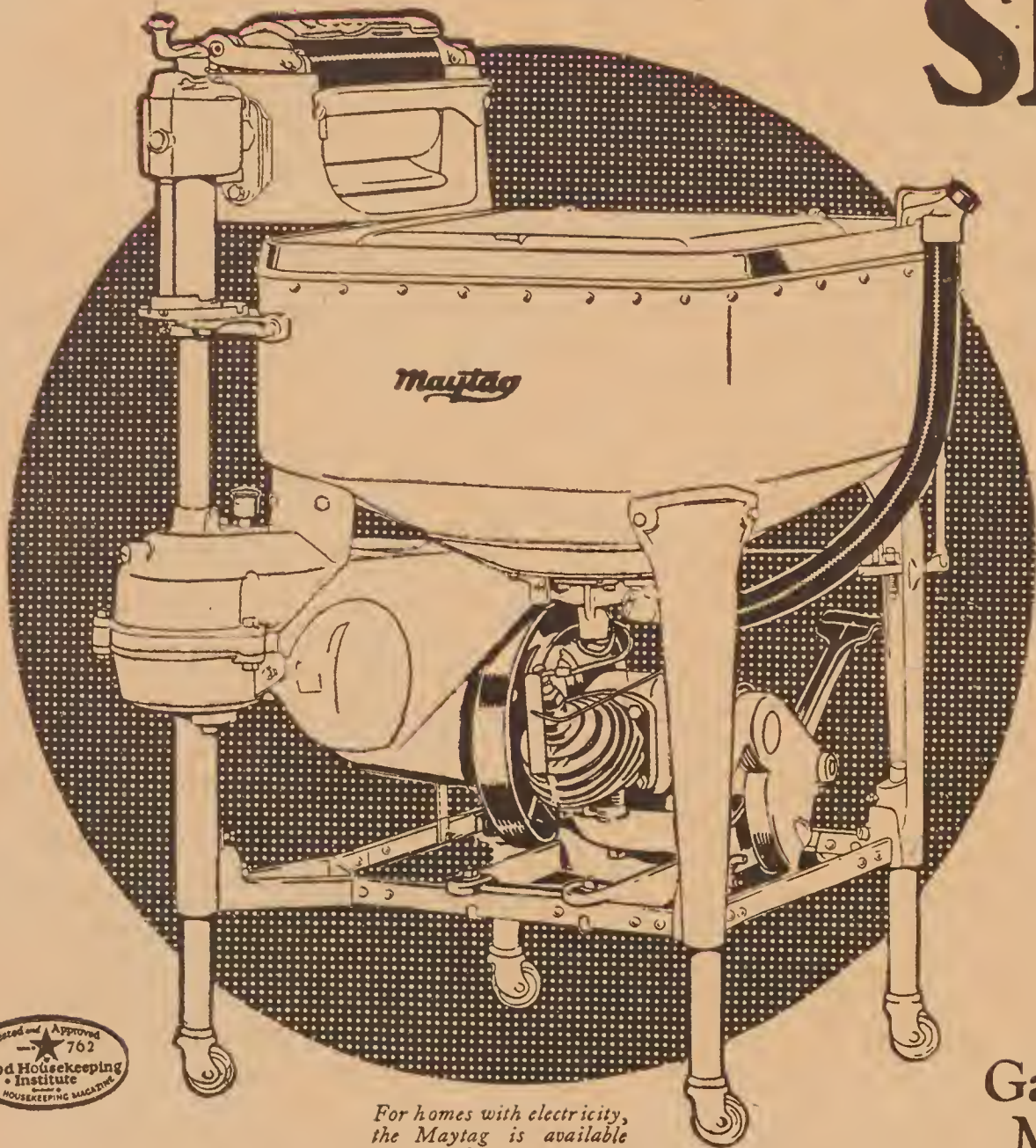
I WISH to thank the American Agriculturist Service Bureau for the prompt and effective manner in which you handle affairs. I have received the pen from —As I wrote you, I had written them three letters, and they were ignored. I received a very courteous letter from the firm, since you wrote them, and the pen yesterday.

Once more I thank you and the American Agriculturist for your kindness.

trustee, where there is only one in the district, cannot legally hire a teacher for the coming school year. In other words, the newly elected trustee has the sole right to hire a teacher for the coming year. There is no legal authority for voting to pay the trustee for his services. The Law also specifically states that a trustee should not accept payment for his services. As we understand it, this does not prevent a trustee from receiving pay for work for the district other than the regular duties of his office.

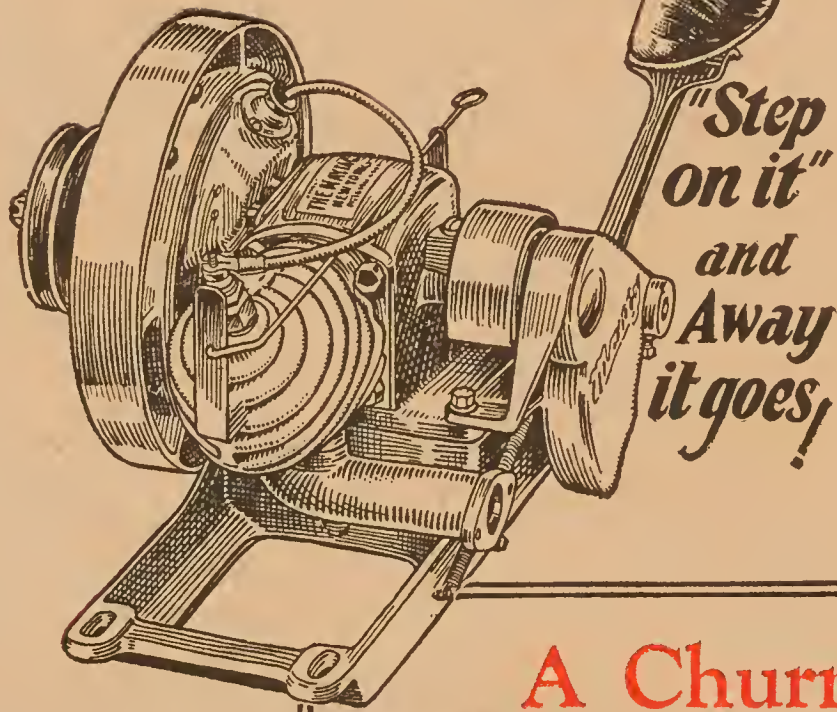
It is also stated by the law division of the State Educational Department that it is illegal to appropriate moneys belonging to a school district, raised

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AMERICAN AGRICULTURIST

\$1.00 Per Year

May 11, 1929

Published Weekly

Along New England Roads

A Fireside Reflection on Ships and Churches and other Things

FOR most of us at least, there is one sure thing about a vacation or a journey. Sooner or later the time comes when you may, or must, turn toward home. Far more than was even possible when traveling by rail, the automobile permits a sense of most delightful irresponsibility—like the lovable vagabond in one of Thomas Hood's poems who every morning at the cross roads, balanced his staff erect and then set his face in the direction where it pointed when it fell.



Jared Van Wagenen, Jr.

But at Portland, Maine, we felt it was time for farm folk to once more think about the farm and so we

turned toward home, down the Boston road. The Portland-Boston road is in part a great highway, much of it newly laid out and straight as a line drawn across the map with a ruler, but as wanderers should, we left it and took the road that skirts the ocean and strings together the various shore resorts which seem to occupy a large part of the coast line between the two cities. There is mile after mile of this seashore resort country, most of it of the cheapest and flimsiest garish wooden construction and set down in a sandy waste. I suppose that in July and August it is thronged with people and mad with merriment, but already in October it was practically deserted with hardly a gas station open for business. It must be infinitely worse when the northeast gales of winter swirl the snow and spray down these long deserted avenues. Further south toward Boston, along the famous North Shore drive are some enormous summer hotels and many lovely estates with homes like castles looking out to sea. At Kennebunk we turned off the road and ran down four miles to Kennebunkport, just to see a sleepy old seaport town with little left except the traditions of those brave days when New England

By JARED VAN WAGENEN, JR.

shipyards built the tall clipper ships and when Yankee seamen made the Stars and Stripes a familiar flag on all the high seas of the world. That was a hundred years and more ago. They were a dauntless breed, those New England captains. Strange stories have come down concerning them—stories not wholly untrue or over-drawn. Many of them were men who were pillars in the church at home, according to the standards of their time, devout, God-fearing men who on voyages between watches read their bibles faithfully and when weather would permit called their crew together for morning prayers and yet with untroubled conscience sailed southbound for Africa with cargoes of Medford rum and northward with a below decks load of a hundred captured negroes for New-Orleans. Not until 1808 was it made an illegal act to catch a negro in Africa and transport him to America, a slave, and now and again that thing was done until al-

most the days of our Civil War. In spite of our almost gloomy questioning regarding the decay of true religion and the morals of our younger generation, I think we now order things better than that.

I did not know it was possible for the ocean to be as near asleep as it was that day. It happened that it was Columbus Day and we wondered if Columbus had weather like this that morning 436 years ago when in the dawn he first saw the shores of the West Indies Islands. There was not a puff of air to ripple the surface and the usually restless heave of the ocean had quieted until there was hardly more than now and then a gentle swash upon the sand.

Born and bred among the hills of eastern New York, I find it very easy to worship at the Shrine of Puritanism. I give whole-handed assent to the doctrine that the iron folk who settled New England were the finest racial stock that ever fared forth to people a wilderness.

In one respect at least, New England greatly excelled New York and that was in the architecture of her country churches. There they had a race of boss carpenters who never saw an architectural drawing nor heard of a blue print but who achieved a singular success in building white wooden temples that were lovely in line and harmonious in proportions. Moreover, this characteristic architecture seems seldom found beyond its native province. Even where the New Englander migrated to new country—as he did by tens of thousands, he rarely took his church architecture with him. Now and then he did. I think it was somewhere in the town of Coventry in Chenango County that I recently saw a church that would be at home if transplanted to some village green in Old New England.

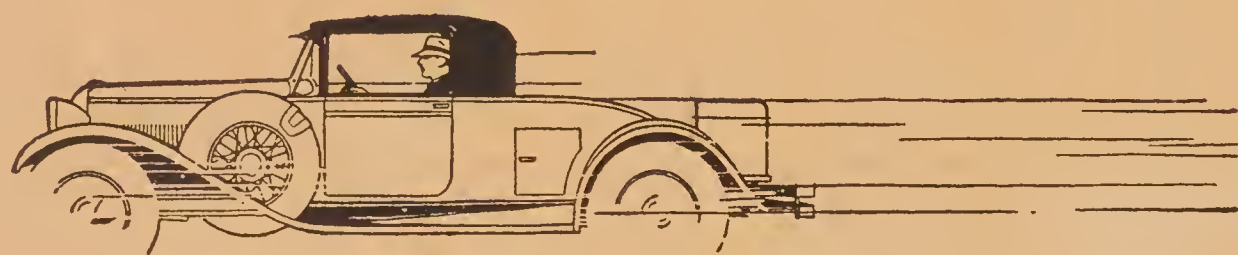
The country church edifice of New England at its best is typically of wood, painted white. There are commonly two rows of windows, the lower row to light the main auditorium—the upper row to light the gallery. This arrangement (Continued on Page 11)



One of the fine things about New England is the spaciousness and restfulness of the old New England villages, well illustrated in this picture. Note also the typical New England home and meeting house.

Our New Serial Starts on Page 5 — Reports on Frost Damage to Fruit, Page 7

Fast driving gives oil its hardest test



Oil which lasts longest at high speed lubricates best at any speed

You will find that the New Mobiloil outlasts other oils at high speeds. This explains why the New Mobiloil will save you money in operating car, truck or tractor.

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Repeated road and laboratory tests prove that when lubricated with the New Mobiloil engines commonly develop more power than with other oils of equal viscosity. In addition this New Mobiloil often reduces oil consumption as much as 50%. Other economies result from fewer repairs, less carbon, and time saved in costly breakdowns.

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Weather Signs in May Time

By CHARLES A. TAYLOR

ANYBODY who wishes to believe in weather proverbs and be perfectly happy in quoting the old jingles and rhymes that have been handed down through all the years, must live always in one place and not stray far from home. For the weather proverbs of my community and those of your neighborhood have somehow got hopelessly mixed and are often so contradictory that they lead to all kinds of confusion.

For instance, it must be good to have dry weather in May, for the old couplet says,

"For a dry wind in May
'Tis your duty to pray."

But there is plenty of contrary evidence that,

"A wet May
Brings a barn-full of hay."

Or, as the Scotch say,

"The haddocks (meadows) are good
When dipped in May flood."

And the Spanish have it,

"Water in May is bread all the year."

Cold weather sometime in May seems generally to have been expected by all our weatherwise husbandmen who have collected weather lore to hand down from father to son.

"Till May is out,
Change not a clout."

In other words, don't change to summer underwear until the end of May.

"Shear your sheep in May
You shear them all away."

Or, "The tail of winter is in the middle of May," and again, "Who shears his sheep before St. Gervats' Day, May 13, loves more his wool than his sheep," and,

"Those who bathe in May
Will soon be laid in clay."

The French say that there is sure to be frost on St. Mamertins Day (May 11), on St. Pancras' Day (May 12), or on St. Gervats' Day (May 13).

One would never suspect the minister of being so greedy as to seek the ill health of his people, that he might profit by more burial fees, yet we have this old libel against him,

"For a warm May
The parsons pray",

which accompanies, "A hot May brings a fat church yard."

If your apples shrivel and drop off the trees soon after blossom time, and if it happens during May 17, 18, or 19, you may be sure that it is the work of St. Dunstan and the devil. It all came about on account of a very greedy brewer who lived long, long ago in a land across the sea, who sold his soul to Satan with the stipulation that the latter should cause all the apples to blight on one of these three days, so that the farmers might not make cider to compete with St. Dunstan's brew. (That, of course, was before prohibition days, but some say that their contract is still in force. Watch your trees and see if they blight your apples.)

Oats, barley, and spring wheat should be sown early enough to get a good start during the moist weather of May, but corn should not grow much until June.

"He who would gather a crop of corn
Should not plant his seed until Dunstan morn (May 19)".

It is better to have your bees swarm early. The Scotch say,

"A swarm of bees in May
Is worth a load of hay,
A swarm of bees in June
Is worth a silver spoon,
A swarm of bees in July
Is not worth a fly".

So, however much you may like to gather May flowers, or dislike to have a May beetle come in at the window and thump around against the lamp chimney or get its feet tangled up in your hair or scratch around on your bald place if you have one; no matter how much you like to go out into the orchard and revel in the beauty and fragrance of apple blossoms, you should remember that, "A dry May makes a wet June," and a wet May foretells dry weather in July, August, and September. So, if the sayings be true, May is a good time to keep your eyes open that you may know what to plan for in the way of crops and weather.

Make this chart your guide

It shows the correct grades of Gargoyle Mobiloil for certain prominent cars. If your car is not listed here, see at your dealer's the complete Mobiloil Chart, which recommends the correct grades for all cars, trucks, tractors, etc.

NAMES OF PASSENGER CARS	1929		1928		1927		1926	
	Engine		Engine		Engine		Engine	
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
Auburn, 6-66.....	BB	Arc.	BB	Arc.	BB	Arc.	A	A
" 8-cyl.....	A	Arc.	A	Arc.	A	Arc.	A	A
" other models	BB	Arc.	BB	Arc.	BB	Arc.	A	A
Buick.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Cadillac.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Chandler Special Six	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Chevrolet.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Chrysler, 4-cyl.....	BB	Arc.	BB	Arc.	A	Arc.	A	Arc.
" Imperial.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
De Soto.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Dodge Brothers.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Durand.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Erskine.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Essex.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Ford, Model A.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" Model T.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Franklin.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Gardner, 8-cyl.....	BB	Arc.	BB	Arc.	BB	Arc.	A	A
" other models	BB	Arc.	BB	Arc.	BB	Arc.	A	A
Graham-Paige.....	BB	Arc.	BB	Arc.	BB	Arc.	A	A
Hudson.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Hupmobile.....	BB	Arc.	BB	Arc.	BB	Arc.	A	A
La Salle.....	BB	Arc.	BB	Arc.	BB	Arc.	A	A
Marmon, 8-cyl.....	A	Arc.	A	Arc.	A	Arc.	A	A
" other models	A	Arc.	A	Arc.	A	Arc.	A	A
Moon.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Nash, Adv. & Sp. 6.	BB	Arc.	BB	Arc.	BB	Arc.	A	A
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Oakland.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Packard.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Peerless, 72, 90, 91...	BB	A	BB	A	BB	A	BB	A
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Plymouth.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Pontiac.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Reo.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Stearns Knight, 6-80.	BB	A	BB	A	BB	A	BB	A
" other models	BB	A	BB	A	BB	A	BB	A
Studebaker.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Velie, 8-cyl.....	BB	Arc.	BB	Arc.	BB	Arc.	A	A
" 6-cyl.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.

Who Contributes Most to Farm Success?

Prize Winning Letters from an Interesting Contest

"FARMING is different from any other business in the world." How much thought is contained in the ten foregoing words! Just a telegraphic message sent out to all the A. A. readers, which gave us food for thought as to just why it is different from any other business, and my answer is, simply because it requires the cooperation, brain and muscle of *both* partners to demand the emblem of success.

What is "success", in referring to farming? Is it success where a large bank account is the only asset? Is it success where man alone says, "I bought this farm and paid for it"? Is it success where woman alone says, "I manage this business; I kept tourists to furnish my home"? Can it be counted success where fine buildings, machinery, broad meadows, and sleek cattle graze in green pastures, but a careworn mother greets you, and one

by one, you observe the children leaving the farm?

In expressing my opinion, I use the word "Partners". I would refer to Mr. and Mrs. not to "madam" alone nor to "mister alone, but by using the little conjunction "and". Therein lies the solution. Why? Benjamin Franklin said, "We must all hang together, or we will all hang separately". True, many will say, but how often do we see man alone building up a successful farm business, or how often do we see splendid farms worked entirely by women? But, is the whole enterprise being looked after? How about the residence? Is it kept alive with happy smiling faces, keen for work, as well as play? Is it guarded and guided by the calm man of the outer world, who returns

at evening to find the smiling face of his life partner, who has proved an inspiration to him all through the toil of the day, who aids him in the hospitality extended to the many friends of that outer world and which stamps him as a "good neighbor"?

Do we find real success on the farm where

and adding enough to the family purse by saving a mechanic's wages, so that on the next trip to the city he will see that Mary has the iron and the new gown also? And was it not fine of Mary during haying season, instead of attending the annual yacht races over at the club, to don her knickers and spend the afternoon raking in the

hay field? How pleased John was, and the downpour of rain in the evening proved what a little extra help meant in saving a crop, and also the worth of cooperation.

Neither phases of work detracted from the dignity of either man or wife, but only added to the strength of the cooperation, whether it be in papering, raking hay, milking the cows, keeping tourists, extra canning, time in the garden, washing dishes, or any other of the countless tasks necessary to contribute to the farm enterprise, by father, mother, man or

wife, son or daughter. After fifteen years of experience as a partner, I find that whole-hearted cooperation is absolutely necessary as one contribution to the business, an opportunity not found in every trade or profession. Farming as a profession has at last come into its own, the one profession founded in those other days. Tilling the soil, enjoying the beauties of God's handiwork, building up a future stronghold for American agriculture in the glowing faces of sons and daughters, meeting the public with a hand clasp, and best of all enjoying each other's companionship and cooperation, these are some of the things which entitle a business to

(Continued on Page 22)

A Pleasant Job

IT was a big job for the editorial staff to read all of the many letters which came from both men and women in our contest, "Who Makes the Greatest Contribution to the Success of the Whole Farm Enterprise, the Man or the Woman?", but we do not know when we have done anything that was more interesting or inspiring.

We only wish we had room to print all of the letters, for all of them were well worth reading. The prize winners and a few others are on this page, and we will print more later.

Perhaps the finest thing about most of the letters was the note of unselfishness which ran through them, the willingness to give credit to the other team mate for what success had been achieved.

But read and judge for yourselves.

woman is alone, the "main spoke in the wheel?" Is there not just a little something, sort of undefinable, lacking?

Widows are often left with families of small children when a Higher Hand has removed the father, and they toil on and rear fine men and women. Great honor is due them, but from my point of view, there is not the sort of success which comes from a man and woman stepping along on a 50-50 basis, aiding each other over the rough spots of life. Mary may need a new dress, or an electric iron, but the grain crop failed. Is it not splendid of John to spend a few days indoors helping Mary paint and paper the four upstairs rooms, thereby proving his ability

Raising Calves on Dry Grain

Producers of Fluid Milk May Maintain Their Herds At a Reasonable Cost

By C. B. BENDER

N. J. State College of Agriculture

MOST of the dairy animals in this country are raised by farmers as a by-product and are sold at a price below the actual cost of raising them. These animals are being sold in the east for good prices at the present time. On the surface, dairymen buying these cows at an average of \$200.00 per head, think they are practicing economy by replacing their worn-out animals by purchase instead of raising them. On proper analysis of this problem it has been found that the dairymen who are purchasing replacements are not increasing the average milk production per cow. Some of them are holding their own and the majority of them are decreasing their average production. This condition can not exist unless we wish to support our cows instead of having them support us.

Aside from the decrease in production in the majority of instances, men who continually purchase their replacements are generally keeping their animals in an uncertain balance in as far as the disease question is concerned. The whole gamut of disease factors may be introduced from tuberculosis, abortion and mastitis to cowpox. When a dairyman is raising all his own replacements the disease factor is under comparative control and where an intelligent breeding program is carried on the average production is increased.

Even though these facts have been recognized by dairymen for years they are still willing to gamble on the proposition because they do not want to bother with calf raising, first; because whole milk is an expensive calf feed,

second; the digestive troubles encountered with gruel feeding where strict attention is not paid to sanitation, regularity of feeding and temperatures of the feed and third; the labor factor.

Recognizing the conditions which were facing the dairymen unless they changed their methods and began to raise calves from their best cows bred to the best bulls, the New Jersey Agricultural Experiment Station decided on a program of calf feeding research which was hoped to reduce the labor costs, feed costs and bother of calf raising. In attacking this problem a definite

standard was established i.e., (1), a minimum of whole milk was to be fed, (2) the animals were to subsist on a dry grain mixture and a legume hay, (3) the calves should be free from digestive disorders, (4) the calves had to be normal for weight and height at six months of age, (5) the method had to reduce the labor and feed costs.

After years of experimental work, using numerous grain combinations and milk substitutes, a ration was developed which fulfilled these requirements in every detail. In view of the response which it has met in New Jersey where over three hundred dairymen are feeding it, we feel that it has answered the question of the calf raising problem. The ration as developed consists of:

100 lbs. yellow corn meal
150 lbs. ground oats
50 lbs. Soluble blood flour (not blood meal)
50 lbs. wheat bran
50 lbs. linseed oil meal
4 lbs. finely pulverized steamed bone meal
4 lbs. finely pulverized limestone
4 lbs. salt

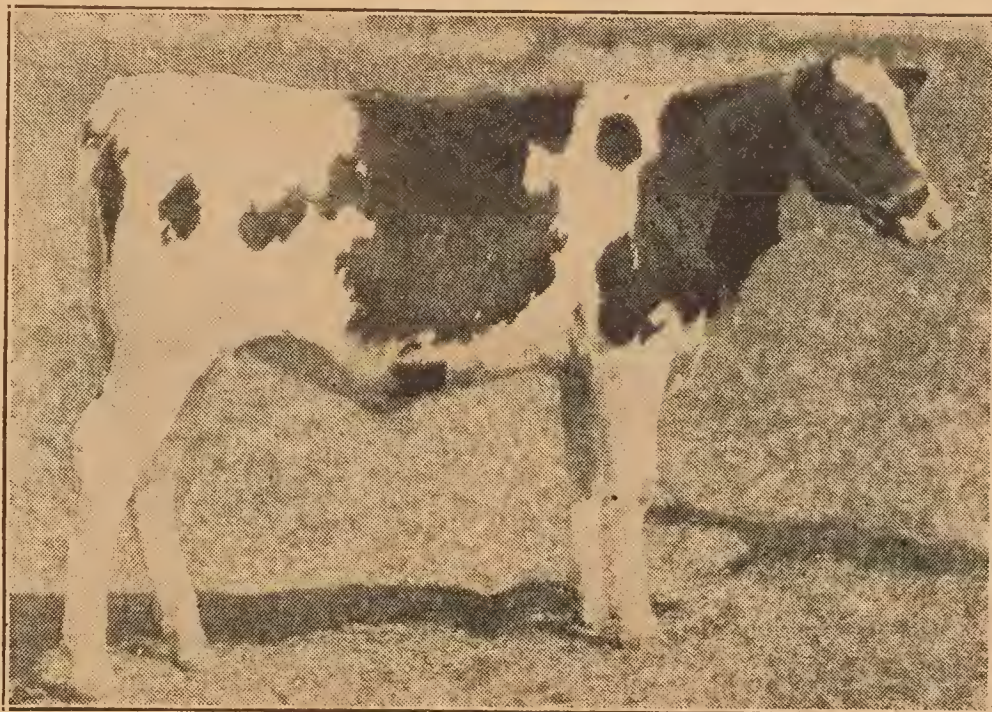
This ration must be fed with the best quality of alfalfa or clover hay for the best results.

The method of feeding is as follows:

Feed whole milk for the first four weeks, the maximum being 6 pounds a day.

At the end of the first week accustom the calves to the grain mixture by rubbing some on their muzzles after the milk feeding. Allow them to pick at hay. Allow them access to all the grain they care for and at the fourth week reduce the milk and give them all the fresh

(Continued on Page 10)



A six months old show calf raised at Forsgate Farms on the New Jersey Dry Grain Mixture.

Editorial Page of the American Agriculturist

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Prices and the Milk Supply

PROFESSOR V. B. HART of the Farm Management Department of Cornell predicts good milk prices for next fall. This is indeed good news, for good prices are the best and the surest way of getting enough milk during the short period.

We have had some letters objecting to our recent editorial entitled, "More Pay Will Bring More Milk", in which we tried to show that the chief reason why there is a shortage of milk during the fall is the fact that milk prices have been too low, compared with summer prices. Our point is that summer prices should not be any less than they are, but that prices for winter milk should be considerably more, and now our point is well proven by figures published by the Farm Management Department of the State College at Ithaca which show that prices of milk for November, December, and January during 1924-28 have been only 46 per cent above the 1910-14 prices, while the prices for May, June and July milk from 1924-28 have been 76 per cent above 1910-14 prices.

Nevertheless, we fully agree with the argument that we must get more milk for this coming November, no matter what the price is. There is no mistake about the danger from western milk and cream. If the New York City authorities are once forced to inspect outside sources and allow new supplies to come in during the short period, we can be very certain that it will not be possible to shut these supplies off at will, with the result that prices to our farmers will be even lower than they are at present.

Good for New Jersey

WE hope every New Jersey dairyman noticed our article on the New Jersey news page of last week telling of the increased indemnities for cattle condemned for TB. The last legislature passed a law increasing the indemnities from one-third to one-half of the appraised value, and the Assembly has made an additional appropriation of \$100,000 to cover this extra expense. We understand that there is no doubt that the Senate will approve it.

The law will become effective July 1, and will apply to cattle tested after that period.

We offer our congratulations to the New Jersey dairy industry. Such a law was highly needed. The campaign against TB is just as much the

responsibility of the whole community, including the cities, as it is of the dairymen themselves.

Name Your Master Farmer

DID you notice our call in the April 27th issue for nominations for Master Farmers for 1929? If not, turn back to the Editorial Page of that issue and read the qualifications for a Master Farmer, and if you care to, send in your nomination of friend or neighbor.

Briefly, to have consideration, a nominee for a Master Farmer must be a successful farmer from a dollars and cents standpoint. He must be a man liked and respected by his neighbors, and one who has made some contribution to his community and state. And last of all, he must be an excellent homemaker, a good husband and a good father.

Only ten or twelve men will be named in our 1929 list for New York. The judges are going to be rigid in their examination of qualifications, so, to avoid disappointments, consider your candidate well before you name him. Your name will be considered confidential, and will never be mentioned, unless you so desire. Nominations will close June 1st.

A Story of Your Own Section

WE know from our letters that thousands of our folks enjoy the AMERICAN AGRICULTURIST's serial stories. Occasionally some objects because the instalments are short, but we believe that short instalments are better than long ones, for people who are busy. The farmer's wife or father himself can sit down for a few minutes' rest between spells and read the entire instalment of one of our stories, when it would not be possible if it were longer.

Read the big instalment on the next page beginning the "Plains of Abraham" by James Oliver Curwood. If once started, we guarantee you will see it through to the finish. It will be of interest to all rural people and especially to those who live in the Mohawk Valley and the North Country, for many of you are now living on farms where the old French and Indian fights once raged.

Why Eastern Farmers Are Losing Their Markets

"I think American Agriculturist would be serving a useful purpose if it would run a series of articles bearing on the necessity of improving the New York State pack in order to hold the markets which should be ours.

"Only today I have been in conference with two wholesale egg men from New York City. Incidentally, they told me that there had been virtually no improvement in the pack of New York State eggs in twenty years, and that the condition in which many of the egg consignments from upstate reach New York is not short of deplorable."

B. A. P., New York.

WE hasten to tell the writer of the above letter that we have been trying to bring this problem to the attention of our readers for years. Recently there have been several market trips conducted by the Farm Bureaus of farmers from the different counties to visit the New York markets. Every man who has been in these markets has reached the same conclusion, that we have held for years, that eastern farmers are killing their own goose by bad marketing methods, including especially grading and packing, and that as a result outsiders are rapidly getting these markets away from us. We sometimes think we are too near to the big eastern cities for our own good.

A western farmer cannot afford to pay the freight on poorly graded and poorly packed stuff way across the American continent, but the eastern farmer has comparatively little freight to pay, and as a result too many eastern farmers try to dump everything, good, bad and indifferent, on the markets.

If you do not believe this, all you need to do is walk through the New York wholesale dis-

tribut. Farmers will wake up some day, but unfortunately it may be too late. This situation is one reason why we have been interested in the proposal to establish a New York State optional brand described in these columns in a recent issue.

The plan contemplates the exclusive appropriation by legislative action of a brand name, to be applied to any New York State farm product which is produced and packed under conditions guaranteeing the meeting of certain stipulated high standards, the thought being to have this brand name, wherever used, to be a hall-mark of quality.

What the Farm Acreage Will Be This Year

THE Crop Reporting Board of the United States Department of Agriculture has collected information from 50,000 producers on the probable acreage of various crops to be planted in 1929. Of course, too much dependence cannot be put on these figures because old man Weather cannot be predicted, and he has more influence on production than all other factors put together.

However, from the figures which the Department has collected, it is found that farmers expect to increase greatly their acreage of beans, spring wheat, tobacco, and cabbage in certain areas. Therefore, the Department warns farmers that there may be a large over-production and resulting low prices for these crops. Caution is indicated.

The combined acreage of the principal feed grains such as corn, oats and barley, as now planned, is unchanged from the acreage harvested last year, and is about 3 per cent above that of 1927. Tame hay acreage will be about a 3 per cent increase over 1928. Potato growers indicate that they intend to plant about 10.6 per cent less than the acreage harvested last year. The Department states that with average weather conditions this acreage would produce somewhere around 390,000,000 bushels, a production which would furnish about the usual supply of potatoes after the heavy holdings from the 1928 crop are off the market.

Bees Are Necessary in the Orchard

WHO among the orchardists of olden times ever would have guessed the very great importance of bees at pollination time? Modern science teaches us that without bees to transfer the pollen there would be very little fruit with most varieties. Nearly all varieties of apples are self-sterile, and even varieties which are self-fertile produce more fruit when cross-pollinated with another variety.

Hence, growers are paying more and more attention to the need of establishing hives of bees in or near their orchards in blossom time by either keeping the bees themselves or hiring some bee-keeper to furnish them while they are needed. The minimum number of colonies an acre for successful pollination is one, and these colonies should be scattered throughout the orchard.

Eastman's Chestnut

I HOPE you will enjoy as much as did we on the A. A. staff the reading of the prize winning letters that came in our contest, "Who Makes the Greatest Contribution to the Success of the Whole Farm Enterprise, the Man or the Woman?" The prize letters are printed on Page 3 of this issue, and more good ones will be printed later.

In reading some of these letters in the contest, I was reminded of the following:

"Say, looky hya, Rastus, you know what you're doing? You is goin' away fo' a week and they ain't a stick o' wood cut for de house."

"Well, what you-all whinin' about, woman? I ain't takin' de axe wid me, am I?"

The Plains of Abraham—By James Oliver Curwood

CHAPTER I

ON a sunny afternoon in May, 1749, a dog, a boy, a man, and a woman had crossed the oak opens of Tonteur's Hill and were trailing toward the deeper wilderness of the French frontier westward of the Richelieu and Lake Champlain—the dog first, the boy following, the man next, and the woman last.

It was a reversal of proper form, Tonteur had growled as he watched them go. A fool's way of facing a savage-infested country that had no end. The man should have marched at the head of his precious column with his long gun ready and his questing eyes alert; the woman next, to watch and guard with him; then the boy and the dog; if such nuisances were to be tolerated in travel of this kind, with evening coming on.

Tonteur was the one-legged warrior seigneur from whose grist mill down in the valley the four were going home.

His eyes had followed the woman with a subdued and appraising hunger in them. Henri Bulain was a strange man, he had thought. He might be a little crazy, might even be a fool. But he was also a very lucky husband to possess a woman with the sweet face and form and the divinely chaste heart of Catherine, his wife.

Jeems was a fortunate boy to have her for a mother.

Even the dog was a scoundrel for luck. An Indian dog at that. A sneaking, good-for-nothing dog. A wreck of a dog without a soul, to be fed by her, petted by her, smiled at by her—as he had seen her smile.

Tonteur had prodded the heel of his wooden leg into the soft earth as they disappeared across his meadow bottom lands. The King of France had honoured him, and he was first of the long string of heroic fighting barons settled along the Richelieu to hold the English and their red barbarians back. He was Doorkeeper to the waterway that led straight to the heart of New France. If the English came with their scalping friends, the Mohawks and the Senecas, they would have to pass over him first of all. No general could be given greater distinction than that. Honour. Wealth. A wide domain over which he was king.

And yet—

He envied Henri Bulain.

* * *

It was the hour when birds were singing softly. Morning had heard their defiance, a glorious and fearless challenge of feathered minstrelsy to all the spirits of darkness; but with late afternoon, sunset, evening, these same slim-throated songsters found a note of gratitude and of prayer in their chastened voices. A thrush sang that way now. A catbird's melody joined it. Silver-throated brush warblers piped their subdued hymns in the thickets. Flowers crushed underfoot. In the open spaces they carpeted the earth with white and pink and blue. Flowers and birds and peace—a world filled with a declining sun—a smiling heaven of blue over the tree-tops—and with them a dog, a boy, a man, and a woman advancing westward.

Three of these, even the dog, Tonteur envied.

This dog had a name which fitted him, Tonteur had thought. For he was a wreck of a dog—even more a wreck than the splendid seigneur himself, with his stub of a shot-off leg and a breast that bore sword marks which would have killed an ordinary man. The dog, first of all was big and bony and gaunt, a physical ensemble of rough-edged joints and craggy muscles that came by nature and not because of hunger. He was a homely dog, so hopelessly homely that one could not

help loving him at sight. His hair was bristly and unkempt. His paws were huge. His jaws were long and lank, and his ears were relics of many a hard-fought battle with other beasts of his kind. His tail was half gone, which left him only a stub to wag. He walked with a limp, a heavy, never-failing limp that seemed to shake his long body from end to end, for his left fore paw—like Tonteur's foot—was missing. A crooked, cheery, inartistic, lovable dog to whom the woman—in a moment's visioning of the fitness of things—had given the name of Odds-and-Ends.

So Tonteur was half right in think-

himself with painstaking care for Marie Antoinette's eyes should she happen to see him! That was the tragedy of it. He had put on his new doe-skin suit on this day when they were going to Tonteur's mill for a bag of meal. He carried a gun which was two inches longer than himself. A big powderhorn swung at his waist, in his belt was a knife and over his shoulder hung the most treasured of his possessions, a slim ash bow and a quiver filled with arrows. He had worn his coonskin cap of fur in spite of the warmth of the day, because it looked better than the lighter one, which was

village of Tuscaroras and a rival village of Delawares, in Pennsylvania, in the summer of 1736.)

"And for fifteen years you have been growing younger and more beautiful," he was fond of telling her. "What a tragedy it will be when I am old and bent and you are still a girl!"

It was true that Catherine did not look her thirty-five years. Her face, as well as her eyes, was young with the softness and radiant changeableness of girlhood, and especially on this Thursday afternoon when she walked behind her boy and her husband from the Richelieu bottom lands. The climb over Tonteur's Hill had brought a flush to her cheeks, and with the glow of the sun in her glossy hair she was a witching picture for Henri to look back on now and then as he shifted the heavy bag of meal from one shoulder to the other.

Tonteur was aware, possibly even more than Henri Bulain, that Catherine's adoration of her men folk and of everything that went with them, even to the primitive discomforts of the wilderness life which had claimed her, was built up against a background of something more than merely being the mate of a man and the mother of a son. Culture and learning and broadness of vision and thought, nurtured in her first by a gentle mother, and, after her death, developed and strengthened by a schoolmaster father, had given to her a medium of priceless value by which to measure happiness. Sometimes she yearned a little for the things outside this happiness—dreamed of brocades with gold embroidery, of buttercup silks and blue satins, of white moires and dainty Valenciennes, and for that reason in Henri's cabin were roguish caps with pink and lavender ribbons, and cobwebby lace for Catherine's hair, and many simple but pretty things made by her own clever hands. She could make frills and fichus as fine as any that Madame Tonteur ever wore, with all their cost, and today her simple gown of sprigged muslin, caught up with blue love-knots, and her cloak and hood of bakneesh red had given her a loveliness in Tonteur's eyes that made his heart thump like a boy's in his battle-scarred breast. Because of her feminine adroitness in fashioning beauty and perfection out of simple and inexpensive things, and also because she was of the spawn of the despicable English, Madame Henriette Tonteur had come to regard her with much the same aversion and dislike with which she would have looked upon a cup of poison.

Tonteur knew this and cursed in his honest heart at the woman who was his wife, with her coldly patrician face, her powdered hair, her jewels and gowns and her platonic ignorance of love—and then thanked his God that little Marie Antoinette was growing less like her with each day that passed over her pretty head. For Marie Antoinette was tempestuous, like himself, a patrician without doubt, but with a warm and ready passion to offset that curse, and for this, too, he blessed the fortune which in one way had been so unkind to him.

Behind her husband and boy Catherine had been thinking of Tonteur and of his wife, the aristocratic Henriette. For a long time she had known of Madame Tonteur's hatred, but it was not until this afternoon that the other discovery had come to her, for, in spite of his most heroic efforts, Tonteur had betrayed himself when suddenly she had caught him looking at her. Catherine had seen the shadow of his secret—like a ghost swiftly disappearing. Up over the Hill she had added many twos

(Continued on Page 20)

Do Not Miss the First Installment of "The Plains of Abraham"

THE Plains of Abraham has all the qualifications on which we judge a good story before it is allowed to appear in American Agriculturist. It is interesting, thrilling and clean and at the same time the scene of the story, which by the way is historically correct, is laid right in New York State.

The story gives its readers a new slant on the character of the Indians that once roamed over this section. The author, James Oliver Curwood, says:

"My great-grandmother was a Mohawk, and it is with pardonable pride and satisfaction that I find myself able to present to the public an occasional evidence of the nobler side of Indian character, suppressed through a period of centuries by the white man's egoism and prejudice. The Indian was the greatest of all friends, the greatest of all patriots, the greatest of all lovers of his country. Despoiled, subjugated, annihilated, he died a savage."

We are giving you a long installment this week in order to give you the setting of the story. Do not fail to read it.

ing of him as a wreck of a dog, but in one other thing he was wrong. The dog did have a soul—a soul that belonged to the boy, his master. That soul had a great scar seared upon it by hunger and abuse in an Indian camp where Henri Bulain had found him four years before, and from which, out of pity for a dying creature, he had taken him home to Jeems. It was a scar cut deep by clubs and kicks, a wound that had never healed and that made the dog what he was—a tireless and suspicious hunter of scents and sounds in the woods.

He was always ahead by a step or two, even when the song of birds and a softly stirring melody of peace filled the day. He was ahead this afternoon. Of the four who were filing westward, he seemed to be the only one who watched and listened for danger to come out of the beauty and stillness of the world about them. Now and then he glanced up at his master. Trouble lay in the boy's face and eyes, and the dog sensed it after a little and whined in a questioning way in his throat.

Daniel James Bulain was the boy's name, but from babyhood his mother had called him Jeems. He was twelve and weighed twenty pounds more than his dog. Odds-and-Ends, called Odd for short, weighted sixty, if the scales in Tonteur's gristmill were right. One would have known the dog and the boy belonged together even had they been in a crowd, for if Odd was a battered old warrior, the boy, on the other hand, gave every evidence of an ambition to achieve a similar physical condition.

"Why, he's dressed up like a bold, bad pirate come to abduct my little girl and hold her for ransom," Tonteur had roared, down in the valley, and Jeems's father had joined the baron in his laughter; then, to make the thing worse, Tonteur had turned him round and round, slowly and appraisingly, with lovely little Marie Antoinette looking on, her dainty nose upturned in patrician disdain—and with Paul Tache, her detestable cousin from the great city of Quebec, openly leering and grimacing at him from behind her back. And this after he had prepared

stripped, and in this cap was a long turkey feather. Odd, the dog, was proud of his martial-looking master, but he could not understand the change that had come over the boy or why he was going home with such a strangely set and solemn face.

Henry Bulain was aching to describe the little scene to his wife as soon as Jeems was out of hearing. But Henri was always seeing either the bright or the funny side of things. That was one reason why Catherine had married him, and it was why she loved him now even more than fifteen years ago, before Jeems was born. It was the big and all-embracing reason why the wilderness with its trees and flowers and dangers loved Henri Bulain. It was because he loved life—loved it in such a vastly inclusive and mysteriously trustful way that Louis Edmond Tonteur, the lion-hearted baron of the seigneurie, had called him a fool for his simplicity and predicted the day when his scalp and those of his wife and boy would adorn the small round hoops of the savages.

From her position behind the dog, the boy, and the man, Catherine Bulain looked upon her world with a joyous and unafraid pride. No boy, in her opinion, could equal Jeems, and no man her husband. That challenge always lay in her dark eyes, rich with sleeping lights because love was there. One could see and feel her happiness, and as Tonteur secretly built up the fire of his yearning when he was alone so she loved to exult in her own possessions when her men folk were ahead and could not see all that came and went in her face. This desire to hold within herself some small and sacred part of her rejoicing was because she was English and not French. That was why Daniel James had an English name, inherited from her father, who had been a New England schoolmaster and afterward an agent of the Penns down in Pennsylvania. It was on the frontier of that far province that Henri had found and married her two years before her father's death.*

(Daniel James Adams, Catherine's father, was killed in a feud between a

"Help! Help!"
not "Caw! Caw!"



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A.A.'s Western New York Farm and Home Talk

This Year's Cabbage Outlook

WHAT are the prospects for a profitable cabbage year in 1929? Many of us would like to know. Just what will happen we must wait to learn but we can study all the present factors in the situation and each make

By M. C. BURRITT

seed than is necessary in order to be

able to have a better selection of medium sized, uniform, vigorous plants. A little extra cost in seed is cheaper than using poor plants or buying. Seed sources are important. Generally, the home grown seed gives the best yields, but the selections for high yields have not improved the head type. Western seed sources (chiefly Puget Sound, Wash.) come next, while imported seed (20% of total used) gives the lowest yields.

Early deep plowing, especially of sod land is important. Cultivation may be half done before planting under good management. We have prepared for this year's cabbage crop by growing sweet clover in wheat stubble to plow under and will supplement this with a fertilizer high in acid phosphate. The sweet clover has cost us about five dollars an acre including all labor at 50 cents an hour.



M. C. Burritt

our own guess. Cabbage is one of the highly speculative crops, with which one may either lose a lot or make a good profit. The cabbage market is easily upset by sharp changes in production. The unit cost of growing a ton is very variable, being particularly affected by the amount of rainfall. It is also a specialized crop and calls for special knowledge and skill to grow well. The grower who sticks to the crop through good and bad years generally does better than the one who tries to guess the good years and grows the crop one year and not the next. Such men are more apt to guess wrong than right, because they tend to come in after a good year and stay out after a bad one, whereas the records show that the opposite would more likely be the better practice.

Competition is Keener

The general competitive market conditions have changed markedly in the last few years. Formerly, the question of whether to sell in the fall or store was chiefly to be determined by the local crop. Of late years the Wisconsin competition has increased greatly. And now southern cabbage begins to come into our markets at Christmas and by mid-February Texas especially, but Florida also, are shipping heavily. New York City uses more loose-headed green Southern cabbage than it does the New York State stored product. Generally per capita consumption of southern cabbage is higher than of northern. Texas is now the second cabbage state in the Union, growing 19,000 acres in 1928 as compared with New York's 28,000 acres up-state. Every cabbage grower should watch competitive areas and production very closely and plant and sell accordingly.

Probably due to the short northern crop and to good prices, Texas and Florida increased their plantings 17 per cent last fall over the previous year. The seven second early states—from Alabama to Virginia—have increased their plantings 37 per cent. The intermediate area from Long Island and New Jersey westward to Illinois, after a rather unsatisfactory 1928 season plan a decrease of 2 per cent. Upstate New York growers have expressed their intention to increase the Danish acreage 2 per cent and the Domestic 8 per cent. These intentions if carried out will give an acreage about the average of 1924 to 1926.

Good Plants Are Essential

It would probably be very unwise to increase the acreage more than this as favorable rainfall conditions would produce so large a tonnage as to be unprofitable. Plants are the first important consideration. Seed of the domestic variety should be sown by the first of May, but present weather conditions in western New York will probably make this impossible. Careful selection of warm early sites, the use of wood ashes or lime to keep down club root, good fertilization and fine preparation of the seed bed are all important factors. I plan to sow more

Weather Has Held Up Work

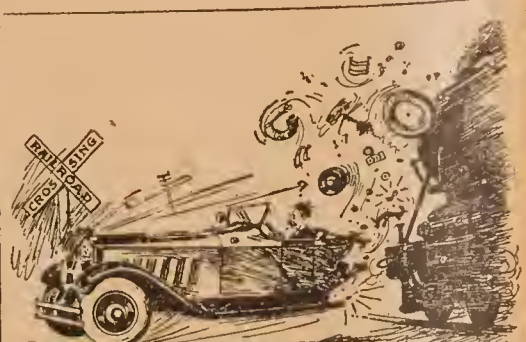
Spring work is progressing very slowly. In addition to the heavy rains previously mentioned, we have had two more almost as bad, so that the ground has been kept soaking wet. There has been little drying weather either, with but four full days of sunshine in April. No plowing has been done in the Lake area below the Ridge in April. Considerable land has been plowed to the south on the lighter soils, but no seeding has been done. Pruning has been pretty well finished and the brush burned. The delayed dormant spray was started on April 23, but was not finished by many growers until the 30th because of rains and winds. The outlook for bloom is fairly good, but not as heavy as was to be expected, especially with Baldwins. It looks like a late spring.

Outlook for Small Fruits

We believe for the man who likes the business and understands it, there is a real future in the growing and marketing of small fruits, particularly berries. But especial care must be taken before starting to study market possibilities and to get the right soils.

Space is too limited to go into detail on the growing of strawberries, raspberries and other small fruits, but if interested, write us for full information or write to your College or Agriculture or Experiment Station.

EXPERIMENTAL work done by the Geneva Station, indicates that the yield of sour cherries is increased substantially by the use of a carrier of quickly available nitrogen. Little or no effect is seen the year the nitrogen is applied but results are noticed the second and third year. Readers who are interested in getting more complete details may write to the New York Agricultural Experiment Station at Geneva, N. Y. and ask for station bulletin 541.



"I wonder what that funny noise in the rear was?"—JUDGE.

Fruit Damaged by Frost

Some First-Hand Reports from All Sections

UNSEASONABLY warm weather early this spring pushed out the buds on all varieties of fruit, thereby causing much apprehension that cold weather might later result in serious damage. Cold weather did come and there was some damage. Knowing that all fruit growers are interested in getting accurate information on the extent of the damage both in their own locality and in the other sections, we immediately took steps to get this information for you. The reports from growers, county agents and spray service representatives follow:

In Western New York

Monroe County—Personally, I have not been able to find any frost damage here. I have made some inquiries hereabouts, and find very little, if any, damage that is apparent now. A few sour cherry orchards in unfavorable locations show slight injury—in one case as high as 30 per cent. With a good bloom, however, this will be negligible for the crop. A little farther south from the Lake, there is a trace of frost injury on McIntosh apples. This is all the damage—practically none—that I have been able to find.—M. C. BURRITT, Hilton, N. Y.

From the information which I have received there has been no damage done to commercial fruits in Monroe County by frost. There may have been some injury from freezes early in April to cherries and possibly peaches but it is not possible to determine the nature or extent of this as yet.—EARL D. MERRILL, Monroe County Farm Bureau.

Genesee County—I can find no damage to any fruits by frost. Plums and sweet cherries now in full blossom. Sour cherries and peaches nearly ready to blossom. Good prospects for crop of all fruits except pears which will be light.—ROY MCPHERSON, LeRoy, N. Y.

Wyoming County—The general opinion here is that apple buds are not injured by the freeze. The early leaf tips show some discoloration but the blossoms appear normal. Peaches and late cherries also appear to be all right. Early cherries may possibly be injured to a small degree.—HOLLIS H. CLARK, Warsaw, N. Y.

Chautauqua County—I am very glad to report, that thus far there does not seem to have been any particular injury to crops in this locality by reason of the freezing weather of the past two weeks.

It appeared improbable that plums and sweet cherries in full bloom could have escaped some injury, but such seems to be the case. Usually this section suffers along with other parts of the state from unusual weather, but it now appears that we have been favored.—F. E. GLADWIN, Fredonia, N. Y.

In Central and Southern New York

Seneca County—We find that sour cherries have been injured from 30 to 85% depending on location and stage of development. McIntosh show slight bud injury in a few localities, where well out. Peaches, apricots, sweet cherries and grapes and later apple varieties do not yet show any material frost injury.—D. M. DALRYMPLE, County Agent.

Yates County—We have relatively few peaches or pears in the country, largely apples, cherries, berries and grapes. It is our opinion that there is but very little, if any, apparent damage so far. Of course, it is early as yet to predict just what the final outcome may be. There may possibly be some injury that will not show until the setting of the fruit. I am not very apprehensive of trouble, however, as we have not had any real freezing weather here in a long time. It has just been cool with a lot of snow and rain. All fruit trees are heavily budded just beginning to show pink.—H. S. FULLAGAR, Penn Pan, N. Y.

Orange County—It is difficult to determine the damage done at present since most of the injury was indirect as far as the fruit crop is concerned. Very little actual damage was caused to fruit buds of apple, pear, and peaches. The most damage to these fruits was to the foliage of the blossom cluster. In some cases in Newburgh township foliage appeared as if it had been badly spray burned. Undoubtedly the injury will weaken the blossom cluster to some extent. Sweet cherries that were in blossom were damaged slightly. Grapes in the Middle Hope section were hit the hardest of any fruits but the amount of damage cannot be de-

termined with any accuracy at present.—S. C. JONES, Special Field Assistant, Orange County Farm Bureau.

The fruit prospects with us look good just now. Never saw cherries more loaded than at present. Peaches look good so far and apples look good. We can't see that the frost has done any damage in this section. This weather is very bad for the bees to work, so much cloudy weather, they may not set fruit.—D. V. FARLEY, Goshen, N. Y.

In the Hudson Valley

Dutchess County—This county was visited by a severe rain, sleet and snow storm on April 16th and 17th, followed by a white frost. The fruit injury in Dutchess County as per our examination on April 24th and 25th reveals a slight injury only to buds of early varieties of apples, but leaf injury is quite severe to all varieties.

Pears are injured from 50 to 75%, depending principally upon the exposure of the orchard. There is severe injury to both sour and sweet cherries indicating that the crop will be very light.

Peaches are only slightly injured on the higher elevations, which indicates that thinning will probably not be necessary this season. Peach orchards at low elevations have some injury as well as a large percentage of them being previously killed during the winter.—A. L. SHEPHERD, Dutchess County Farm Bureau Manager.

There seems to be no appreciable injury to fruit buds of apples in this neighborhood. Stone fruits show much more injury. Sour cherries seem to be the worst. Early Richmond show 90 to 100% injury—later varieties apparently from 50 to 75% here on my place where frost damage tends to be less than in many other places in the neighborhood, on account of nearness to the Hudson River. Sweet cherries, to my surprise, seem to be rather less injured than sour, though badly hit. I found one variety (May Duke) about 90% frozen, later varieties in general about 50%. I have found very little injury to my peaches which are very favorably located on top of a hill with air drainage toward the river. I have not seen any injury to the few grapes that I have in the yard.—K. B. LEWIS, Red Hook, N. Y.

Columbia County—Fruit trees generally are budded heavily. There is, however, considerable frost injury, and in one section the damage is severe, on apples and sweet cherries. There is also much injury to sour cherries and Kieffer pears.

In most of the county, however, it is hoped and expected that there should be a good blossom and that there will be enough uninjured ones to permit of a good crop.

In parts of the county there is an unusual injury to the wood at the base of the fruit buds. This varies in degree and it is a question just how much damage this will do.

On April 10th the thermometer in one fruit section was as low as 10 degrees above zero while two days before it was as high as 90 degrees. This weather change has been unheard of here before this and unquestionably accounts for the frost damage. Peaches which came through the winter also survived this spring freeze and are in good shape.—A. B. BUCHHOLZ, Farm Bureau Manager.

The cold weather has apparently damaged fruit buds to the extent of about forty or fifty per cent. Regarding varieties, it appears that Kings and Greenings have suffered the most severe damage.—PAUL JUDSON, Kinderhook, N. Y.

Ulster County—There was considerable marginal frost burning on leaves of apples which were most advanced, Baldwin being particularly affected in this respect. Many counts on various varieties show that amount of actual killing of blossom buds to be small. However, some orchards of Ben Davis showed as high as 40% actual killing of blossom buds. McIntosh buds seemed to be markedly cold resistant. Only in especially wind-exposed places were any McIntosh buds found to be killed by the weather. We are not sure as to the actual extent of injury until after the June drop. Apple buds may have been so weakened that they will fall in June.

Sour cherries showed the greatest actual bud injury. Some orchards show as high as 75% killing of buds. There are orchards, however, which show no injury. Neither peaches or sweet cherries were touched.

Some parts of the county show con-

(Continued on Page 15)



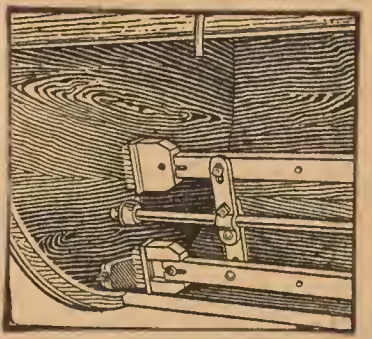
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With the A. A.
Dairyman



The A. A. Dairy Show Excursion

I am very much interested in the American Agriculturist dairy train excursion to St. Louis. Please send me particulars. I think that my son and myself are both going.—B. E. P., N. Y.

THIS is the type of dozens of letters that are now coming in asking for more information about the big American Agriculturist dairymen's train to St. Louis to attend the National Dairy Show. Many of the letters mention that they want to take a part or all of the family.

We really think that this is one of the finest opportunities for both a good and profitable time that has come along in years. Why not begin now to plan to go?

The carfare will differ somewhat, according to where you live, but the excursion rate from Syracuse, which is near the center of our dairy district, is \$46.55 for a return trip ticket. To this should be added \$9.00 for the price of a lower berth each way, or \$7.20 for upper berth each way. If you take the berth from Buffalo, the lower will cost \$7.50 each way, or \$6.00 each way for an upper berth. By crnwdiog a little, two people can occupy one berth.

Definite hotel rates have not been secured as yet, but we expect to get low rates because of the large party. Expenses will be kept at a minimum and will be lower than they would be for anyone alone. The services of American Agriculturist will be rendered entirely free of charge, our only desire being to help as many of our dairymen as possible to have a good vacation.

The party will be in charge of someone from the American Agriculturist editorial staff, and a representative of the Agricultural Department of the New York Central Railroad. All details of arranging for passage, meals, hotel, etc., will be taken care of so that you will be relieved of all responsibility. The only thing you will have to do is to enjoy yourself.

As we have before stated, a program of entertainment and fun, including possibly a band or orchestra, will

be arranged for the train, and side excursions will be arranged to visit interesting points in the city of St. Louis and vicinity.

One of the big objects of the trip is to advertise New York State dairying and especially to bring back with us first hand information on the progress dairymen are making in other sections, including some information as to how much competition might be expected in this milk shed from other districts.

The dates of the Dairy Show are October 12-19. Mark them with a red lead pencil on your calendar, keep them in mind, and plan to give your family and yourself the time of your life.

If interested, let us know and we will keep you informed of developments.

Bad for Both Cows and Pasture

WHEN hay and silage are gone, it probably does no good to tell a dairyman that it is poor business to turn his cows out to pasture too early. Nevertheless, it is recognized that, both from the standpoint of the cow and the pasture, early spring grazing is harmful.

Early pasturing cuts the yield of the pasture crop and encourages the growth of weeds. The ground is apt to be soft so that poaching is bad also.

This year especially when it is necessary to keep the cow's production up for next fall's shortage, let us not be in a hurry to ruin the pasture by too early feeding.

Empire State Ayrshires Herd Test Leaders

WITH an average of 811 pounds of 4.28% milk, 34.71 pounds of butterfat during February, the eight Ayrshires owned by H. P. Ordway, of

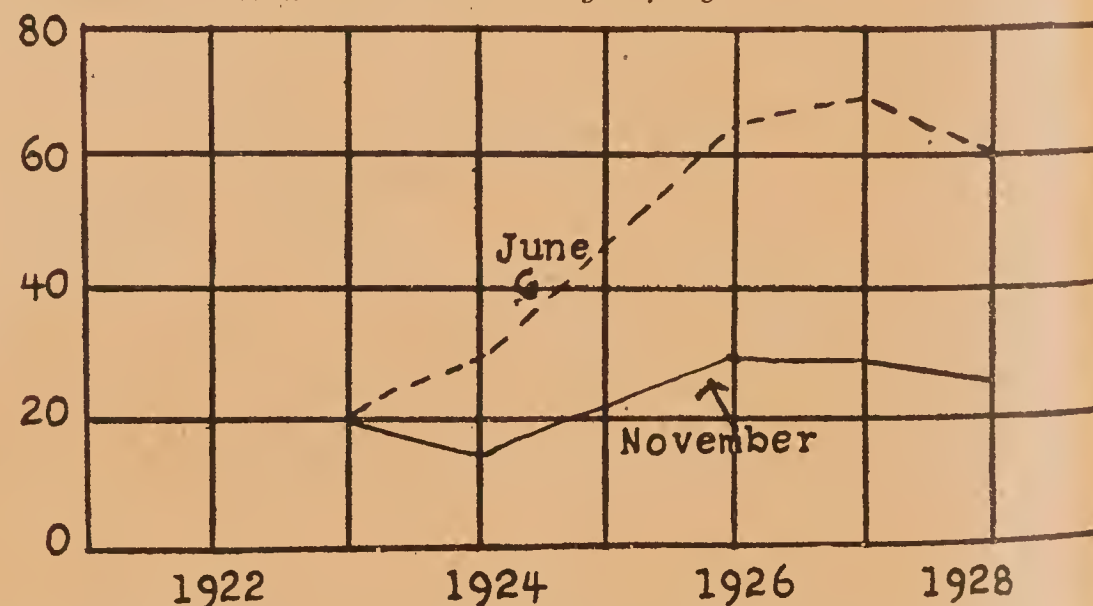
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Increase Over 1922 in Average Daily Production per Dairy

Pounds

By DR. V. B. HART

New York State College of Agriculture



MORE milk has been obtained in November, but for each can of November milk, approximately two and one-fourth cans were added to the June surplus. In other words a glance at the chart shows that while the June surplus has increased about 60 pounds per dairy per day, the November increase has only been about 25 pounds per dairy per day as compared to production in 1922.

It has been estimated that the New York milk shed will have to increase its production from 7,000 to 10,000 cans next November above the amount produced in November 1928. Figuring on a basis of 55,000 approved dairies in the milk shed, this means

from 11-15 pounds per day per dairy. The above figure shows how the production per day per dairy in June and November has been increasing since 1922. We have increased November production but for each can of November milk there has been added approximately two and one-fourth cans of June milk.

An increase of from 11-15 pounds per dairy is not an impossible thing. However, the greatest increase in November production that we have had in any one year during the last five has been one of 7 pounds. Therefore the job which now faces dairymen in the New York milk shed is a bigger one than has ever been done before.

(Continued from Opposite Page)

Canisteo, New York, led all other herds for production in New York State, and ranked second in the United States, among all herds tested for the Ayrshire Herd Test, reports Advanced Registry Superintendent W. A. Kyle of the National Ayrshire Breeders' Association of Brandon, Vermont.

The I. D. Karr Herd of twenty-one Ayrshires located at Almond, New York, on their average yield of 727 pounds of 4.22% milk, 30.67 pounds of butterfat, placed second for yield in the Empire State. The four year old, Agnes P. of Sand Hill, made the good yield of 1969 pounds of milk, 77.38 pounds of butterfat.

Jersey Bull from Massachusetts Sells for \$10,000

THE Killingly herd, one of the world's greatest production herds of Jerseys was dispersed at public auction on April 17 at Barre, Mass., when the 40 head of cattle, including many calves, sold for a total of \$33,875. Buyers from all over the country were present at the sale and bids were received from Japan, Argentine, Mexico and Hawaii.

Killingly Owl Interest, the famous nine-year-old bull that sired the herd went for the highest price, \$10,000, to Duntreath Farms of Memphis, Tenn., owned by Dr. C. S. Crisler. This noted sire is the youngest bull in the Jersey breed to win an American Cattle Club Gold Medal for the high production of his daughters. He now has 14 officially tested daughters and others on test qualifying. To date, the 14 daughters that have completed test records have won a total of 3 Medals of Merit, 8 Gold and 18 Silver Medals for their high butterfat yields. The average mature 365-day equivalent production of all of these daughters is 798.5 lbs. of butterfat.

Duntreath Farms also took the son of this famous sire, Killingly Torono Lass' Son, for the second highest sale price, \$8,500 and the former world's champion cow, Killingly Owl Susanah, for \$2,700, the third highest price of the sale. Several of the other fine Jerseys were also purchased for Duntreath Farms. One cow, Killingly Owl Sally, was sold to T. E. Grow, superintendent of Randleigh Farm, Lockport, New York for \$1,000.

R. T. Lee of Iowa City, Iowa, sales manager, conducted the sale with Walter Andrews of Beach City, Ohio, as auctioneer.

Calves Have Scours

What can we do to cure our calves of scours?—R. M., New York.

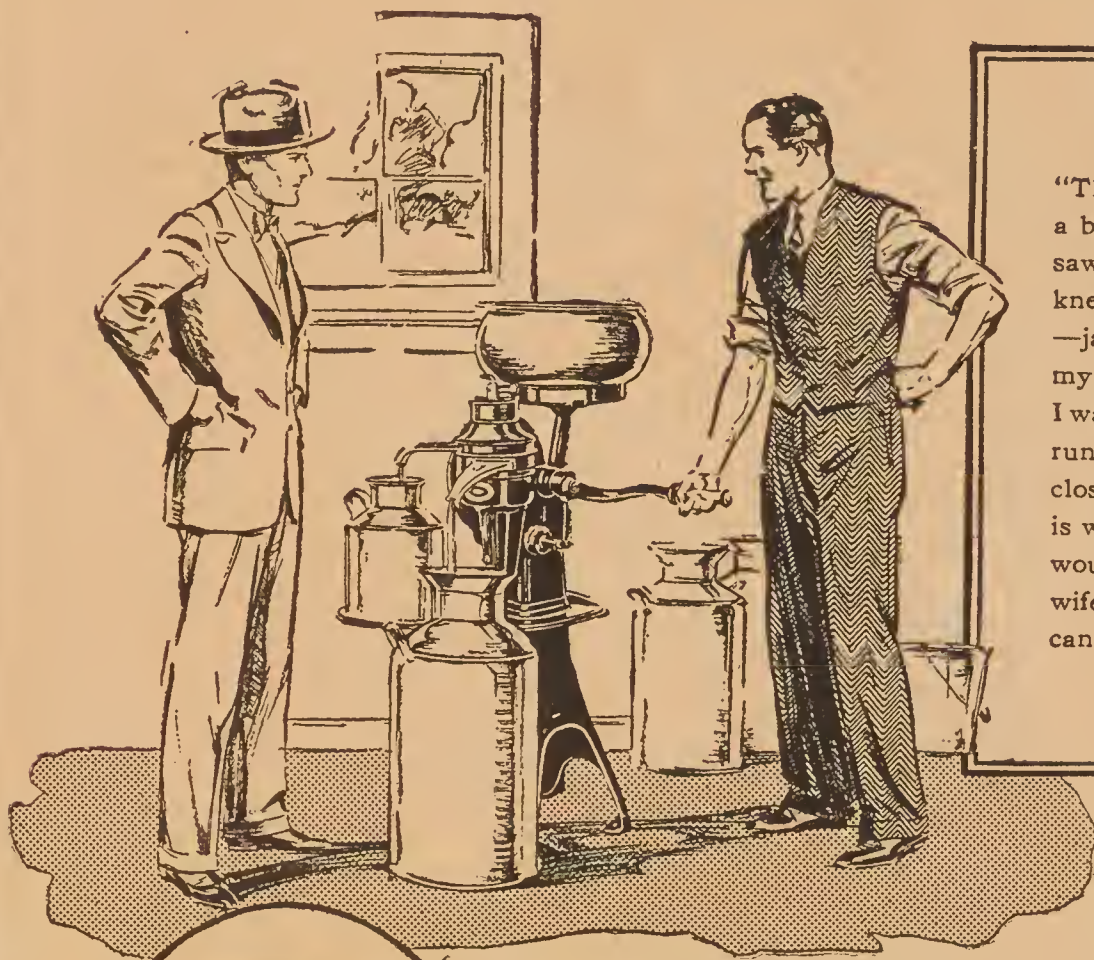
THERE are two kinds of scours that trouble calves. White scours are the result of an infection soon after birth and usually result fatally. The best treatment is prevention through sanitation.

Scours caused by indigestion are likely to occur at any age and can be cured. The first thing to do is to reduce the food by half or omit a feeding entirely. A dose of from one to four tablespoons of castor oil should be given. This can be followed by a teaspoonful of a mixture of one part salol and two parts of subnitrate of bismuth. If the calf is still scouring at the next feeding, omit the feeding, or give two or three raw eggs, in a small amount of warm water. It sometimes helps to add two ounces of lime water to each pint of milk fed. Another remedy sometimes used is ½ tablespoonful of baking soda three times a day in warm water.

Ravages of Abortion

SOME of the best authorities among the veterinarians agree that 30 per cent of our dairy cattle are affected with contagious abortion. We have heard much in recent years about what tuberculosis does to cattle, but while not so much is said about it, every dairyman knows that contagious abortion causes even heavier losses. It is estimated that these losses from abortion amount to \$30,000,000 annually to the livestock industry of America.

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"The separator I had wasn't such a bad machine, but the minute I saw this McCormick-Deering I knew I'd buy it. The shiny finish—japanning they call it—caught my eye. And when I turned it I was surprised how easy it was to run. The dealer showed me how close it skimmed whether the milk is warm or cold and I figured it would be a good investment. The wife likes it, too, because you can wash the discs so easily."



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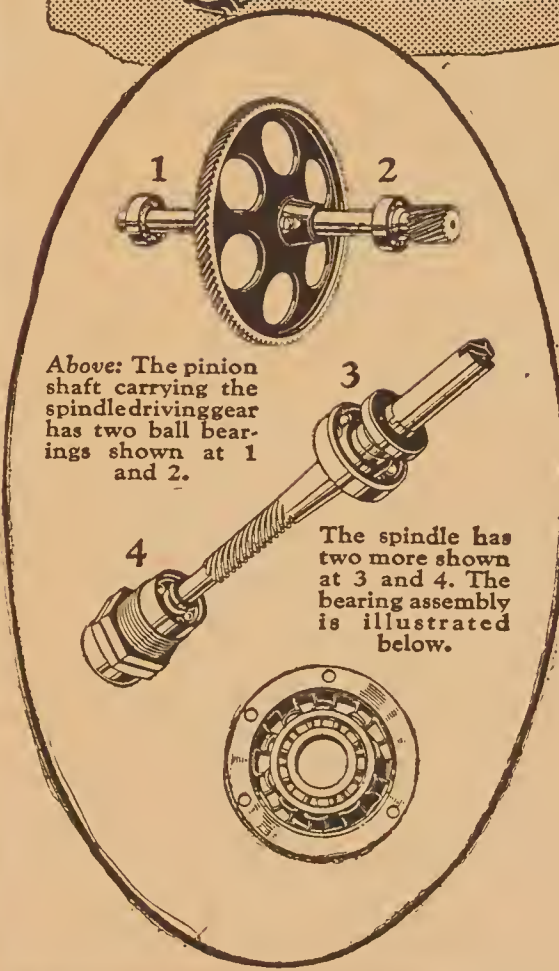
It's the combination of ball bearings at the four high speed points, and positive, automatic oiling that makes McCormick-Deering Cream Separators so easy to turn. Try the one on display at the McCormick-Deering dealer's and see for yourself how easily and quickly you can make the bowl run full speed.

Examine the scientifically designed discs that skim warm or cold milk with maxi-

mum butter-fat recovery. And remember to take notice how readily the glossy japanned finish wipes clean of splashes and grease.

McCormick-Deering Cream Separators come in six sizes: 42, 60, 90, 108, 144, and 180 gallons milk (350-1500 lbs.) per hour. Every one will positively skim rated capacity. Ask the McCormick-Deering dealer near you to demonstrate, or write direct for complete information.

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The spindle has two more shown at 3 and 4. The bearing assembly is illustrated below.

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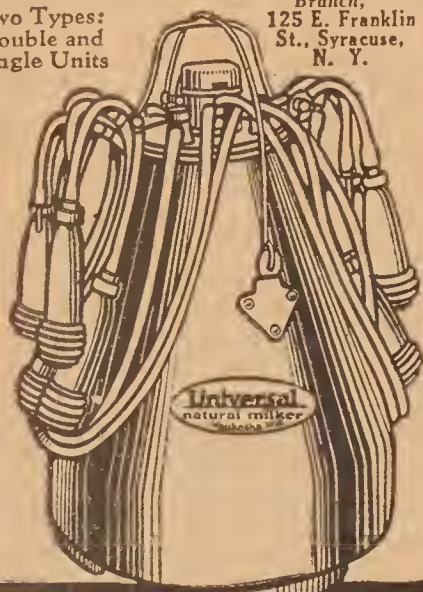
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With the A. A. Livestock Man



Dr. Sun-Health Giver

THE time is coming, probably not far distant, when all of our homes, barns and poultry houses will use much more window glass than they do at present. This glass will not be of the ordinary kind, but rather will be ultra-violet glass which does not screen out the important health-giving ultra-violet rays of the sun.

For many years doctors and parents have realized the value of cod liver oil when fed to children. In recent years, poultrymen have been feeding it to hens and chicks. It contains vitamin D, or stored up sunshine, the same that you get from direct sunlight in the form of the ultra-violet rays.

Ward's Acres, a farm located near New Rochelle, New York, has put in this new kind of window glass, but to be effective much more glass has to be used than in an ordinary barn.

Dr. W. T. Bovie of the American Medical Association in recent tests tried ordinary window glass and the new glass which admits the ultra-violet rays. A number of chickens were placed under each. Within a month the crop under the special ray glass had gained about twice as much as the crop under ordinary glass, and while all of the latter developed positive rickets, not one of the special glass chicks showed definite symptoms.

It is interesting to know that because Dr. Sun is hard to make an appointment with on account of so many cloudy days, scientists have perfected a new ultra-violet ray machine or lamp which furnishes artificial sunshine. Sometime, maybe, every home and every barn or chicken house where livestock is kept will have electrical machines which will flood the whole building with artificial sunshine as easily and as cheaply as it is now lighted by the push of a button with electricity.

Raising Calves on Dry Grain

(Continued from Page 3)

water they want to drink. At the fifth week the calves should be getting nothing but the grain, alfalfa or clover hay and water.

Sometimes the calves may appear gaunt during the fifth to the seventh week. This is due to slow grain consumption and is due to management, but after that they step out on the mixture.

From the fifth week we put enough grain in a pail or box to last the calves for 24 hours. Give them all the hay and

water they want and forget about them until the next morning.

The average scale of grain consumption is as follows 1-2 pounds per day during the second month, 2-3 pounds during the third month, 3-4 pounds the fourth month, 4-5 pounds the fifth month, 5-6 pounds the sixth month and the maximum grain feeding is 6 pounds a day.

When the calves are six months of age we change the ration to a regular growing mixture of corn, oats, bran and linseed which is cheaper, reduce the amount of grain fed and add silage to the ration.

Let the calves have all the exercise and fresh air they can get and excellent results will be secured.

The dry grain mixture method of calf raising does not affect the breeding powers or lactating powers of the animals. One animal raised on this method made a world's record, several have stood second in the state and the others have milked on a par with daughters of the same bulls raised on milk.

Age to Breed Heifers

Is it advisable to breed heifers when they are about fifteen months old?—L.C., New York.

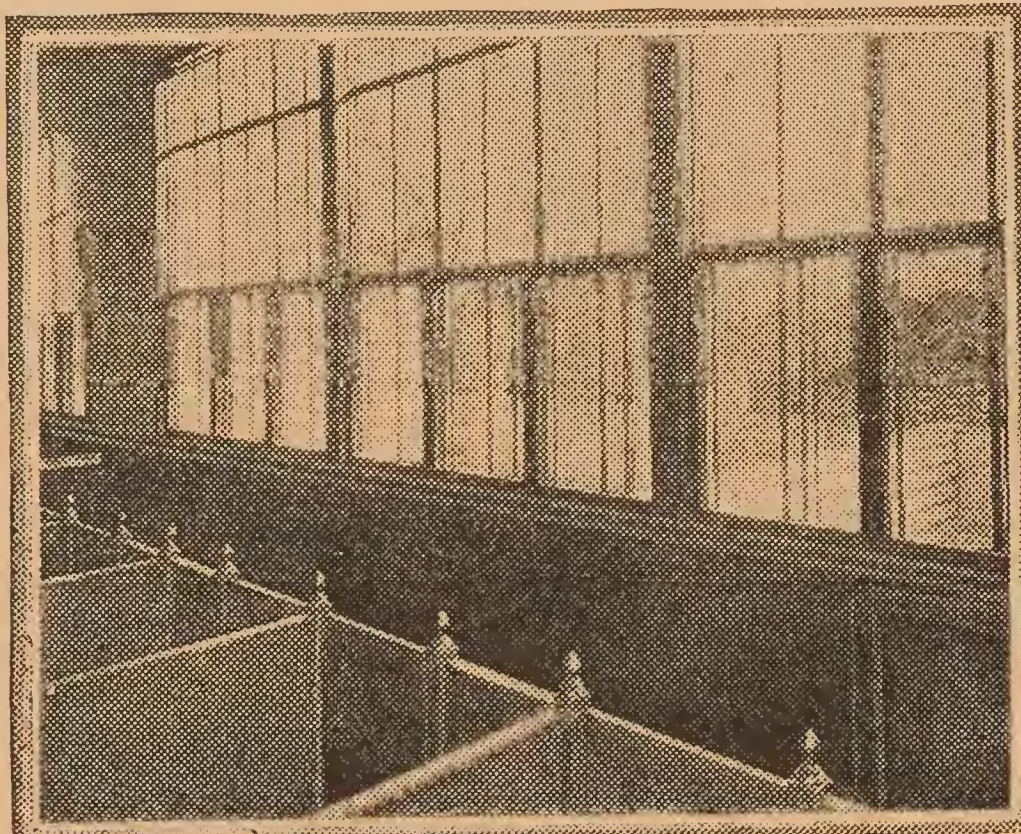
CALVES should be fed and managed so that they will be large enough to breed at fifteen or sixteen months without stunting their growth. At the same time it is essential that they be well developed when they calve if they are to make productive cows.

Dry Skim Milk Powder for Calves

Has anyone tried feeding dried skim milk to calves without mixing it with water?

THE Ohio experiment station recently compared results from whole milk, skim milk, dry skim milk mixed with water and dry skim fed as a powder. The calves fed dry skim milk made good gains, in fact they gained slightly faster than the calves that were fed skim milk powder mixed with water.

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FOR SALE Registered purebred Jersey bull, 18 months old. Price, \$80.00.
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TWO REGISTERED HOLSTEIN BULL CALVES Seven months old. Sire exceptionally well bred. Dams now on test. Two real bargains for someone.
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Heavy legged, square backed, Chester and Yorkshire crossed, Poland China and Chester crossed. Barrows, boars or sows 6-8 weeks old \$5.00—8 to 10 weeks old \$5.50 each. Fancy Berkshires, also Chester Whites, 2 months old Sows and unrelated Boars, \$6.50 each. 10 days trial or your money back. Shipped C. O. D. Crating free of charge. Yours for quality hogs.

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Also few Chester Whites 6 to 7 weeks old \$6.00, and some Jersey Red Durocs 7 weeks old \$6.00. Sold C.O.D. Keep them 10 days, if not satisfied, return them and your money will be refunded. No charge for crating.

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Your old and new address if you are moving this Spring.

AMERICAN AGRICULTURIST
461 Fourth Ave. New York

Along New England Roads

(Continued from Page 1)

gives these churches a curious two story effect. In front there should be a wide projecting porch supported by lofty columns with fluted capitals (believe Corinthian is the word I should use) while overhead towers the lovely, tapering spire.

Springfield, Mass. is becoming a large city—rapidly approaching two hundred thousand people. The city has wealth and historical traditions and a cultural background such as few American cities can equal. She has a beautiful civic center but to me the gem of it all is that old Congregational Church, built, I believe, 110 years ago, it is surely not a modern city church. It would look most at home if set on some elm-planted New England village common. Today it is a survival—a survival of another and almost forgotten era. Set in the very midst of things, around it swirls the roaring tide of traffic typical of our material civilization but the old white walled church still stands as a visible symbol of the Spirit of Puritanism which once made New England great.

I do not know that it is easy to account for this outstanding distinction of country church architecture in New England. I suppose it had its roots in the fact that in the Puritans' commonwealth as nowhere else, the church was outwardly supreme in the lives of men. The New England church in a very real sense was prosperous and powerful and she symbolized that fact by beautiful and dignified buildings.

The Village "Common"

There is yet another New England institution and that is the village "Common." The old name still survives in the big open space found in the heart of the great city of Boston. "Common" is literally correct for it was the common open pasture ground and the possession of all the people, owned by no man. Typically the New England village was built around this open center. Very often the New England emigrant carried the institution to his new home. Lawyersville, the tiny hamlet where I live, was founded by a colony of Connecticut Yankees. It was a rather remarkable circumstance because on every side they were surrounded by Dutch and Germans. I have sometimes pleased my fancy by calling it a Yankee Island in a Teutonic sea. True to their traditions, these pioneers set aside a plot of land for a "common" and built around it so that our village, like the Holy City, "lieth four square."

Jefferson, Camden, Hamilton, Clinton, Sangerfield, Peterboro, Bloomfield are only a few of many New York State villages which betray their New England origin by building around a central open space. Unfortunately, in this state, we have almost absolutely forgotten the fine old New England word "Common." We call it the "Square"—sometimes the "Green." Worse than that we sometimes call it the "Park." But no matter what name we employ, the fact that a village or city has at the heart of it an open, unowned plot of ground is almost unimpeachable evidence that its first settlers were Yankees.

But it must be time that our short vacation is finished and we came safe home. Some day, if the editor will grant me space, I want to write of Old Newgate Prison. Someone has called it the most noteworthy ruins in New England. I think it has in it the stuff of which stories are made and it ought to be worth a page or two.

We Need the "Vacation Habit"

I wonder if in the course of these easy-going informal vacations now running back several years, we have accumulated any experience which might justify us in giving advice to other farm folk similarly inclined. Without question, we ought to get the vacation habit. It is a good thing to come to know what lies over the next hill. The coming of the automobile has been by no means an unmixed blessing, but I am wonderfully glad because it has greatly broadened the

horizon of millions of farm folk. Fortunately, almost every farmer has a car. Probably the greatest difficulty in the way of a vacation for most farmers is the question of someone to keep the home fires burning and the cows milked. Being fortunate in having on the farm at home an especially competent son we do not have this particular question to trouble us. I am afraid it is true that the farmer works longer hours than any other class of toilers. All this talk which is going around the world about a six hour day and a five day week—a proposition which is coming to be a definite ideal on the part of organized labor—all this means nothing to the farmer. Any vacation he gets he deserves and he may take it with a clear conscience.

Given a car and a week it is easy to go, say, a thousand miles and to have a glimpse of half a dozen states. For example, it will carry the New York dairyman south of Mason and Dixon's line into a region that geographically, agriculturally and socially is quite a different world from our New York hill country. The expense of such a trip will vary widely with our standards of comfort and the type of accommodations demanded. We have never tried camping out although I have an intimate friend, a University Professor, who along with his wife has pitched his tent by many thousands of miles of trail and declares he likes it.

We have tried both the "tourists accommodated" homes and the more pretentious hotels of good-sized cities. I think that as our experience increases we are more inclined to try the tourist homes. As a matter of fact, I have a suspicion that today the main reason for going to a big city hotel is just to demonstrate that we, too, have the price and if so this is close to snobbery.

Some Advantages of Tourist Homes

On an extended automobile tour the biggest item in the budget is not oil and gas and tires, but beds and food. Two people occupying a room with bath in the better hotels will find the most common charge \$5.00 per night and food will be correspondingly expensive. On the other hand, the usual tourist home rate is \$1.00 "per person." Really, the main difference is that there is no telephone in the bedroom and the bath will be across the hall, moreover, there will be no street lights or trolley cars under the windows. I have had no occasion to complain of either the bed linen or towel supply. The country is getting full of people who have learned how to care for even fastidious guests. When it comes to "eats" the argument is all for the home. The old-fashioned farm idea of plentitude still prevails. At breakfast I have been offered fruit, cereal, milk, toast, eggs, bacon with almost everything else you can think of—all for the munificent sum of fifty cents. I believe there are many tourist places which are serving morning meals more elaborate than the modest charge will justify. There is yet another reason. We (meaning the Madam and myself) are both by our wardrobe and our training not much given to "dressing for dinner" and I confess that sometimes in a hotel dining room we have been a bit embarrassed and reluctant to make known our wishes concerning food because the men waiters were dressed so much more resplendently than I.

There is yet another reason why we lean toward the tourist home. The most valuable part of any vacation is the information you get. I have been told that I have a very well developed talent for vigorously cross-examining people regarding crops and cattle and old churches and mouldering grave yards and all sorts of neighborhood traditions. These are matters concerning which your host and hostess are not only willing but glad to talk and often they are a mine of worthwhile information. On the other hand,

(Continued on Page 15)

A Concrete Milk House

with an asbestos-shingle or slate roof is FIREPROOF, DURABLE and SANITARY... It is believed to be the cheapest in the long run, for it requires few repairs and no painting.

—Farmers Bulletin No. 1214, "Farm Dairy Houses" U. S. Dept. of Agriculture, Washington, D. C.

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A four-page leaflet has been prepared containing plans and instructions for building a concrete block milk house. INSULATED CONCRETE COOLING TANKS which SAVE HALF YOUR ICE are included in the above plans.

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Reviewing the Latest Eastern Markets

Milk Prices

The following are the May prices for milk in the basic zone of 201-210 miles from New York City.

Dairymen's League prices are based on milk testing 3.5%. Sheffield on the basis of 3%.

Class	Dairymen's League	Sheffield Producers
1 Fluid Milk....		
2 Fluid Cream	3.37	3.17
2A Fluid Cream		2.05
2B Cond. Milk..	2.26	
Soft Cheese....		
3 Evap. Cond. Milk Powder	2.51	2.05
Hard Cheese		
	2.25	
4 Butter and American cheese. Based on New York City Market quotations on butter and American cheese.		

The Class 1 League price for May 1928 was \$2.90 for 3.5% milk and Sheffield's \$2.80 for 3%.

The above prices in each class are not the final prices the farmer receives. The final price received from the dealer is the result of the weighted average.

Butter Barely Holding On

CREAMERY	May 1, 1929	Last Week	May 1, 1928
SALTED			
Higher than extra....	46 -46½	46 -46½	45 -45½
Extra (92sc).....	45½-	45½-45¾	44½
84-91 score.....	43 -45¼	43¼-45¼	43 -44¼
Lower Grades.....	42 -42½	43 -43½	42 -42½

The butter market is barely holding the position we reported last week. In fact, from some angles, the market shows a slip, those marks scoring higher than extras generally selling at 46c, premiums being paid on only rare occasions where gilt-edge, light colored marks are concerned. Furthermore, 45½c is the limit on 92 score butter whereas a week ago there were some sales at 45¾. Larger receipts than were looked for have been more or less responsible for the situation. New York has been a little above other markets and we have attracted butter both by rail and water. As a result the supply has been very full. The selling element appreciating this has met all offers promptly, and as a consequence floors have been kept fairly free as a general order of things. Here and there slight accumulations are reported but they have not yet become serious. The chain stores have been maintaining a relatively low retail price and these outlets have had the effect of moving a lot of this extra butter. From now on the bulls are going to be at work and we expect the prices will tend downward due to the criticism of color. New York wants a light colored butter and at this

time we begin to get a lot of butter carrying a high color. This is used as a lever to drive the price down. We have had some of it already but we are going to see even more.

Trading as a whole has not had the snap to it that makes for a real strong market and this factor is going to influence the buying trade in no small degree. On April 26, the four largest cities reported 2,106,164 pounds of butter in cold storage warehouses. A year ago the same day the same cities reported 1,685,433 pounds. From April 19 to April 26 cold storage holdings in those four cities were reduced 156,024 pounds, whereas during the same period last year those same cities reported a reduction of 331,034 pounds. The trade is anxiously awaiting the May 1 government report.

Fresh Cheese Slightly Lower

STATE FLATS	May 1, 1929	Last Week	May 1, 1928
Fresh Fancy.....	22 -	27½-29½	22 -22½
Fresh Average.....			
Held Fancy.....	27½-29½	22 -22½	29½-30½
Held Average.....			28 -28½

The fresh cheese market slipped a half cent as April came to a close. On Monday, April 29, the market showed an easier trend and one round lot was sold at 22c. Another lot consisting of 200 boxes of equal quality was offered at the same price. This slightly easier tone appeared to have the effect of stimulating business for the demand on May 1 for fine quality fresh cheese absorbed the offerings of State goods.

Cured cheese is quiet. There is relatively little held cheese in the market and that is in extremely strong hands.

The production of cheese is on the increase. This increase is more noticeable in Wisconsin, while in New York State the make is gaining very slowly. In New York City the market is easier on fresh Wisconsin cheese. The entire situation would lend the opinion that the trend is for an easy market. Whether prices will slip below 22c no one can tell, but with the situation as it exists today there is little likelihood of any advance. On April 25, the ten cities making daily reports had on hand 10,441,000 pounds of cheese. On the same day a year ago the same ten cities reported 7,934,000 pounds. From April 18 to April 25, cold storage holdings were reduced in those ten cities 203,000 pounds, whereas a year ago

during the same period those same cities reported an increase in holdings of 334,000 pounds.

Minor Changes in Egg Market

NEARBY WHITE	May 1, 1929	Last Week	May 1, 1928
Hen'y Sel. Extras....	34 -37	34 -37	35 -37
Hen'y Av'ge Extras..	33 -	32 -33	34 -34½
Extra Firsts.....	32 -32½	31 -31½	32 -33
Firsts.....	30½-31	30 -	30½-31½
Undergrades.....	27 -32	-30	28 -32½
Pullets.....			
Pewees.....			
NEARBY BROWNS			
Hen'y.....	34 -36	34 -35	36 -36½
Gathered.....	28 -33½	28½-33½	30½-35

There have been only minor changes in egg prices since last week. Those grades just under the very tops have improved a fraction of a cent. From all indications it would appear that the market is going to hold the slight gain that it has made. Country costs have continued relatively high compared with local values. Production continues to hold back. There seems to be little

Market Reports Daily by Radio

Up-to-the minute market information and prices are broadcast daily for your benefit by American Agriculturist co-operating with the New York State and Federal Departments of Agriculture, through station WEAf. The reports are broadcast at 12:30 standard time.

doubt that the weather has had a material effect upon the lay. On April 26, the ten cities making daily reports had on hand in public warehouses 1,827,000 cases of eggs, compared with 2,073,000 cases on April 26, 1928. From April 18 to April 26 the holdings in the ten cities increased 505,000 cases, whereas during the same period the same cities reported last year 545,000 cases.

Advices from the West particularly Texas indicate a marked falling off in the lay. The movement of eggs from Texas and within Texas is said to have slackened up considerably compared with several weeks ago. Furthermore, the advices state, that although some storing has been done, it is lagging considerably behind a year ago. Minnesota egg production is said to have reached its peak in the fourth week of April. The flush of the egg season is reported to be over in Tennessee. Although production continues fairly liberal, there has been some decline in the lay. These reports may have some bearing on what we can expect and at this writing it looks like a good egg year.

Live Poultry Accumulating

FOWLS	May 1, 1929	Last Week	May 1, 1928
Colored.....		35-36	27-28
Leghorn.....		25-30	-27
CHICKENS			
Colored.....			
Leghorn.....			
BROILERS			
Colored.....		30-53	35-55
Leghorn.....		25-42	25-40
CAPONS.....		60-65	
TURKEYS.....		50-60	
DUCKS, Nearby.....		26-32	18-24
GESE.....			

At this writing the last Passover the Hebrew holiday, has the market at a standstill. There is absolutely no trading and the situation is entirely nominal. We therefore omit any quotations. Quite a few express broilers are lying around and although there is no business being done it looks like a downward trend. This is the reverse of the market on Monday the 29th when we had quite a favorable market. At that time fowls favored the seller, colored stock bringing from 36c to 37c and Leghorn fowls from 32c to 33c. Fancy broilers were well sustained with colored stock bringing anywhere from 30c to 50c and Leghorn broilers from 25c to 42c. Long Island spring ducks sold up to 32c with other nearby from 26c to 27c.

The next holiday to watch will be Decoration day which falls on May 30. Although this is usually a fair time to market broilers, a good deal depends upon the weather. Therefore readers are urged to listen in on the

radio market and weather reports. Incidentally, those who are in the vicinity of resorts may well investigate local markets. Some of them may pay more than the Metropolitan district. We have known this to occur many times in the past. The best market days will be May 27 and 28. We would advise having stock in the market not later than the morning of the 28th.

Hay Moving Freely

The hay market continues unchanged. Timothy No. 1 is extremely scarce and medium grades are moving readily. This means that the market has been moving in good shape. Quotations remain undisturbed varying from \$18 to \$27 depending on quality.

Feeds and Grains

FUTURES	May 1, 1929	Last Week	May 1, 1928
(At Chicago)			
Wheat, (May).....	1.13	1.14½	1.61½
Corn (Mar.).....	.90½	.89½	1.05½
Oats (Mar.).....	.49½	.47½	.62½
CASH GRAINS			
(At New York)			
Wheat, No. 2 Red..	1.41	1.41½	2.26
Corn, No. 2 Yel....	1.07½	1.06¼	1.27½
Oats, No. 2.....	.62	.60½	.80
FEEDS	Apr. 27, 1929	Apr. 21, 1929	Apr. 28, 1928
(At Buffalo)			
Grade Oats.....	33.00	33.50	43.00
Spring Bran.....	26.50	27.50	39.50
Hard Bran.....	28.00	30.00	42.00
Standard Mids.....	26.00	27.00	40.00
Soft W. Mids.....	33.00	35.00	46.50
Flour Mids.....	32.50	33.00	41.50
Red Dog.....	36.00	37.00	42.50
Wh. Hominy.....	37.00	37.00	44.00
Yel. Hominy.....	37.00	37.00	43.50
Corn Meal.....	37.50	38.50	45.50
Gluten Feed.....	42.50	42.50	44.75
Gluten Meal.....	52.50	52.50	59.00
36% C. S. Meal.....	41.50	41.50	58.00
41% C. S. Meal.....	44.50	44.50	64.00
43% C. S. Meal.....	46.50	46.50	67.00
34% O. P. Linseed Meal.....	52.00	52.00	53.50

The above quotations are those of the local Buffalo market and are F.O.B. They are reported in the weekly letter of the N. Y. State Department of Agriculture and Markets.

Rates on carlots and less than carlots may be obtained from your local freight agent, thereby giving the price of the commodity delivered your station.

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NOTICE TO CREDITORS OF WELLS J. AGEN TO PRESENT CLAIMS

Any person having a claim against Wells J. Agen for milk and cream of his own production sold to said Wells J. Agen, is hereby required to file with the undersigned Commissioner at 122 State Street, Albany, N. Y., a verified statement of such claim on or before June 15, 1929.

Dated: Albany, N. Y., April 22, 1929.
BERNE A. PYRKE,
Commissioner of Agriculture and Markets

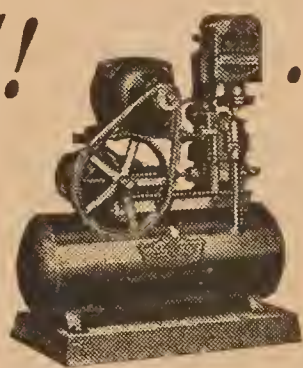
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Farm News from New York

Cooperative Milk Producers Federation Criticizes Federal Farm Relief Bill

FOLLOWING a recent three-day conference of the National Cooperative Milk Producers Federation, a statement was published criticizing certain features of both House and Senate farm relief bills. Particular emphasis was placed on the dangers to cooperatives should they participate in the proposed stabilization corporation. It was pointed out that these stabilization corporations cannot function unless they sell abroad for less than the domestic price and that no provision is made for making good these losses. It is, therefore, believed that if cooperatives should sponsor stabilization corporations, which should later become insolvent, it would react unfavorably in the minds of the public and would conclude that the cooperatives were lacking in business management. Objection was also taken to the provisions made for clearing houses. The Federation declared that such a scheme cannot work out successfully and therefore, opposed government loans for this purpose. Protest was also made against the provisions in the bill for loans to cooperatives for educational purposes because it was felt that it would enable cooperatives to set up high powered soliciting organizations, which might result in more harm than good.

In conclusion the Federation statement asserts that the basis for any farm relief legislation must be adequate tariff protection, and that without it, "no permanent farm relief can be secured and maintained without such import duties as will reserve the domestic market for our agricultural producers."

Dairymen's League Annual Meeting June 20

THE annual meeting of the Dairymen's League Cooperative Association is scheduled for June 20th at Syracuse. The principal speaker at the meeting will be Harry Hartke of Covington, Kentucky, who is president of the National Cooperative Milk Producers Federation. In preparation for the annual meeting, every local association in districts 2, 4, 6, 8, 14, 17, 22 and 23, met on Saturday, May 4, to elect a delegate to the district meeting on May 7. On Tuesday, May 7, these delegates met to nominate directors for the districts already mentioned. At this meeting members of the resolutions committee were selected to serve at the annual meeting.

Asiatic Beetle Destroys Lawns

THE Westchester County Farm Bureau is putting out posters and warnings concerning the Asiatic Beetle, which is very destructive to lawns. The larva of this beetle will entirely destroy a lawn in a few weeks where it is abundant. A control consists of applying five pounds of dry arsenate of lead powder to each 1000 square feet of lawn. This should be mixed with a bushel of screened soil or sand for more even distribution and applied when the grass is dry.

Where lawns have been destroyed and are being reseeded, double the quantity of arsenate of lead is recommended to be worked into the top soil.

Guernsey Breeders Offer Prizes to 4-H Calf Clubs

NEW YORK 4-H Guernsey calf clubs will receive \$325 during the year from the New York state Guernsey Breeders' Association, according to an announcement just made by J. P. Willman of the New York state college of agriculture.

A total of \$175 in cash prizes is offered to 4-H calf club members who show Guernsey heifers at the 1929 New York state fair at Syracuse. Of this amount, \$150 will be distributed in five prizes of \$8, \$7, \$6, \$5, and \$4 respectively, to the winners in the five classes of junior heifer calves, senior heifer calves, junior yearling calves, senior yearling calves, and heifers or cows two years old or older. The remaining \$25 is to be divided equally among the 4-H club members who

show Guernsey heifers at the New York state fair who do not win prizes. To this amount is to be added any money not used in the classes here mentioned, if it should happen that five do not enter a given class.

The association will also give a plaque

Agricultural Programs From WGY

12:00 Noon—Eastern Standard Time, daily except Saturday and Sunday—weather report, farm produce report, farm talks.

6:10 P. M.—Eastern Standard Time, daily except Saturday and Sunday—farm produce report, farm talk.

7:00 P. M.—Eastern Standard Time, (8:00 P. M. Daylight Saving Time). Thursday—Half-hour agricultural program.

costing about \$25 to the champion 4-H Guernsey showman at the fair.

The sum of \$125 is to be contributed toward the expenses of sending a group of 4-H Guernsey heifers to the 1929 National Dairy Exposition at St. Louis.

Voters' Radio Service for May

THE National League of Women Voters and the National Broadcasting Company co-operate in broadcasting non-partisan information on topics of interest to voters. These talks may be heard each Tuesday at 7 to 7:30 p. m. (eastern standard time) over WEA, New York City and WRC, Washington, D. C.

May 14th, Crime and the Law. "Our Inadequate Criminal Law" by Dr. George W. Kirchwey, formerly warden of Sing Sing. "Inadequate Administration" by Dr. Raymond Moley, Professor of Public Law, Columbia University.

May 21st, "What Congress is Doing" by Mr. Charles G. Ross, Head of the Washington Bureau of the St. Louis Post Dispatch. "The Jones Law" by Mr. Henry Goddard Leach, Editor of *The Forum*.

May 28th, The Federal Government and the Indian by General Hugh Lenox Scott, member of the Board of Indian Commissioners since 1919, and Mr. Lewis Meriam, of the Institute for Government Research, the Brookings Institution, Washington, D. C.

Mediterranean Fruit Fly Menaces Fruit and Vegetable Industry

A DEVELOPMENT of interest to a fruit growers is the discovery of an insect pest known as the Mediterranean Fruit Fly, in Florida. It is stated that this is probably the most serious menace ever faced by the fruit and vegetable industries in this country. Attempts are being made to stop this pest at once and unless they are successful it is believed that losses will be very severe. All citrus fruits from Florida are being subjected to rigid inspection before they leave the state and Congress has been asked to make an appropriation of \$4,250,000 to fight this insect pest. Although it is not definitely known how the pest gained entrance, authorities believe that it came into this country in straw that was used to pack liquor bootlegged into the country.

New York County Notes

Cattaraugus County—William Marvin, Jr., student of Cattaraugus High School and winner in the county oratorical contest for high schools, also won second place in the semi-finals in Buffalo, April 26 when winners from eight counties in Western New York competed. He received a gold medal and \$55 in cash as a prize. The contest was sponsored by the Buffalo Evening News. Randolph, Cottage, Cattaraugus, North Otto, Machias, Mansfield, Little Valley, East Otto, Limestone, West Valley and Steamburg Grangers were present at a county wide conference held in Eddyville Grange Hall,

April 26. Miss Elizabeth Arthur, Lowville, State Grange Lecturer, was in charge and won the admiration and esteem of the Lecturers and Secretaries present. Her blackboard and thermometer demonstrations and tableau at the close were very inspiring to the Grangers. The first week in May has been sour, cold and wet. No oats have been sown as yet. Grass has a good start.—M. M. S.

Steuben County—April has very nearly established a new record for rain, snow and cold. It has been impossible to put in crops but some plowing has been done on naturally dry fields. Grass is looking good and pastures are well advanced for the season. Cows are doing well except in cases where too much dependence has been placed in the new growing grass.—H. I. D.

Livingston County—A new 4-H Club has been organized. About 20 Livingston county boys and girls and their parents from district 20 met at Holmes School, Springwater, N. Y., Friday evening, April 26 to organize a new 4-H Club. The following officers were elected: President, Dorothy Billock; Vice President, Kathryn Schumell; Secretary, Mary Kern; Treasurer, Marion Gibson; Song Leader, Irene Kern. While there were about 18 eligible boys and girls present at the first meeting it is expected there will be more present at the next meeting. We all hope this organization will be a success which we surely think it will be.—I. K. S.

Chenango County—The farmers within a radius of seven to eight miles of the progressive village of New Berlin, N. Y., under the able leadership of Mr. F. Palmer and a few others, purchased a Howe Ford fire truck for rural use. The equipment consists of ladders, 850 feet of regular fire hose, a chemical and booster tank, holding 300 gallons, a pump working on 120 lbs. pressure which will deliver two streams of water at the same time, and also a chemical stream. The money for the purchase of the truck was raised by an assessment of \$4.40 per \$1000 which was purely voluntary on the part of the farmers, and they came across 99%. On April 25 we had a general get-together for an inspection of the equipment and an excellent supper was served, at which time it was decided to form a rural fire association. Officers were elected and we were invited to join the county association. So far as we can find out, this is the first purely rural fire truck and association in New York and we are naturally proud of the fact.—M. W. F.

Clinton County—April so far has been very cold with several snow storms. The mountain on both sides of us are still

white with snow. Very little work on the land has been done so far. Buyers are now offering 50c a bushel for potatoes. New seeding seems to have come through the winter fairly well.—R. J. M.

Ontario County—April has made a record for a cold wet month. There have been very few days when it did not rain or snow. We have had some hard freezes which has been very hard on fruit. The report is that 80% of the sour cherries were killed. Very little plowing has been done, fields being too wet to draw a machine. Most of the sheep have been sheared. The price of potatoes is improving.—E. T. B.

Columbia County—A week of rainy weather with two days of sunshine is the past nine days' record. Brooks are running over and meadows are flooded. 4-H Club workers receive instruction from a State Clothing Specialist. A Junior Aviation Class has been formed in Hudson. Kinderhook is to have a new fireproof school building by September 1. Trout are big in Hollowville. Boys caught 3 lb. ones this week. A large brush fire in Stockport was fought by 40 men and the Stockport Fire Company, for over four hours. Diphtheria Immunization treatment for children is being given in Hudson, for third time. Livingston Grangers held an interesting meeting, relating to grade crossing elimination. Chicks are hatching fine. Eggs are selling for 32c a dozen selected, and for 25c unclassified.—Mrs. C. V. H.

Dutchess County—We have had cold, snow and rain for two weeks, starting April 16. Crops will be put in the ground late this year. Fruit is not hurt yet although it was 10 above zero April 23. Potatoes are \$1 a bushel; eggs, 35c to 40c a dozen; hay \$8 to \$10 at barn; butter, 45c to 50c a lb.; sugar 5c a lb.; flour, \$1.05 for a 24½ lb. sack. It has been a bad spring for bees.—T. S.

Reforestation Interest Increases

THE interest which New York State residents are taking in reforestation, is shown by the increase in orders for seedlings received by the Conservation Department. The present yearly demand is about 25 million trees. Legislation passed at Albany this winter will undoubtedly increase this demand. The state now has five nurseries, located at Saratoga, Lowville, Lake Clear, Horseheads, and Painted Post. It is expected that when these five nurseries are running at full speed they will have an annual output of 50 million trees.

Pennsylvania Farm Notes

THE first Pennsylvania law making it compulsory to designate the grade of an agricultural product was secured by the Pennsylvania grape growers when Governor Fisher signed the bill which will require the marking of all closed packages of grapes in conformance with the United States grape grades.

The bill further provides that grapes not conforming to the U. S. Standards, which have been adopted as the official grades for use in Pennsylvania by the Bureau of Markets, may be stamped on the covers of the packages as "Unclassified."

4-H Clubs Are Increasing

WITH 8,000 boys and girls enrolled in agricultural and homemaking 4-H clubs in this state last year, J. F. Keim, assistant state club leader of the Pennsylvania State College, believes there are possibilities for many more young people to engage in the work.

Reviewing some of the activities of clubs this spring, Mr. Keim reports that the Wayne County Poultry Club has added new members and started an ambitious program. They have ordered 500 baby chicks and will purchase the same number of 8-week-old pullets. The club plans to select a judging team to participate in the contest at State College in June.

In Union county there is a steady demand for calves for club work. Members already own 125 animals, many of which have come into production. In March a Holstein owned by Franklin Miller, of this county, had the best record reported by junior cow club members, producing 48.38 pounds of butterfat.

Members of a businessmen's club in Clearfield have decided to sponsor a potato club this year. They were entertained by eight 4-H club members recently in a stunt known as "Carrying out

the Health H." The four H's in the name and insignia of club work stand for heart, hand, head and health.

JOHN GROSS, an octogenarian residing in York, Pa., dies after a brief illness with pneumonia. He had a national reputation as a viticulturist and was a prolific writer upon the cultivation and hybridizing of grapes. His displays of grapes at the annual county fair attracted much attention usually including over one hundred correctly named varieties. No less than 13 distinct foreign grapes were exhibited as a part of his remarkable collection. The fruit trees of Southern and Eastern Pa. with the exception of a few early flowering varieties escaped serious damage from frosts. Extraordinary heavy rains and wind destroyed the pollen of some bloom. Pollination has been found to be an all-important factor in securing a profitable crop from many varieties of deciduous fruits. Pollination of deciduous fruits, especially where they are heavily planted presents a problem worthy of consideration. The inter-planting of varieties to obtain cross-pollination is all essential in this age of progress. The pasturing of bees in the average orchard pays the owner, even if it is necessary to buy several strong colonies for the purpose of pollination. The writer knows of several successful instances of this character in our large fruit growing belts.—O. D. S.

Mercer County—A very wet cold spring. Not much plowing has been done. Rural carriers had a banquet and meeting at Jamestown, Pa. Saturday evening April 27. Dirt roads are very muddy and full of ruts. Potatoes are 40c a bushel; eggs 25c; butter, 45c; chickens, 28c; veal, 14½c. It has been a very backward season.

Baby Chicks

CHERRY HILL CHICKS

S.C.W. Leghorns—Wyckoff Strain.....	100
S.C. Everlay Brown Leghorns.....	10.00
Barred Rocks—Wm. Nace's select.....	12.00
S.C. Rhode Island Reds.....	13.00
Mixed or Broiler Chicks.....	7.00

1/2c less in 500 lots. 1c less in 1,000 lots.
25 chicks add 2c. 50 chicks add 1c. Full count.
100% live arrival guaranteed. Parcel Post prepaid.
Bank reference. Order direct from this ad or write
for free circular.

CHERRY HILL POULTRY FARM,
WM. NACE, Prop. Dept. A, McAlisterville, Pa.

Chicks C.O.D.

Immediate delivery. Leghorns \$13 per hundred. Hatched from healthy Mountain-Bred, 5 lb., tested, 2 and 3 year old breeders. Order quick, pay post man and have your own Heavy-weight pullets laying in five months time. Our customers do it. So can you. \$63 for five hundred. Satisfaction guaranteed. A postal card will do.

FARM SERVICE

ROUTE A10 TYRONE, PENNA.

BABY CHICKS

PROMPT DELIVERY—WILL SHIP C.O.D.

White and Bd. Rocks.....	50	100	500	1000
S. C. R. I. Reds.....	\$6.50	\$12.00	\$57.50	\$110.00
S. C. White Leghorns.....	5.50	10.00	47.50	90.00
Heavy Mixed.....	5.50	10.00	47.50	90.00

PINECREST POULTRY FARM & HATCHERY
Herbert Miller, Prop. Box 12, Richfield, Pa.

STOP! LOOK! LISTEN!

Cash or C.O.D.....	25	50	100	500	1000
Wh. Wyandottes.....	\$4.00	\$7.50	\$14.00	\$67.50	\$130
Rocks or Reds.....	3.50	6.50	12.00	57.50	110
Wh. Leghorns.....	3.00	5.50	10.00	47.50	90
Heavy Mixed.....	3.00	5.50	10.00	47.50	90
Light Mixed.....	2.50	4.50	8.00	37.50	70

From carefully selected free-range flocks. 100% arrival. Postpaid. Valuable illustrated 96-page booklet FREE. Telling all about poultry.

The Commercial Hatchery,
Box 75-A (The dependable plant) Richfield, Penna.

BABY CHICKS

From Heavy Laying Free Range Flocks

S.C.W. & Br. Leghorns.....	25	50	100	500	1000
S.C.B. & Wh. Rocks.....	\$3.00	\$5.50	\$10	\$47.50	\$90
Buff Orpingtons & Reds.....	3.50	6.50	12	57.50	110
White Wyandottes.....	3.50	6.50	12	57.50	110
Assorted Chicks.....	2.75	4.50	8	37.50	70

100% prepaid safe delivery guaranteed.

Order from this ad. or write for circular

Box 161

J. N. Nace Poultry Farm, RICHFIELD, Pa.

No Bluff Chicks

Just Real

Thousands of customers know. Order year after year. A satisfied customer my best advertisement. Join the old reliable plant. 16 years satisfactory service cuts down expensive advertising. My customer reaps the benefit by ordering from this small advertisement. S. C. White and Brown Leghorn SPECIALIST. 200 to 200 Egg Strain CHICKS \$13.00 per 100; 500 or more, \$11.00 per 100. Assorted chicks, \$8.00 per 100. FREE & 100% LIVE DELIVERY GUARANTEED. **HOUSEWORTH'S LEGHORN FARMS,** Port Trevorton, Penna.

SINGLE COMB

White Leghorns Exclusively

3000 breeders on free farm range. Pure Barron English Strain, with trapnest records up to 314 eggs in a year. The large vigorous Leghorns that lay large white eggs. Now booking orders for hatching eggs and baby chicks Mar., Apr., & May delivery. Special feeding directions with all orders. Circular free. Cecil Sherow and Olive Briggs-Sherow successors to **EDGAR BRIGGS, SUNNY BROOK FARM** Box 50 Pleasant Valley, N. Y.

BABY CHICKS

FROM A HEAVY LAYING STRAIN. Three years blood tested for white diarrhea and under State supervision. Barred Rocks. White Wyandottes. Reds. White Leghorns. Moderately priced. Write for Catalogue and Prices.

BYRON PEPPER & SONS
BOX 11, GEORGETOWN, DEL.

MAY PRICES

S. C. White Leghorns.....	100	500	1000
Barron & Wyckoff Leghorns.....	\$9.00	\$42.50	\$80.00
Barred Rocks & R. I. Reds.....	10.00	47.50	90.00
Light Mixed \$8. Heavy Mixed \$10. Our chicks are properly hatched, strong and vigorous. 100% live delivery. Postpaid. Circular free giving full details of all breeds. CLEAR SPRING HATCHERY, McAlisterville, Pa. R. D. No. 2. F. B. Leister, Prop.	12.00	57.50	110.00

CHICKS, 8c UP HEALTHY, FREE RANGE STOCK

Rocks - Reds - Wyandottes - Leghorns - Mixed Circular and Price List. Delivery Guaranteed. **LONG'S RELIABLE HATCHERY,** Box 12, Millerstown, Pa.

LEGHORN CHICKS

FROM my own range raised healthy disease free breeding flock. \$14.00 per hundred.

L. W. HAMBLIN WILSON, N. Y.



With the A. A. Poultry Farmer



How to Wire Up the Yard Light

MANY of our readers who have put in farm lighting plants or central station electric power will want to put in a yard light of about 100-watts capacity and mounted either high up on the windmill with a strong reflector to light the whole barn lot and front yard, or on a pole of good height and lasting quality and also with a good reflector. This ordinarily will not be burned very long at a time but when it is turned on should light up the whole farm yard quite brilliantly. It should be so arranged that it can be turned on or off at least from the house and barn and preferably from the house, barn, and front gate or garage.

It is hard to estimate the value of such a yard light. In case of disturbance at the barn or poultry house, a snap of the switch at the house and instantly the whole yard is brilliantly lighted before the owner needs to step outside, and he has the advantage of having the thief or prowling animal out in the bright light, while he is not exposed himself. It does away entirely with the danger of running into forgotten implement or other obstruction when hurrying with late chores or making a midnight trip to the barn because a horse or a cow is in trouble. It is a time and trouble saver when coming in late on a dark or stormy night if the yard light can be turned on from the garage and then turned off when one reaches the house. A good yard light is also quite a social asset in case of a party, to welcome the arrivals and speed the departing guests. Since a strong light high up on a windmill can be seen for miles, it could easily be arranged to be used as a signal for help in case the telephone was cut or out of order.

The wiring up of such a yard light to operate from two, three, or even four different switches is neither very complicated nor very expensive. This is shown quite clearly in the diagram (D-730), to be controlled both from two and three switches. All that is required for controlling the yard light from house and barn is two three-way or three-outlet switches arranged as shown. To control it from house and barn and garage requires the same three-way switches at house and barn and a four-way or four-outlet switch at the garage. These can be secured from any electrical supply dealer, who

will also be able to explain just how they should go.—I. W. D.

Chicks Need Lime

LIME is important for the growing chick and lack of lime in the food results in a drain on the reserve supply in the bones and soft tissues of the young birds and interferes with their proper development.

Many rations commonly fed to poultry contain much less lime than is required for the proper functioning of the body. Poultrymen are advised to meet this shortage for growing chicks by adding lime in the form of vegetable foods, such as young clover, alfalfa, etc. For mature fowls, oyster shell or other inorganic lime compounds are all right.

Most grains are deficient in lime and the birds cannot eat enough to meet the lime requirements of their bodies. Mature fowls can use lime in inorganic form fairly well, but young chicks cannot supply their needs from this source to such good advantage. For this reason, it is highly desirable to provide a regular supply of vegetable foods rich in lime for the young birds.

Keep the Chicks Warm

THE success of a whole year's business on the poultry farm often depends upon success in brooding chicks. The most critical period in a chick's life is the first few days in the brooder house. No single factor in chick management is more important than heat control. No condition is so quickly reflected in stunted, unthrifty chicks, as improper temperature.

Proper temperature protects health and promotes uniform growth of chicks. Uncomfortable chicks refuse to eat, and unhealthy chicks fail to digest properly what they do eat. The poultryman's task is to keep appetite and digestion always "up to par."

We recommend, for the first week, a temperature of not less than 95 degrees, one inch above the floor, at the edge of the hover. The poultryman with little or no experience in brooding, should use a thermometer to check temperature conditions.

Do not try to keep the entire pen

(Continued on Page 16)

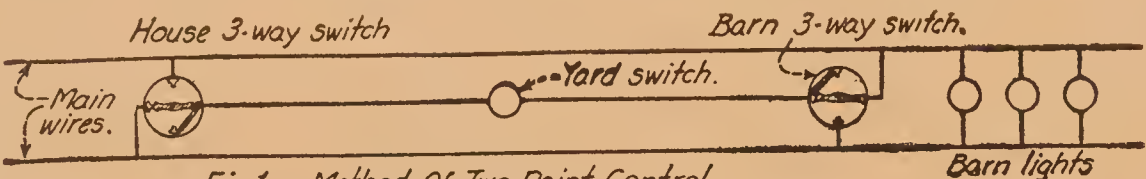


Fig. 1. Method of Two Point Control.
With switches as shown yard light is on.
Moving either switch turns off light.

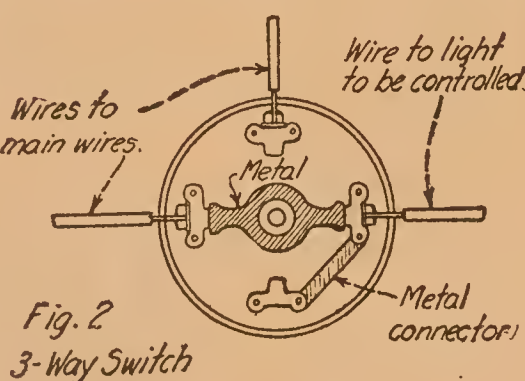


Fig. 2
3-Way Switch

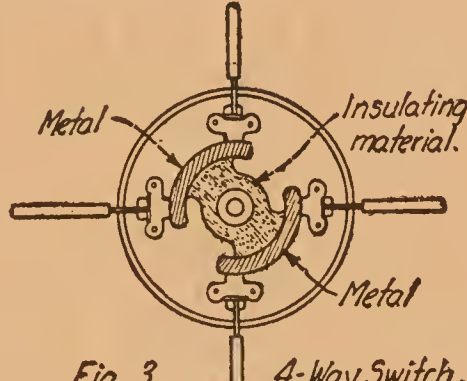


Fig. 3
4-Way Switch

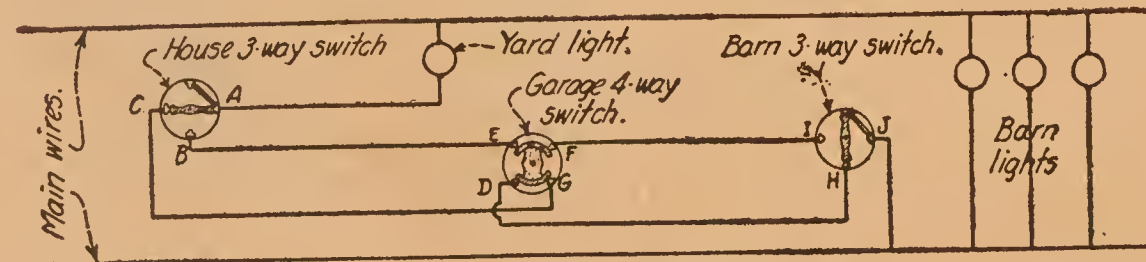


Fig. 4. Method of Three Point Control.
Attach yard light to either A or J.

D-730.

Wonderful Success In Raising Baby Chicks

Mrs. Rhoades' letter will no doubt be of utmost interest to poultry raisers who have had serious losses in raising baby chicks. We will let Mrs. Rhoades tell her experience in her own words:

"Dear Sir: I see reports of so many losing their little chicks, so thought I would tell my experience. My first incubator chicks, when but a few days old, began to die by the dozens. I tried different remedies and was about discouraged with the chicken business. Finally I sent to the Walker Remedy Co., Waterloo, Iowa, for a box of their Walko Tablets to be used in the drinking water for baby chicks. It's just the only thing to keep the chicks free from disease. We raised 700 thrifty, healthy chicks and never lost a single chick after the first dose."—Mrs. Ethel Rhoades, Shenandoah, Iowa.

Danger of Infection Among Baby Chicks

Readers are warned to exercise every sanitary precaution and beware of contaminated drinking water. Baby chicks must have a generous supply of pure water. Drinking vessels harbour germs and ordinary drinking water often becomes contaminated and may spread disease through your entire flock and can cause the loss of half or two-thirds your hatch before you are aware. Don't wait until you lose your chicks. Take the "stitch in time that saves nine." Remember, that in every hatch there is the danger of some infected chicks. Don't let these few infect your entire flock. Give Walko Tablets in all drinking water for the first two weeks and you won't lose one chick where you lost dozens before. These letters prove it:

Never Lost One After First Dose

Mrs. C. M. Bradshaw writes: "I used to lose a great many of the little downy fellows, tried many remedies and was about discouraged. As a last resort I sent to the Walker Remedy Co., Dept. 422, Waterloo, Iowa, for their Walko Tablets for use in the drinking water of baby chicks. I used two 50c packages, raised 300 White Wyandottes and never lost one or had one sick after using the Tablets and my chickens are larger and healthier than ever before. I have found this Company thoroughly reliable and always get the remedy by return mail."—Mrs. C. M. Bradshaw, Beaconsfield, Iowa.

You Run No Risk

We will send Walko Tablets entirely at our risk—postage prepaid—so you can see for yourself what a wonder-working remedy it is when used in the drinking water for baby chicks. So you can prove—as thousands have proven—that it will stop your losses and double, treble, even quadruple your profits. Send 50c for a package of Walko Tablets (or \$1.00 for extra large box)—give it in all drinking water and watch results. You'll find you won't lose one chick where you lost dozens before. It's a positive fact. You run no risk. We guarantee to refund your money promptly if you don't find it the greatest little chick saver you ever used. The Pioneer National Bank, the oldest and strongest bank in Waterloo, Iowa, stands back of our guarantee.

WALKER REMEDY CO., Dept. 422
Waterloo, Iowa

Post Your Farm And Keep Trespassers Off

We have had some new signs made up of extra heavy material because severe storms will tear and otherwise make useless a lighter constructed material. We unreservedly advise farmers to post their land and the notices we have prepared comply in all respects with the laws of New York, New Jersey and Pennsylvania. The price to subscribers is 95 cents a dozen, the same rate applying to larger quantities. Remittance must accompany order.

American Agriculturist

461 Fourth Avenue. New York

Fruit Damaged By Frost

(Continued from Page 7)

siderable killing of grape buds. Mildew was more prevalent than usual last year. Probably more injury occurred where wood was unable to properly mature, because of early defoliation last summer from mildew and black rot.—W. SEWARD SALISBURY, *Ulster County Spray Service*.

There does not seem to be very much damage to fruit yet in this section. Some think there is a little damage to sour cherries, some seem to think that Keiffer pears are hurt some. Sometimes the trees will blossom but will not set fruit. Cherries, peaches, plums and apples are blossoming now. Apples are just in their pink and it is pretty hard to tell just now how the fruit will come out, but it doesn't look as if much damage is done yet.—FRED DUBOIS, *New Paltz, N. Y.*

In the Champlain Valley

Clinton County—As far as I know the Champlain Valley fruit was not damaged by the snow storm of Apr. 16th. We are somewhat later than down state and the buds were not along as far, so they were not damaged as near as I can tell.

Our fruit men have just started to put on the delayed dormant spray.—GEO. R. CZIRR, *County Agricultural Agent*.

The Situation in Other Sections

California—A heavy frost occurred on the morning of April 9. Reports of the actual damage differ somewhat, but according to *The Packer* of April 27, it is estimated that the peach crop in the San Joaquin Valley will be only from thirty-five to forty per cent of last year's crop of clingstones and from sixty-five to seventy per cent of last year's crop of freestones. The same report states that the pear crop has not suffered as much damage as first thought. Last year's production was 219,000 tons and this year's crop is now forecast at 140,000 tons. The reports of injury to the grape crop vary between ten per cent and forty per cent.

Washington—The latest reports from the State of Washington, indicate that the cherry crop will not be over forty per cent of last year's crop and that the peach crop will not be over fifty per cent of last year's crop. Up to date pears and apples seem to have escaped damage.

Michigan—The report in *The Packer* of April 27, states that cold weather caused some damage to fruit in Michigan. It is reported that from fifty to eighty per cent of the buds on sour cherry trees were frosted except where orchard heaters were used. The same report states that little or no damage was done to apple, peach, plum or pear buds.

Georgia—Although there is some disagreement as to the exact situation, it seems to be generally agreed that the Georgia peach crop will be short. One grower states that the crop will not be over 60 to 75 per cent of last year and that growers in general claim that they will not be able to ship more than 50 per cent of last year's crop.

Virginia—We have no information on damage in Virginia. All reports are that fruit trees in Maryland, Virginia and Delaware are in good condition.

Along New England Roads

(Continued from Page 11)

concerning questions of this kind, the ignorance of the usual hotel clerk is appalling. Not only does he not know but moreover he doesn't want to know and esteems you a freak for being interested in such rubbish.

Then I want to give one bit of advice that I confess with shame we often fail to follow. It is this: Go slow. You can see far more in going a hundred miles than if you went (as some misguided folks have done) three times as far. If you see an intelligent farmer digging potatoes beside the road, stop and talk with him. You may learn something from each other and part good friends. Do not—positively do not—fail to read all markers and monuments set beside the road. By all old country cemeteries halt and walk among the graves. If you are sympathetic you may weave romances and you may reconstruct tragedies from the simple inscriptions set above those bygone folks. I believe in ghosts but always they are friendly, kindly spirits and you need not be afraid.

Then if you do all these things you will come safe home and the old farm will have new beauty and you will have attained refreshment of spirit and an untroubled conscience and a great stock of pleasant memories.

SAFE • SILENT • ECONOMICAL • EFFICIENT



Cook in a Cool Kitchen all this summer!

HOT summer days are coming—but you can keep *your* kitchen cool... No more sweltering on hot muggy days with a stove that keeps the whole house like an oven.

A Silent Glow Oil Burner will transform your stove into a modern, oil burning range that cooks like a charm and lets you be comfortable, too... No fires to kindle, no coal or wood to lug, no ashes to take out. When you want a fire just turn a knob. When you're through, just turn your fire out.

That's comfort. It's convenience—it's *living*!

You can cook lots faster with a Silent Glow

Oil Burner—and your meals will be delicious.

And in winter it's just as wonderful. No early rising on freezing mornings to start a cold stove. Just turn the knob—that's all there is to it. And you'll always have plenty of hot water.

Silent Glow is quickly installed without altering your present stove. It's simple to operate. Anyone can run it. Inexpensive, too—it burns ordinary low cost furnace oil. And surprisingly modest in price.

Step in and see this wonderful new burner at your local dealer's. Or use the coupon.

SILENT GLOW OIL BURNERS

For Every Domestic Need — From Cottage Stoves to Apartment Houses
5 Years on the Market — 5 Year Factory Guarantee

[MAIL THIS TODAY]

THE SILENT GLOW OIL BURNER CORPORATION
191 Franklin Avenue, Hartford, Conn.

A.A.5-11

I am interested in a Silent Glow Oil Burner. Please send me, without obligation, information on the burner checked below and the name of my nearest dealer.
Kitchen Range Burner ☐ Furnace Burner ☐ Hot Water Heater ☐

Name _____ Address _____

City (or R. F. D.) _____ State _____



Apollo

Galvanized Roofing



Highest Rust-resistance!
Made from KEYSTONE Copper Steel
LOOK FOR APOLLO BELOW BRAND

APOLLO-KEYSTONE Galvanized Sheets (alloyed with copper) give lasting service and protection from fire, lightning and storms; strong—durable—satisfactory. APOLLO-KEYSTONE Copper Steel Galvanized Sheets are the highest quality manufactured. Unequaled for roofing, siding, gutters, culverts, flumes, tanks, grain bins and all sheet metal work. Use Keystone Roofing Tin Plates for residences and public buildings. Sold by leading dealers. Send for BETTER BUILDINGS booklet.

AMERICAN SHEET AND TIN PLATE COMPANY, General Offices; Frick Building, Pittsburgh, Pa.
SUBSIDIARY OF UNITED STATES STEEL CORPORATION




CLEANS SILVER INSTANTLY

No Polishing—No labor
Results Guaranteed

Send 50c for one
Six for \$2.75
Agents Wanted

ALKEM PRODUCTS CO. 20 W. 44th St. N.Y.



NEWTON'S Compound
For horses, cattle, hogs

Heaves, Coughs, Conditioners, Worms. Most for cost. Two cans satisfactory for Heaves or money back, \$1.25 per can. Dealers or by mail.
The Newton Remedy Co.
Toledo, Ohio.

When Writing Advertisers, Be Sure to
Mention American Agriculturist

Keep Your Horses Sound



A horse free from blemishes and going sound is more valuable and works better. Absorbine has been used successfully since 1892 for reducing lameness and swellings without blistering or removing the hair. Horse can be worked at the same time.

\$2.50 at druggists, or postpaid. Horse book 5-B free.

ABSORBINE

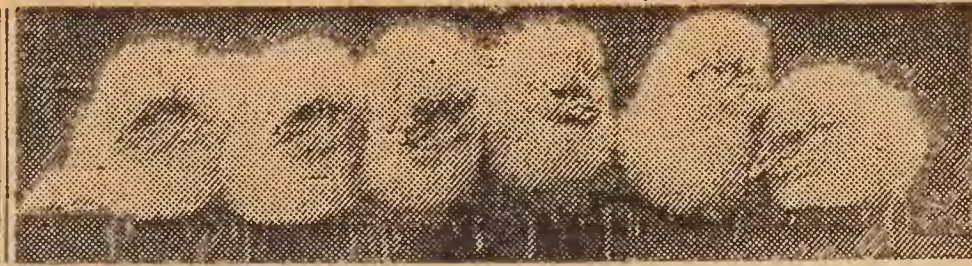
TRADE MARK REG. U.S. PAT. OFF.
W. F. YOUNG, Inc. 579 Lyman St., Springfield, Mass.

Bonus for Live Rats



25c plus your money back, if Tempto Rat Killer fails to get them all. ONLY KIND, not a squill or other poison. Harmless to anything but Rats and Mice. Pests die outside. Proved by thousands. Send no money—just your name to Imperial Lab., 1003 Coca Cola Bldg., Kansas City, Mo., for a large \$2.00 Farm Size pkg.—enough for 200 Rats—for only one dollar, on 15-Days' Trial. If there is a live one left, the dollar you paid the postman (with postage), plus 25c for your trouble, will be cheerfully mailed. You risk nothing, so write today.

BABY



CHICKS

(Continued from Page 14)

warm. Ideal brooding conditions are provided by a hot stove in a cool room. A wide range of temperature, with ample heat near the stove, encourages exercise, and benefits the chicks. Open windows in the front of the house admit direct sunlight, and improve ventilation, keeping the litter dry and the air fresh. Chicks raised under such conditions eat more, feather better, develop more uniformly, and harden off with less trouble.

Hover temperature may be reduced about five degrees a week. If chicks

protein, and 2 per cent mineral matter. The yolk is about half water and contains considerable fat. It has about 15 per cent protein. In composition, eggs are like animal foods, such as meat, cheese and milk. They contain practically no starch. Hence, it is desirable to combine them with cereals or vegetables in the diet. Contrary to popular belief, there is no difference in the composition of eggs with white and dark shells.

Egg yolk is rich in mineral matter and is an important source of iron in the diet. The fat in egg yolk contains substances which stimulate growth. Therefore, egg yolk is especially valuable in the diet of children. Egg white is rich in sulphur, which is shown by the readiness with which silver is darkened in its presence.

Pullets Should Be Mature Before Production Starts

WITH better methods of growing chicks the problem has arisen of getting the proper development of the birds before they begin laying in the fall. It is generally acknowledged that where pullets begin to lay before they are well grown that they produce small eggs that sell for a low price and that they are not likely to maintain heavy production right through the year.

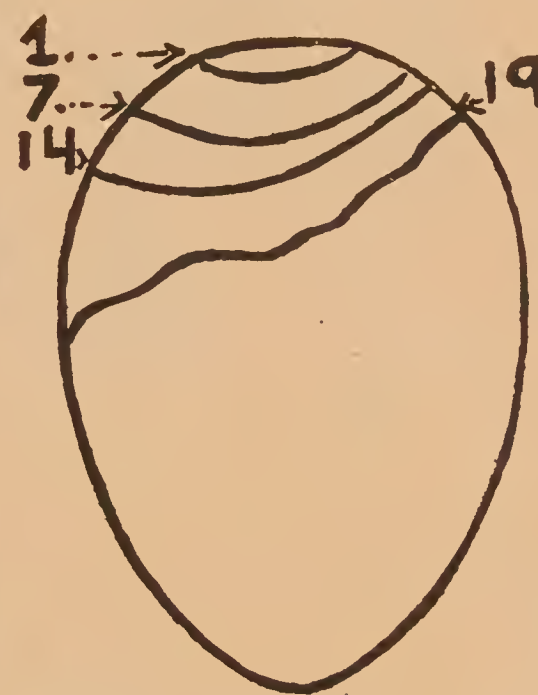
As a general rule it is not a good plan to have leghorn pullets lay before they are close to five months old and heavy breeders not before six months. It has been found that the pullets can be held back by increasing the amount of grain they get as soon as they show signs of development. The amount of animal protein in the mash may be reduced at this time or less mash and more grain may be given them.

The statement has been made that it is impossible to have pullets too fat when they go into the laying house in the fall. This surplus flesh gives them a reserve to draw on during the winter. It has been found that where pullets begin to drop off in weight during the winter that a slump in production may be expected soon.

Starting the Baby Chicks On Mash

WE used to consider it necessary to start the baby chicks off with mashed egg yolks, oat flakes or something of that sort, but finally gave them chick feed to start with, and could not see but that they did as well, if not better. We always saw to it that sour milk was on hand, and the

(Continued on Opposite Page)



Size of the air cell at 1 day, 7 days and 19 days of incubation. Watching the air cell is one way to determine whether or not eggs are getting sufficient moisture. An air cell that is too large shows that the air is too dry.

are permitted out doors, on the ground or on a platform, it will be safer to confine them near the entrance until they have learned how to get into the house.

It is well to visit the brooder house at least once during the evening to make sure that all the chicks are comfortable.

The use of dim lights all night in the brooder house, helps prevent crowding and permits chicks to eat and drink whenever they desire.—LOCKE JAMES.

Raise Chicks on Clean Ground

THE difficulty of raising young stock free from intestinal parasites year after year on the same range has become so great that many poultrymen are finding it necessary to abandon the old ranges and provide new, clean ones.

A clean range may be defined as an area of ground on which no chickens were raised last year and on which no poultry manure has been scattered for the last 2 years. Where such a range is not available, a system of rotation is advised so that clean ranges will be available in the future. In the rotating system one range is used for the chicks one year while the others are cultivated and cropped. A 2-year rotation is good but a 3-year rotation is much better. In this, 3 areas are available, thus making it possible to keep the chicks away from each range for a period of 2 years. Corn, clover, and chicks make a desirable rotating arrangement.

What's In An Egg?

The shell comprises about 11 per cent of the weight of the egg, the yolk 32 per cent and the white the remaining 57 per cent. The white is 85 per cent water, about 12 per cent

FOR YEARS WE HAVE HATCHED AND SOLD SATISFACTORY CHICKS



Catalog—FREE.
Member I.B.C.A.

POSTPAID PRICES—AMERICA'S FAMOUS PRIZE WINNING STRAINS—

100% Live Delivery Guaranteed.	25	50	100	500	1000
Wh. Br. Bf. & Blk. Leghorns.....	\$3.25	\$5.00	\$9.50	\$46	\$90
Bd. Wh. Bf. Rox; Reds; Blk. Min.; Bf. Orp.; Barron Wh. Leg.....	4.00	6.50	12.00	57	110
Wyckoff Wh. Leghorns; Buff Minorcas.....	4.50	8.00	15.00	70	135
Ex. Qual. Wh. Wyand.; Reds; Rox; Wh. Minorcas.....	4.75	8.50	16.00	76	150
Sheppard's Anconas, 100, \$10. Blk. Giants \$20. Lt. Brahmas \$22. Heavy Mixed \$9.50. Light Mixed \$8. Pekin Ducklings 28c each. Not Postpaid to Canada. We ship C.O.O. Bank Reference. Member I.B.C.A. Send now for Beautiful 4-Color Catalog FREE.					

THE NEW WASHINGTON HATCHERY CO. Box R, NEW WASHINGTON, OHIO

WOLF SELECTED CHICKS

CHICKS C. O. D.

Special pen mated and extra high bred chicks at slightly higher prices. Shipment made any time you wish.

	25	50	100	500
S.C. Wh. Br. & Buff Leghorns, S.C.M. Anconas.....	\$3.25	\$6.50	\$12.00	\$57.50
Bd. & Wh. Rocks, S.C. & R.C.R.I. Reds, Bl. Minorcas.....	3.75	7.25	14.00	67.50
White Wyandottes, Buff Orpingtons.....	4.25	8.00	15.00	72.50
Jersey Black Giants.....	5.00	9.50	18.00	87.50
Assorted Odds and Ends, Mixed Chicks.....	3.00	4.75	9.00	45.00
Assorted Heavy Mixed Chicks.....	3.50	6.00	11.00	55.00

WOLF HATCHING & BREEDING COMPANY, BOX 1, GIBSONBURG, OHIO



Immediate Delivery



HUBER'S RELIABLE CHICKS

MAKE EXTRA POULTRY PROFITS

When we say RELIABLE—we mean RELIABLE in every way. Breeding stock of highest quality of 19 years of careful development. Special attention paid to health of flocks and records kept.

CATALOG FREE—CHICKS SENT C. O. D. IF YOU WISH. Write for details—get our illustrated catalog which tells all the story. Our prices reasonable. A book on Raising Chicks worth many dollars given free with each order of \$10.00 or more. Big discount for early orders.

HUBER'S RELIABLE HATCHERY, No. High St., Fostoria, Ohio

Buy C.M.L. Chicks

C.M.L. CHICKS

specialized in Barrons. We import direct from England. 100% Live Delivery Guaranteed. Prepaid.

	25	50	100	500	1000
Barron S.C. Wh. Leghorns.....	\$3.00	\$6.00	\$11.00	\$52.50	\$100.00
Barred & Wh. Rocks; Wh. Wyandottes.....	3.25	6.50	12.00	57.50	110.00

All stock carefully selected for size and health. C. M. L. chicks mature early and are sure to please you. Better chicks cannot be had at these low prices. Write for Free Catalog or order direct from this ad.

C. M. LONGENECKER, BOX 40, ELIZABETHTOWN, PA.



Big Chicks From High Record Matings

300 to 326 Eggs S. C. White Leghorns. Our long experience in Breeding will prove a satisfaction to our customers at the following prices:	50	100	500	1000
White, Brown, Buff Leghorns & Heavy Mixed.....	\$5.50	\$10.00	\$47.50	\$90.00
Blk. Minorcas; Barred & White Rocks; Orpingtons.....	6.50	12.00	57.50	115.00
S. C. Reds; Wh. Wyandottes; Barron Leghorns.....	7.00	13.00	62.50	120.00
Giants.....	9.00	17.00	80.00	
Light Mixed.....	4.00	8.00	40.00	80.00
Special Tancred White Leghorns.....	8.50	16.00	75.00	145.00

Your order will receive my special attention. Satisfaction Guaranteed. UHL PIONEER HATCHERY & EGG FARMS, DEPT. A, New Washington, Ohio. Albert Studer, Prop. Ref.: Farmers State Bank

QUALITY BABY CHICKS

Five extra given free with every box of one hundred ordered. May hatched chicks, Leghorns, White, Brown, Buff, Black—\$12.00 per 100; Barred Rocks, Reds, Minorcas, Anconas, \$14.00 per 100; White Rocks, Wyandottes, Buff Orpingtons, \$16.00 per 100. April \$2 more, June and July \$2 less. Custom hatching. Eggs for hatching. Odds and Ends, Left Overs, Mixed broiler chicks, Light, 10c; Light and Heavy, 12c; All Heavy, 14c; Better order now. Will send C.O.D. Thousands hatching daily all year around. Active, husky, chicks hatched from healthy free range breeders that will live, grow and lay. Prompt shipments. Postage prepaid. Live delivery. Send for folder. SCHOENBORN'S HATCHERY, 335 Main St., Hackensack, N. J. Phone 1603 or 1604.

BABY CHICKS

Free Range Bred	25	50	100	500	1000
Wh. & Brown Leghorns.....	\$2.75	\$5.25	\$10.00	\$47.50	\$90
Anconas & Black Leghorns.....	2.75	5.25	10.00	47.50	90
White & Barred Rocks.....	3.25	6.25	12.00	57.50	110
Col. Wyand. & R. L. Reds.....	3.25	6.25	12.00	57.50	
Heavy Mixed Broilers.....	3.00	5.75	11.00	52.50	
Light Mixed Broilers.....	2.25	4.25	8.00	38.75	75

Full count and quality guaranteed. Catalogue free. Hatchery Chicks. ULSH POULTRY FARM & HATCHERY, For Greater Profit Port Trevorton, Penna. Box A

BABY CHICKS

100% live delivery guaranteed. Order from this ad, or write for free circular. C. P. Leister, McAlisterville, Pa.



FERRIS STRAIN WHITE LEGHORN CHICKS

Our breeders are large birds; long, deep, rectangular bodies. Selected for size, type and egg production.

\$10 Per 100; \$47.50, 500; \$90, 1000. Juniata Poultry Farm, Box T, Richfield, Pa.

TURKEYS

TURKEYS Eggs and Baby Turkeys. Esbenshade's Famous Bronze Strains puts you on the right road to greatest success and profits. Catalog. Guaranteed. Esbenshade Turkey Farm, Box A, Ronks, Pa.

CHIX

FROM LARGE BREEDERS	100	500	1000
Summer Prices			
Ferris Strain White Leghorns.....	\$10	\$47.50	\$90
Everlay Brown Leghorns.....	10	47.50	90
Basom's Barred Rocks.....	12	57.50	110
Owens' R. I. Reds.....	12	57.50	110
Mixed Chicks.....	8	37.50	70

Our breeders are selected for size, type and egg production. The kind that lay and pay. Send for literature. It's free. Tells all about our great egg machines.



Juniata Poultry Farm, BOX T, RICHFIELD, PA.

BABY CHIX

Cash or C. O. D.	100	500	1000
Barred Rocks.....	\$12.00	\$57.50	\$110.00
Tancred Strain S.C.W. Leghorns.....	10.00	47.50	90.00
Heavy Mixed.....	9.00	42.50	80.00
Light Mixed.....	8.00	37.50	70.00

These chicks are from free range and heavy egg producing flock. 100% live delivery guaranteed to your door. Write for Special Mating prices.

FRANK NACE, Cocolamus, Pa., Box No. 120

TAKE NOTICE

75,000 CHICKS for MAY DELIVERY	25	50	100	500	1000
S. C. White Leghorns.....	\$3.00	\$5.50	\$10.00	\$47.50	\$90
Barred Rocks or Reds.....	3.50	6.50	12.00	57.50	110
Silver Laced Wyandottes.....	4.00	7.50	14.00	65.00	
Light Mixed.....	2.50	4.50	8.00	37.50	70
Heavy Mixed.....	2.75	5.00	9.50	45.00	85

From carefully selected free range flocks. 100% arrival Postpaid. Write for illustrated catalogue.

The Richfield Hatchery, Box 80, Richfield, Pa.

CHICKS 8 1/2 C

CLASS A CHICKS at low prices, also pullets. Special discounts. Several varieties. No money down. 100% live arrival; postpaid. Catalog free.

BOS HATCHERY, R2A, ZEELAND, MICH.

DUCKLINGS

Mammoth White Pekins, \$28.00 per hundred.

L. W. HAMBLIN WILSON, N. Y.

WENE CHICKS

Quality Chicks Priced Low

Our May prices are as low as those asked by others for untested stock. Yet every chick comes from a blood-tested mating. All our Leghorn matings are State-Supervised, consisting of Hen breeders weighing 4 lbs. or more.			
Immediate Delivery	50	100	500
White Leghorns, Select			
Matings.....	\$7.50	\$14.00	\$65.00
*White Leghorns.....	9.00	17.00	80.00
Wene-Ells Matings.....	9.00	17.00	80.00
Rock-Wyandotte			
Broiler-Roaster Cross.....	7.00	13.00	60.00
Straight Rocks, Reds,			
Wyandottes.....	8.50	16.00	77.50
*Wene-Ells flocks headed by pedigreed 200-egg Cockerels.			

All Chick Shipments Sent Postage Prepaid —100% live delivery guaranteed. S. C. White Leghorn Pullets—State-Supervised. 8-10 weeks. June and July deliveries. FREE FOLDER and Mating List Mailed on Request.

WENE CHICK FARMS Dept. D, Vineland, N. J.

BABY



CHICKS

FINGER LAKE REGION BABY CHICKS

with an official record. Ask for our Baby Chick Book describing our Pedigreed Cornell Chicks from stock that has laid from 200 to 312 eggs in their pullet year and mated to breeders that have averaged over 200 eggs in their pullet year. Also describes our 144,000 egg hatchery with 22 years' experience in hatching Baby Chicks. Leghorns, Reds, Rocks, Wyandottes, Minorcas, and Giants. The home of better Chicks at lower cost.

THE DEROY TAYLOR CO.,
NEWARK, NEW YORK

BABY CHICKS

hatched by the best system of incubators from high class bred-to-lay stock. White, Brown, Buff Leghorns, Anconas \$14.00 per 100; Barred, White Rocks, Minorcas, Reds \$16.00 per 100; White Wyandottes, Buff Orpingtons \$17.00 per 100; Giants \$20.00 per 100; Heavy Bred \$12.00 per 100; Light Bred \$10.00 per 100; Pekin Ducklings \$30.00 per 100. Add 25c on orders for less than 100. Safe delivery guaranteed by parcel post.

Nunda Poultry Farm, Desk H, Nunda, N. Y.
Member of the International Baby Chick Ass'n. and the N. Y. State Co-Operative Chick Producers Ass'n.

200,000 CHICKS 1929

Goodling's Super Quality. Healthy, Strong and Vigorous

	50	100	500	1000
Single Comb, White Leghorns.....	\$6.50	\$12.00	\$57.50	\$110
Barred Plymouth Rocks.....	7.00	13.00	62.50	120
S.C. Rhode Island Reds.....	8.00	15.00	75.00	
Broiler Chicks, Heavy Breed.....	5.50	11.00	52.50	100
Broiler Chicks, Light Breed.....	5.00	10.00	47.50	90

Order direct. Prepaid 100% live delivery guaranteed. Circular Free.

THE VALLEY HATCHERY Box A, R. No. 1, RICHFIELD, PA.

PENNA. "State Supervised" CHICKS

Flocks inspected by officials from the Penna. Dept. of Agriculture. Our 19th year. Get our low prices on Reds, Rocks, Leghorns and Minorcas. Member I.B.C.A.

Catalogue free.

THE KEYSTONE HATCHERY,
(The old reliable plant) RICHFIELD, PA.

BETTER BABY CHICKS

\$12 to \$25 per 100

Barred and White Rocks, White and Columbian Wyandottes, R. I. Reds, Jersey Black Giants, Black Minorcas, White and Brown Leghorns, Mottled Anconas, 20,000 Weekly. Finest purebred, heavy producing, free range stock, under State inspection. 100% Safe delivery guaranteed. Catalog free.

ULSTER POULTRY FARMS, Box 40, WALDEN, N. Y.

BABY CHICKS

13 Leading Varieties—White Leghorns, Black Minorcas, Rocks, Reds, Wyandottes, Hamburgs, Speckled Sussex, Buff Orpingtons.

\$9.00 per hundred and up.

Free Catalog and Price List

Lantz Hatchery, Tiffin, Ohio

BARRED ROCK CHICKS

A large modern Breeding Farm and Hatchery devoted exclusively to the production of BARRED PLYMOUTH ROCKS.

MARVEL POULTRY FARM, GEORGETOWN, DEL.

Klines Barred Rocks

Tested stock. Penna State College males. Strong chicks guaranteed. Prompt delivery. C.O.D. \$12.00-100. \$110.00-1,000. \$500.00-5,000. Write or wire.

S. W. Kline, Box 40, Middlecreek, Pa.

BRED TO LAY BABY CHICKS

Barred Rocks; White Leghorns \$10.00 per hundred for May and June deliveries. 25 chicks \$2.75; 50 chicks \$5.25.

Scarborough Poultry Farm, Box A, Milford, Del.

RHODE ISLAND REDS Vt. Certified: Tested free from B.W.D. Males from 200-300 egg hens. Pullets: Started Chicks: 3000 Baby Chicks weekly: Circular.

ASCUTNEY FARMS, A10, HARTLAND, VT.

DUCKLINGS \$33; EGGS \$14-100 "Duck News" Free. ROY PARDEE, Islip, L. I., N. Y.

SPECIAL FALL prices for breeding Turkeys, Geese, Ducks, and Guinea. Write your wants and for mailing list. **PIONEER STOCK FARM, TELFORD, PA.**

(Continued from Opposite Page)

chicks had nothing else to drink for several weeks.

The past two years we have fed a whole mash ration, almost entirely, and think it is the most satisfactory method we have ever tried. The ration which is known as the "Wisconsin ration" is as follows:

80 lbs. corn meal	1 lb. salt
20 lbs. flour meal	5 lbs. calcium
5 lbs. bone meal	

The above is fed with as much skim milk as the chicks will take. When feeding cod liver oil, we used one pint of oil to 100 pounds mash.

The mash is fed in shallow trays not over two inches deep. There is danger that the chicks will pile in on top of each other, and kill those on the bottom where the hoppers are too deep.

After trying various things, we have found shavings the most satisfactory litter.—MRS. E. M. N.

Quality Is Worth the Cost

What puzzles me most and at the same time provokes me a great deal is the fact that so many people are so foolish and so unbusinesslike as to buy inferior quality baby chicks when they can get high quality chicks for so little more. Of course you can get scrub chicks at low prices—save just a few cents in the original cost; but by the time those chicks have grown into marketable broilers or productive pullets their value is far below that of stock which came from quality chicks hatched at the same time. What I mean is, that a scrub chick may grow into a dollar value at maturity while the quality chick costing two or three cents more will grow into two dollar value; the labor and expense and everything else being the same in both cases.

It seems to me that the case is so perfectly clear in favor of the quality chick that no one with any common sense whatever would even consider the scrub stuff.—P. F. C.

WE thoroughly agree with the sentiments of this letter. It costs just as much in time, feed, and equipment to raise a poor chick as it does a good one. After the pullets are mature, it costs practically as much to keep one that will produce 80 eggs a year as it does to keep one that will produce 160 eggs a year. There are a lot of hens that would produce better than they do at present if they were given better feed and care, yet it is always true that a poor chick will not pay no matter how well she is fed and cared for. The few cents extra premium that must be paid for good chicks is certainly an investment that will pay good dividends.

Egg Marketing Hints

LOSSES in marketing eggs result from:—

1. Delivery of fertile eggs to market.
 2. Dirty eggs.
 3. Washed eggs.
 4. Shrunk eggs.
 5. Cracked or broken eggs.
 6. Bad flavored eggs.
- To sell eggs for the best prices:—
1. Kill, sell or confine the rooster when the breeding season ends.
 2. Keep strong, healthy, vigorous stock, and care for it properly.
 3. Gather eggs frequently.
 4. Provide plenty of clean, well padded nests.
 5. Keep out the cracked, dirty, small, and very large eggs for home use.
 6. Always keep eggs in a cool, dry place.
 7. Keep eggs free from obnoxious odors.
 8. Do not wash eggs.
 9. Market eggs as regularly and as often as possible.
 10. Never expose eggs for market to direct sunlight, rain or to extreme heat.—M. STIRES.

Hall's Chicks

Leghorns-Reds-Rocks-Wyandottes

"WELL BRED FROM WELL BREEDERS"

New England Accredited stock. All breeders 100% White Diarrhea free

Week of	Grade	A	S. C. W. LEGHORNS	S. C. R. I. REDS	BARRED ROCKS	WHITE WYANDOTTE
May 13	Special	Matings	\$15.00	\$18.00	\$20.00	\$23.00
			17.00	20.00	23.00	26.00
Week of	Grade	A	14.00	16.00	17.00	20.00
May 20	Special	Matings	16.00	18.00	20.00	23.00

Prices are per hundred. For orders of 25 chicks add 75c. For orders of 50 chicks add \$1.00.

We ship Prepaid and guarantee safe delivery

Everyone answering this advertisement will receive FREE our suggestions for brooding, feeding and rearing chicks.

Hall Bros.

POPLAR HILL FARM
BOX 50 WALLINGFORD CONN.

EIGENRAUCH FARMS

RED BANK,

NEW JERSEY

18TH YEAR

breeding White Leghorns for size, vigor and heavy production of large White EGGS. 8,000 LAYERS are housed on our farm.

Our Chick Guarantee

100% satisfactory arrival on the exact date we promise shipment. Every chick sold by us is hatched from eggs laid by breeders on our own farm.

Write for Free Folder and Prices on Pullets and Chicks
EIGENRAUCH FARMS Dept. G, Red Bank, N. J.



Fairport Quality Chicks

are bred to make money for you. Strong, healthy, vigorous from the world's best and heaviest laying strains such as—Tancred, Ferris, Owen Farms, Daniels, Thompson, Martin, Shepard, Fishel and others. Free range flocks, scientifically culled and supervised. Smith Hatched. 100% live delivery guaranteed. 16 breeds 9c and up. Postpaid. Members International Baby Chick Association. Send now for free poultry book and prices. Buy Hatchery Chicks for Greater Profits.

FAIRPORT HATCHERIES Box 44 Fairport, N. Y.



Here: Nearly Everyone Raises

Full Blooded "AMERICAN" Quality Chicks

Write now for our new low prices. Your opportunity to get our special flock mating chicks at utility prices. Chicks shipped C. O. D. Catalogue and prices on request. 100% live arrival guaranteed. 15 breeds. Write now.

American Chickeries, Box 214, Grampian, Pa.



Schwegler's "THOR-O-BRED" BABY CHICKS

"LIVE AND LAY"

THEY LIVE because they are bred from healthy, free range breeders that have thrived and gained in vigor for generations. They LAY because they are born selected and tested high egg power stock. White, Brown and Buff Leghorns, Barred and White Rocks, R. I. Reds, Anconas, Black Minorcas, Buff Orpingtons, White Wyandottes, \$20 and up. 100% live delivery guaranteed. Postpaid. Member International Chick Assn. Write today for FREE Chick Book.

SCHWEGLER'S HATCHERY, 204 Northampton, BUFFALO, N. Y.

"OHIO'S BEST" CHICKS C.O.D.

Our chicks are from some of Ohio's best breeding flocks. Every breeder carefully culled and mated with sturdy, vigorous, highly bred males.

	25	50	100	500	1000
White Leghorns.....	\$3.25	\$6.00	\$11.50	\$55.00	\$108.00
Bd. & Wh. Rocks, R. I. Reds.....	3.50	6.75	13.00	62.50	120.00
Wh. Wyan. Buff Orpingtons.....	3.75	7.25	14.00	67.50	130.00

Asst. for broilers \$9.75 for 100; \$45 for 500. Asst. all heavies \$11 for 100; \$52.50 for 500. Order from this ad. We will ship C.O.D. on 10% deposit. Ref.: Van Wert National Bank. 100% live delivery prepaid. Make certain of your shipping date by placing your order now for May and June.



VAN WERT HATCHERIES,

GUS ICKES, Mgr.,
R46, VAN WERT, OHIO

BABY CHICKS

	25	50	100	500
White Leghorns.....	\$2.75	\$5.25	\$10.00	\$47.50
Barred Rocks.....	3.25	6.25	12.00	57.50
Rhode Island Reds.....	3.25	6.25	12.00	57.50
Heavy Mixed.....	2.75	5.25	10.00	47.50
Light Mixed.....	2.50	4.75	9.00	42.50
Peking Ducklings.....	7.50	14.50	28.00	
Mixed Ducklings.....	6.50	13.00	25.00	

John Shadel Hatchery McAlisterville, Pa.
Route 2.

Pennsylvania Co-Operative Leghorn Farms

Breeding COCKERELS with RECORDS to 303 EGGS. PURE TANCRED-HOLLYWOOD-BARRON STRAINS. White Leghorns—Brown and Buff Leghorns—QUALITY EXTRAORDINARY—PRICE WAY DOWN—SHIP C. O. D. Get our prices quick.

Pennsylvania Co-Operative Leghorn Farms,
Box 314 Grampian, Pa.

When We Entertain the Bride-To-Be

A Lightsome Touch to These Affairs Puts Everyone in Gala Mood

AS long as the earth revolves upon its axis, just so long will we have brides. And just that long must we have showers for brides. Several suggestions will follow for announcing the fact, as no one, until a party is given, can guess that a couple is engaged.



SET NO. B5135 is a lovely little tailored coat and bonnet ensemble in sizes, 1, 2, and 3 years. It comes ready made in pink pique with white trim, and stamped for embroidery. Floss included for working.

Set \$2.50

The nicest entertainment—if you live near where a ten-cent store can be reached, is to give each guest a dime, and all go to the store and purchase the finest gift that they can secure for the dime. Then let the guests return to the home, and hem and embroider tea towels for the bride. Have some simple patterns and various colored thread for making them.

The friends of the bride-to-be may be asked to bring their fancy work and spend the afternoon in social conversation. Have the gifts left at the front door. Decorate the home in rainbow colors using crepe paper. Or a pretty color scheme can be carried out with spring flowers. A "mock wedding" causes lots of fun. A nice lunch consists of salad made of oranges and watercress, fruit punch, sunshine cake, and lady fingers. Place a large paste diamond on the engagement finger of the bride-to-be and thus the secret will be told. After refreshments are served, have a smiling expressman arrive with a clothes basket full to overflowing with the gifts. Another novel way is to have the real postmaster come—if you live in a small town, and he can be persuaded to come—have bride-to-be sign on the "dotted line", and then he will present the gifts in a new mail sack.

If we wish to remember the much



The best of Paris and New York styles are adapted for the home sewer in our new Summer Style Book. With the charming fabrics to be found on the market today and the simplicity of the summer styles, every woman can be dressed right and becomingly. Send twelve cents for your copy of the Summer Style Book to Pattern Department, American Agriculturist, 461 Fourth Ave., New York City.

WOOL BLANKETS, and Colonial Coverlets. BATTING. Also sold direct from the ROBES. Made from your own wool. mill if you have no wool. Beautiful goods that give satisfaction and long wear. Write for catalog and samples. Prices reasonable. WEST UNITY WOOLEN MILLS, DEPT. G., WEST UNITY, OHIO.

neglected old bridegroom, he may be honored with a "den" shower. Let one of his special friends casually invite the groom-to-be to his home for dinner. Upon arrival he will find many of his special friends, each one giving him some den appliance. A part of the evening may be given over to the writing of letters of consolation, with the instructions to read them on the honeymoon trip.

A novel way to entertain for both bride and groom is to have as many tables as you have invited guests. Have head and foot tables. At one table have paper and pencil and have the plan for the first floor made, four rooms to a

dinner. Fruit and vegetable salads contain the much-desired vitamins, and may be the means of using various left overs which would otherwise be wasted.

Savory Vegetable Salad

1 can tiny peas	Tender part stalk of celery
1/2 lb. young carrots	Mayonnaise
1 large dill pickle	Paprika
	Salt—pepper

Scrape carrots and cook till tender in slightly salted water. Drain, chill and dice. Cook peas ten minutes, drain. Clean and soak celery in ice cold water half an hour. Drain, chill each thoroughly; before combining. Chop pickle fine. Mix lightly together, blend with sufficient mayonnaise to moisten well. Season to

few cheese balls, rolled in finely ground nuts or parsley. Top beets with mayonnaise.—ROBERTA SYMMES.

Home made cottage cheese combines very nicely with beets.

Rose Vegetable Salad

1 head fresh green cabbage	1 can tiny peas
1/2 bunch fresh carrots	1 lb. very small string beans
1 bunch beets	

Clean cabbage, remove wilted leaves, cutting out the hard center, and leaving a big center cavity to hold vegetable filling. Bend back the outer row of leaves to look like petals—soak two hours in cold water, drain and chill till ready to use. Cook each of the vegetables to be used separately in slightly salted water, until tender. Cut beets in dice, the carrots in slices or strips, and drain peas well. Beans should be cut in half if large. Chill vegetables separately and combine with dressing preferred, and serve in the cavity of cabbage on a flat platter, garnish with lettuce leaves and olives.—ROBERTA SYMMES.

Here is a chance to get your vitamins and most gardens will provide these vegetables.

Five Minute Mayonnaise

1 whole egg	1/4 teaspoon white pepper
2 cups salad oil	1/2 teaspoon paprika
1/2 tablespoons lemon juice	1/2 teaspoon dry mustard
1/4 teaspoon salt	few grains cayenne

Break egg into bowl, stir with wire egg beater till broken only, sift in dry ingredients, stir till mixed. Add oil drop by drop till it begins to thicken, then faster, alternating with lemon juice until all is used. Is easily made in five or six minutes, and keeps well on ice in air tight jar a week.—ROBERTA SYMMES.

If you like a highly seasoned salad dressing add more pepper and mustard. You doubtless know that if the oil mayonnaise mixture does not combine well you may start afresh with a new egg and add the curdled mixture gradually drop by drop just as you would the oil.



No. 502, 30 cents for 24

Monograms are always in order and they are appropriate not alone for napkins, towels, etc., but they are very smart on personal apparel too. Here is a very beautiful and different series. Each letter in the alphabet is combined with a flower beginning with that letter, swinging gracefully into a circle to make a most attractive spot of decoration. They come in two sizes, 3 inches and 1 1/4 inches, on wax transfers and are easily transferred to your material with a hot iron.

The flowers are as follows: A, apple blossom; B, buttercup; C, calla lily; D, daisy; E, eucharis lily; F, fuchsia; G, geranium; H, honeysuckle; I, iris; J, jonquil; K, kentia palm; L, lily of the valley; M, moonflower; N, nasturtium; O, oak; P, pansy; Q, quince blossom; R, rose; S, shamrock; T, tulip; U, utricularia; V, violet; W, wild rose; Y, yucca; Z, zinnia. Be sure to state letter you want.

There are 12 large and 12 small patterns of any one letter to an order. Price for number 502 is 30 cents, postpaid. Address Embroidery Department, American Agriculturist, 461 Fourth Ave., N. Y. City.

floor. At another table, the second floor, four rooms and bath must be planned. At another table, furniture must be drawn for the house. At another draw plans for the basement. At another table plan the garage, while at another the planting of the lawn is laid out. Another lists the fruit to be canned, and placed in the home the first year. Have two judges, a man for the girls', a girl for the men's work. Ideas will come to you for each table. Refreshments of cream and cake and heart shaped mints would be nice.—M. F. M.

Salad Surprises for Spring

NO matter what your salad is made of, be sure that it is daintily prepared, and attractive to the eye as well as the palate. A simple garnish adds so much to the toothsome and appearance, and may be so easily prepared. Hardboiled egg, or iced egg, olives, slices of ripe tomatoes, strips of pimento, cooked beets in dainty slivers, or dices, and cheese balls rolled in paprika and ground nuts, all make delicious garnishes. The majority of salads are nourishing, readily digested and should be served at every possible

taste. Serve very cold on lettuce.—ROBERTA SYMMES.

If you do not care for the dill flavor any sweet-sour pickle can be used.

Stuffed Beet Salad

Large dark red beets (as many as desired). Cut stems, not too close. Scrub well and cover with water, boil till tender, but unbroken. Plunge into cold water, and rub off skins. Scoop out centers, leaving a rather thick cup or shell. Marinate them in French dressing till ready to use them. Cut the centers that have been removed into small dice, adding equal quantities of diced celery, and moisten well through with mayonnaise or French dressing. Drain cups well and fill them with the above mixture. Serve very cold on crisp lettuce with a dab of dressing on top of each.—ROBERTA SYMMES.

Chopped chicken or veal can be combined with the diced beets and dressing to fill the centers of the beet shells.

Beets Stuffed With Cheese

Boil beets till tender, selecting medium uniform size. Remove skins, scoop out centers. For filling mash cream cheese with a few finely chopped olives, and enough mayonnaise to moisten. Season with salt, pepper, paprika. Fill beets with mixture, and lay the filled cups on lettuce. On side of each plate add a

Pajama Ensemble



PAJAMA ENSEMBLE PATTERN No. 3239 consists of blouse, trousers and coat. It offers many possibilities of combining attractive colors and fabrics. Washable crepe de chine, pongee, plain and printed sateen, voile, or the new artificial silks could be combined with stunning effect. The pattern cuts in sizes 16, 18 years, 36, 38, 40 and 42 inches bust measure. Size 36 requires 4 yards of 36-inch material with 2 yards of 36-inch contrasting. PATTERN PRICE 13c.

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Aunt Janet's Corner

"A Friend is the Sunshine of Calamity"

A GOOD neighbor is without money and without price. Some of the most precious things in life are that way. Just this minute one of my good friends has been driven almost to desperation, first by a long-continued illness which racks his body with pain and hinders his work, then by unceasing rain which not only prevented farm work but added to his physical misery.

Last year was a poor one for him and his neighbor farmers and with such a depressing combination of affairs, he felt his cup brimming just a little too full of sorrow. And that is just where the good neighbors came in. One after the other, although they had about all they could manage themselves, they offered to come and help. One even offered to bring his help and two tractors to get the potatoes planted. Then the world looked different. The offers of help were not accepted, but they put heart into the discouraged one and, although the skies were still dark and the rains fell, the world was brighter because of the good, practical friendliness which had been demonstrated.

It is such deeds of genuine, homely application that make this old world a sunnier place to live.—Aunt Janet.

The Boy Takes a Hand

IN this family there are no girls, so the little boys sometimes make cakes for their mother. Nine-year-old Robert

sends these two recipes which he uses:

Plain Cake

1 cup sugar 2 teaspoons baking powder
1 egg 1½ cups of flour
sweet cream 1 teaspoon vanilla

Beat egg in cup and fill up with the cream. Add to the sugar. Then add the flour and baking powder sifted together and add the vanilla.

Chocolate Loaf Cake

2 squares chocolate or 1½ cups flour
5 tablespoons cocoa 1 egg
½ cup boiling water 1½ teaspoonful baking powder
poured over it ½ (scant) cup of sweet milk
¼ cup of butter
1 cupful sugar

—R. N., New York.

These would be good to save along with Betty's recipes which come out once



SET NO. 1912 is a new idea in dining room set which will be sure to please. It is stamped on finest quality of white Indian Head and consists of the following: five piece lunch set, three piece buffet set, three piece vanity set, scarf 18 by 45 inches, and six doilies. We are able to offer this complete set at the remarkably low price of only \$1.50 postpaid to any address. Address Embroidery Department, American Agriculturist, 461 Fourth Ave., New York City.

a month in American Agriculturist. A scrapbook for pasting in Betty's recipes costs 10c. Address Betty, American Agriculturist, 461 Fourth Ave., New York City.

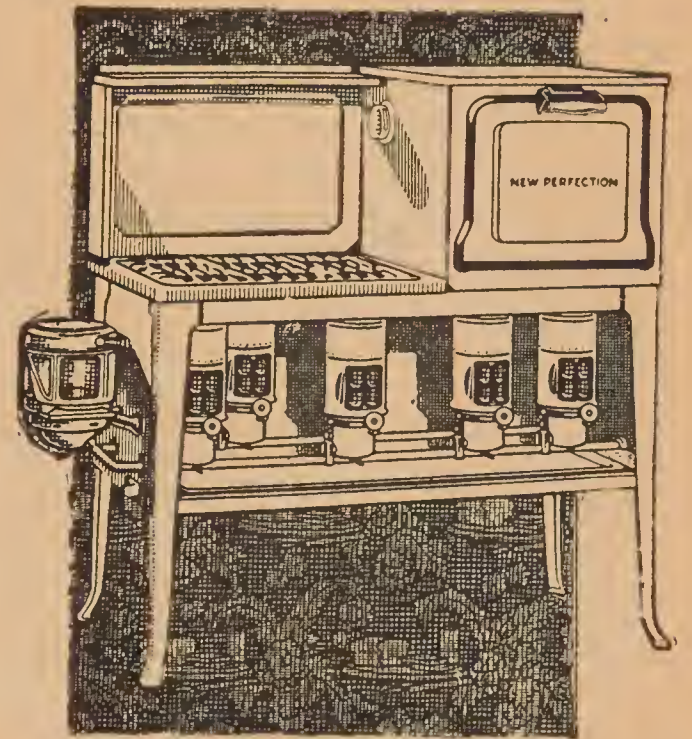
Do You Know That—

After cutting out garments, etc., I mark the places where the buttons or button holes should go (to match) and how far the hem should turn up, with a red pencil such as teachers used for marking papers. Then there is little chance of getting them wrong. I find many other uses for such a pencil when sewing. I sew the shoulder straps on slips, chemise, etc., at the same time I put the hem in the top. Mine never bother about wearing off where they are sewed since I make them this way. Mark the places where the straps are to go before starting to put in the hem.—BETTY.

If you can use cream in coffee, put it in the cup first and pour the coffee over it. It is more delicious. Just try it.—MRS. I. B., New York.

Use left over cereals (oatflake and cream of wheat, etc.) in your meat loaf or dressing.—BETTY.

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2781



PATTERN No. 2781 with its rippling jabot frills and wrap-around skirt has a very pleasing and youthful effect. The pretty printed silks both natural and artificial, the crepes, and voiles are well suited for this style treatment. The pattern cuts in sizes 16, 18 years, 36, 38, 40 and 42 inches bust measure. Size 36 requires 3½ yards of 40-inch material with ¼ yard of 27-inch material for vestee. PRICE 13c.

The Plains of Abraham

(Continued from Page 5)

and twos together, until, in the sure way of a woman, she knew what Tonteur was thinking and did not fear or distrust him for it.

At the same time her thoughts inspired her with a warm appreciation of her own great fortune, for against another man's unhappiness and another woman's failure as a wife she could see more clearly the things for which she, in the fullness of her felicity, should offer up the devoutest of prayers. The man ahead of her was humming a French tune as he carried his hundred pounds of whole-corn meal, and one could see that he was French in every drop of blood that ran through his veins. Catherine loved the spirit of this blood even more than she did the English which was in herself. Just as she had become French, so Henri in his heart had become as wholly English, and never tired of swearing that he would not trade one tiny breath of the precious life in Catherine's body for all of his beloved New France. From the beginning, his influence had been stronger than his wife's for while Catherine kept everything that was English alive in her memories, and taught her boy in English as well as in French, and sang her English songs and treasured her English books, she loved New France as

she had never loved the more forbidding aspects of her New England home, and she loved the warm-hearted and sunny people in it with a sympathy and devotion which might have come from birth and not adoption.

Yet Madame Tonteur hated her. Disbelieving whatever good might have been said of Catherine, she hated her first as a deadly enemy of her race, and hated her then because she dared hold her head as proudly as a baron's lady, and hated her last of all because, nothing more than the wife of a worthless backwoodsman like Henri Bulain, she was impudent enough to be the prettiest woman anywhere near the Tonteur seigneurie.

And, so far as it was in her power, she had planted and nurtured this hatred to growth in the heart and mind of her proud daughter, Marie Antoinette, until Tonteur, blind to the feline subtlety of a woman in such matters, wondered why it was that this girl, whom he worshipped above all other things on earth, should so openly display unfriendliness and dislike whenever Jeems came to Tonteur Manor.

* * *

CHAPTER II

OF THIS same thing Jeems had been thinking as he walked ahead of his father and mother. His mind, at

present, was busy with the stress of fighting. Mentally, and physically in a way, he was experiencing the thrill of sanguinary battle. Half a dozen times since beginning the long climb over Tonteur's Hill he had choked and beaten Paul Tache, and in every moment of these mental triumphs Marie Antoinette looked on with wonder and horror as he pitilessly assailed and vanquished her handsome young cousin from the big city of Quebec.

(In 1749, the population of Quebec City, metropolis of New France, whose wealth and culture and courtly life made it at that time the Versailles of the New World, was less than seven thousand.)

Even in the heat of these vivid imaginings, Jeems was sick at heart, and it was the shadow of this sickness which Odd caught when he looked up into his master's eyes. From the day Jeems had first seen Marie Antoinette, when she was seven he was nine, he had dreamed of her, and had anticipated through weeks and months the journeys which his father permitted him to make with him to Tonteur Manor. On these rare occasions he had gazed with childish adoration at the little princess of the seigneurie and had made her presents of flowers and feathers and nuts and maple sugar and queer treasures which he brought from the forests. These tokens of his homage had never served to build a bridge across the abyss which lay between them.

He had stood this hurt and still kept Marie Antoinette in his thoughts, for there was no other child to help fill her place. But since last autumn, when Madame Tonteur's sister and her son Paul had come to the seigneurie, his dreams had grown more clouded until, on this Thursday afternoon, they were replaced by grim and merciless visions of a future vengeance on the young man who had laughed at him and humiliated him, and who, without any grace whatever that he could see, basked warmly in the smiles and graciousness of Marie Antoinette's favour.

For all his shattered hopes of friendship with Toinette, he now found an excuse to blame this rich and high-toned youth with his green and crimson velvet suits, his lace ruffles and gold brocades, his silver-handled sword and supercilious, conceited airs. His antagonism was not a thing brewed only in his mind, for Paul Tache, who was the son of a Quebec army officer deep in the intrigues of the Intendant, was the last straw to break down whatever hopes he had possessed of ultimately making an impression on the seigneur's daughter. With the coming of Paul, who was two years older and a head taller than himself, and who paraded all the fine and courtly manners taught to young gentlemen in Quebec, she had regarded him more haughtily than ever, and that very day had made no effort to hide her amusement when Paul said, with a sneer on his dark face, "Doesn't it make you tired to walk all the way in from the woods, little boy? And does your mother allow you to load that old gun of yours with powder and ball?"

It was the memory of this moment which rankled in his breast—a moment in which he had stood speechless, his face hot and red, his tongue hopelessly tied, his heart only half beating as the Quebec boy walked away with Toinette, strutting like a turkey cock and looking back contemptuously as he went. It was the knowledge of his own failure to reply or to do anything but stand red-faced and dumb, like a fool, accepting the insult without protest, that deepened his gloom and increased his bitterness.

He was glad when his mother and

father paused to rest on the edge of a great rock near the trail, for this interval gave him opportunity to go on alone, and when he was alone he could tear and thrash Toinette's cousin in a much more admirable way than when the others were tramping close at his heels. By the time Odd had preceded him to the edge of a high plateau, which was richly covered with grass and thickly grown with big chestnut trees, his mental orgy of vengeance and bloodshed was beginning to subside.

Suddenly Odd stopped so that his gaunt body made a barrier against Jeem's knees. He stood with his pawless leg off the ground, and when he slowly rested it to earth again it was in a manner which sent a thrill of anticipation through his master.

He dropped to the earth and drew himself behind the decaying mass of a monster log that had fallen a hundred years before. Odd crouched at his side with his muzzle level with the top of the log. Thus a minute passed, and after that another, and more on top of them, yet Odd gave no sign of discouragement, nor did Jeems.

Another minute of this rustling stillness, and a magnificent turkey cock strutted majestically out into the sun. He weighed twenty pounds if an ounce, thought Jeems. His head was like blood, his beautiful body a gold and purple bronze, and his gorgeous breast plume touched the ground. He was a proud and immaculate bird, defying all the world in the empty open, and he shuffled his wings and began to swagger about in a circle while the chuckling and clucking sound of his satisfaction clearly reached the watchers' ears. In this moment Jeems thought again of Paul Tache, for the Quebec boy was like this turkey cock, always flaunting his clothes and disporting himself with the importance of a man.

He caught his breath short as a slim brown female bird came out from the bushes to join her red-headed monarch. A flutter of velvety wings followed her and in as many seconds six more females joined the gathering in the open. The turkey cock paraded more proudly than before and puffed himself up until he was twice his honest size, and it seemed to Jeems that the lady turkeys were all crowding about him like so many Marie Antoinettes attracted by his fine clothes and his manner of making himself big in their eyes. At the sight before him, Jeems hated Paul Tache more than ever and was possessed with the inspiring thought of wreaking his first vengeance upon his rival's head by killing the turkey cock.

Slowly he withdrew the long-barrelled gun from the top of the log and tautened the string of his bow. He waited until the big bird stood less than eighty yards away. An inch at a time he rose higher on his knees, and Odd's body grew stiffer with his movement. A choking sound came from the dog's throat as the long bow was bent. The twang of the string was like the ring of a steel tuning fork, and across the open sped a grayish flash. There followed a mellow sound, a great commotion, a leaping of gorgeous colour high into the air, then a wild beating of wings and a speeding away of seven brown forms to the safety of cover. Paul Tache, the turkey cock, was down and dying, and in the space of a dozen seconds his seven Marie Antoinettes were gone.

A moment later, Jeems and Odd stood looking down on the turkey cock, and gladness leapt once more into the boy's face and eyes—for here was not only a splendid dinner for to-morrow, but also, in his imagination, the first blow struck against his enemy.

(To be Continued Next Week.)

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CABBAGE PLANTS, NOW Ready. My frost proof Cabbage plants will head three weeks earlier than home grown plants. Varieties: Jersey and Charleston Wakefield, Succession, Flat Dutch, Golden Acre and Copenhagen Market. Prices by parcel post postpaid: 500, \$1.25; 1000, \$2.25. Express: 1000, \$1.00; 5000, \$4.50; 10,000, \$7.50. Bermuda Onion plants same prices as Cabbage plants. Roots wrapped in moss and shipped promptly. Satisfaction Guaranteed. P. D. FULWOOD, Tifton, Ga.

PAY ON ARRIVAL—Frostproof Cabbago Plants immediate shipment. 75c-1000. EMPIRE PLANT CO., Albany, Ga.

FROSTPROOF CABBAGE PLANTS. Order today. Pay postman, 500-60c, 1000-\$1. POSTAL PLANT CO., Albany, Ga.

STRAWBERRY, RASPBERRY, BLACKBERRY, Dewberry, Loganberry. Wineberry, Grape, Junberry plants; Asparagus, Rhubarb, Horseradish roots; Hardy Perennial and Annual Flower plants; Roses, Vines, Shrubs, Hedge plants. Catalogue free. HARRY E. SQUIRES, Hampton Bays, N. Y.

PREMIER OR HOWARD 17 Strawberry Plants \$1.00 per 100, \$5.00 per 1000. BASIL A. PERRY, Georgetown, Delaware.

OLD FASHIONED HARDY Flower Plants. Hollyhocks, Delphiniums, Bleeding Hearts, Anemones, Blue Bells, Canterbury Bells, Columbines, Monkshoods, Hardy Carnations, Hardy Chrysanthemums, Hardy Lilies, Hardy Phloxes, Lupines, Hardy Pinks, Oriental Poppies, and 240 other Perennials that will bloom this summer; Pansies, Asters, Salvias, Petunias, Zinnias, Snapdragons and other annuals; Roses, Vines, Shrubs, Hedge Plants; Berry plants. Asparagus roots. Catalogue free. HARRY E. SQUIRES, Hampton Bays, N. Y.

GLADIOLUS \$1.00 Blooming Bulbs \$1.00. 12 choice Dahlias \$1.00. Catalogue. 20 Evergreen Trees \$2.00. GLADAHIA FARMS, Chicopee Falls, Mass.

MASTODON EVERBEARING STRAWBERRY Plants \$2.00 per 100, \$15.00 per 1000. Plants set out this Spring will bear quantities of large delicious berries this summer and fall. BASIL A. PERRY, Georgetown, Delaware.

CERTIFIED SEED POTATOES, Irish Cobblers and original strain Carman No. 3. Buy direct from grower. Write today for prices. N. A. BAKER & SONS, Fairport, N. Y.

SEEDS—NURSERY STOCK

FREE GLADIOLUS BOOK—36 pages, 45 illustrations. Describes 171 exquisite varieties, many new. Tells how to grow. It's free! The famous beautiful Rainbow Collection of thirty bulbs, all different, \$1. postpaid. HOWARD GILLET, Gladiolus Specialist, Box J, New Lebanon, N. Y.

COOK'S CERTIFIED POTATOES. Cobblers and Russets. Better than ever. Attractive prices. We pay freight. IRVING E. COOK, Munnsville, N. Y.

LARGE GLADIOLUS BULBS. Joy mixture \$2.50 per 100; Glad mixture \$1.25 per 100. Small bulbs, named varieties, ten kinds, \$1.50 per 100, delivered, circular free. BRANDON GLADIOLUS FARM, Brandon, Vt.

MILLIONS OF OPEN field grown tomato plants, Baltimore, Stone, Earliana, Bonnie Best, Chalk Early Jewel, Matchless, \$1—1000, Ruby King Pepper plants \$2—1000, Potato plants \$1.75—1000, Cabbage plants 75c—1000. Safe arrival guaranteed, all plants ready. SINS POTATO PLANT CO., Pembroke, Ga.

SEED CORN—West Branch Sweepstakes for sale. Greatest ensilage corn grown. Germination 98% when tested. \$3.00 per bushel. A. L. WINTER & SON, Montoursville, Pa.

FROSTPROOF CABBAGE PLANTS 75c, 1000; Bermuda Onion \$1.00; Collards 75c; Tomatoes \$1.00; Ruby King Pepper \$2.00; Porto Rico Potato Plants \$2.00. QUITMAN PLANT CO., Quitman, Ga.

4,000,000 SWEET POTATO PLANTS Yellow Jersey, Big Leaf, Up River, \$1.50 per 1000. Gold Skin, Red Nansmond, Nancy Hall, and Southern Queen. \$1.75 per 1000. C. E. BROWN, Bridgeville, Del.

BUY GRIMM ALFALFA Seed Now! Lyman's Seed traces to original Grimm stock. Hardest of alfalfas and highest in feeding value. Yields for years without replanting. Seed scarified to increase germination. Also sweet clover and red clover. Order early! A. B. LYMAN, Introductor, Excelsior, Minn.

CAULIFLOWER PLANTS ready May 10th. Field grown. Catskill Mountain Snowball, Long Island Snowball, Extra Early Erfurt \$4.50 per 1000; 500, \$2.50; 200, \$1.50. Cabbago Plants ready May 10th. Copenhagen Market, Early Jersey Wakefield, Glory, Succession, Danish Ballhead, \$2.00 per 1000, 500, \$1.50. F. W. ROCHELLE & SONS, Chester, New Jersey.

LORDS GOLDEN AGE extra early yellow sweet corn. Good size, productive, tender, deliciously sweet. The originator has grown it ready for the table 57 days from planting. \$1, quart; \$1.70, 2 quarts; \$2.50, 4 quarts; \$4.50, peck; \$6.50 half bushel; \$12.00 bushel. JAMES E. LORD, Stonington, Conn.

STRAWBERRY PLANTS: Senator Dunlap, 100, 90c; 300, \$2.25; 500, \$3; 1000, \$5. Premier—Gibson—Big Joe—Cooper—Stevens Late Champion, 100, \$1; 300, \$2.50; 500, \$3.50; 1000, \$6. Everbearing, Champion, 25, 75c; 50, \$1; 100, \$1.50; 500, \$5; 1000, \$10. Mastodon, Everbearing, 25, \$1; 50, \$1.75; 100, \$3; 200, \$5; 500, \$8; 1000, \$16. Figure each variety separate. Write for prices on Black, Purple and Red raspberry plants. Our plants are strictly fresh dug, from new fields. F. G. MANGUS, Maple View, N. Y.

MARY WASHINGTON ASPARAGUS roots \$1.25 per 100; \$8., per 1000. BASIL A. PERRY, Georgetown, Delaware.

SEND \$1 for 12 Labeled Dahlias, flowers of marvelous beauty, all colors, regular value \$3.50. BOLTS DAHLIA FARM, Stepney, Conn.

CAULIFLOWER PLANTS, 100-60c; 1,000-\$4.00; 5,000-\$18.00. Cabbage plants, 100-40c; 1,000-\$2.50; 5,000-\$10.00 prepaid. E. FETTER, Lewisburg, Pa.

Additional Classified Advertising

On Page 22

HANDY ANDY Says "Here's How"

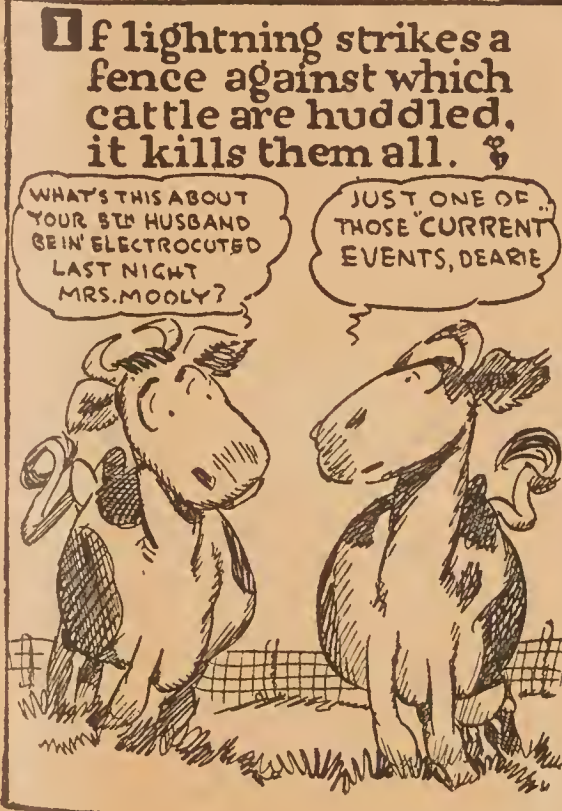
To Prevent Stock Losses from Lightning

By Ray Inman

If lightning strikes a fence against which cattle are huddled, it kills them all.

WHAT'S THIS ABOUT YOUR STUBBAND BEIN' ELECTROCUTED LAST NIGHT MRS. MOOLY?

JUST ONE OF THOSE CURRENT EVENTS, DEARIE



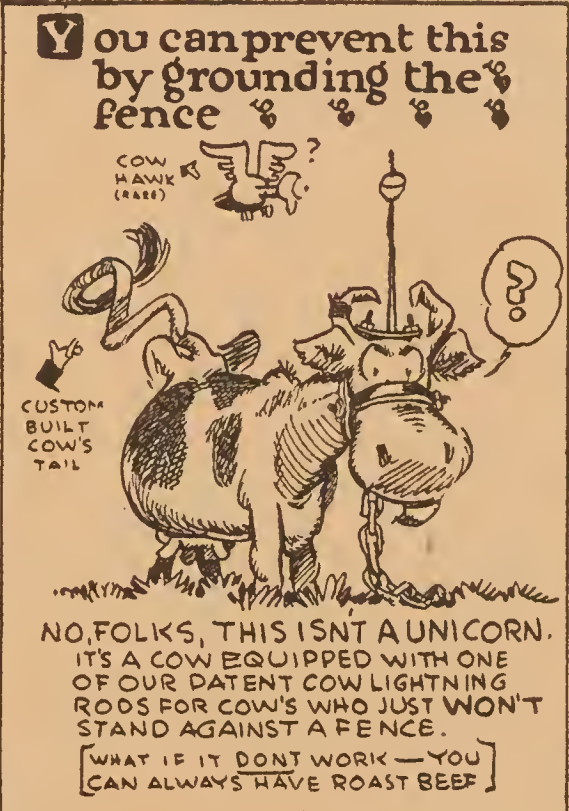
You can prevent this by grounding the fence

COW HAWK (RAVE)

CUSTOM BUILT COW'S TAIL

NO, FOLKS, THIS ISN'T A UNICORN. IT'S A COW EQUIPPED WITH ONE OF OUR PATENT COW LIGHTNING RODS FOR COWS WHO JUST WON'T STAND AGAINST A FENCE.

[WHAT IF IT DONT WORK—YOU CAN ALWAYS HAVE ROAST BEEF]



If your fence has steel posts it is already grounded and safe.

OLIE—WHAT THE SAM HILL ARE YOU DOIN'?

BOSS, YOU BANTOLE ME "GROUND DAS FENCE"—SO AY POOSH HIM RIGHT OFFER ON DAS GROUND, LAK YOU TOLE



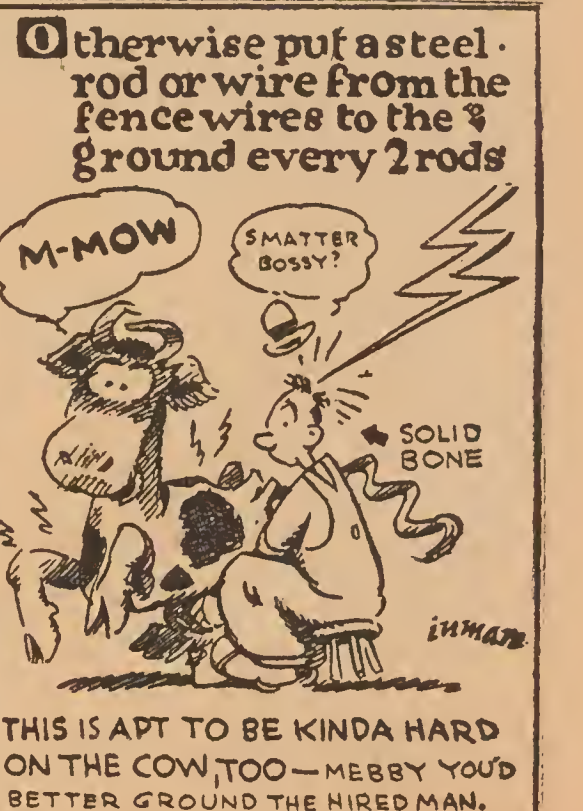
Otherwise put a steel rod or wire from the fence wires to the ground every 2 rods

M-MOW

SMATTER BOSS?

SOLID BONE

THIS IS APT TO BE KINDA HARD ON THE COW, TOO—MEBBY YOU'D BETTER GROUND THE HIRED MAN.



Additional Classified Advertising

SEEDS—NURSERY STOCK

STRAWBERRY PLANTS, Bubach, Corsican, \$1.25 per 100 postpaid. Delicious, Warfield, Dunlap, \$1.00 per 100. Free circular. W. G. SEUBERT, Camden, N. Y.

FINE OUTDOOR GROWN Cabbage Plants—300, 75c; 500, \$1.00; 1000, \$1.50 prepaid. 5,000, \$5.00 expressed. Tomato & Onion Plants \$1.50 thousand. Pepper and Sweet Potato Plants \$2.50 expressed. All now ready. Prompt shipments, good delivery guaranteed. OLD DOMINION PLANT COMPANY, Franklin, Va.

FINE FROSTPROOF CABBAGE and Onion Plants—Copenhagen Market, Ballhead, Wakefields, etc. 300, \$1.00; 500, \$1.50; 1000, \$2.50; Prepaid, 10,000, \$10.00 Expressed. Tomato Plants—300, \$1.50; 500, \$2.00; 1000, \$3.50 Prepaid. 10,000, \$15.00 Expressed. Pepper & Sweet Potato Plants—500, \$2.50; 1000, \$4.00 Prepaid, 10,000, \$25.00 Expressed. Transplanted Tomato and Pepper Plants 100, \$1.50; 500, \$5.00; 1000, \$8.00; 5000, \$35.00. Good delivery guaranteed or money refunded. J. P. COUNCELL COMPANY, Franklin, Va.

CERTIFIED BERRY PLANTS, Columbian purple also Kansas, Cumberland, Plum Farmer, Black Caps. Prices 60c doz. \$3 hundred delivered. CHAS. WHEELER, Mannsville, N. Y.

VEGETABLE SEEDLINGS ready now for you to transplant into cold frames or greenhouse. Peppers—Ruby King, Worldbeater, Bull Nose, Sweet Cheese, Sunnybrook, and Chinese Giant \$3.00 per 1000. Tomatoes—Langdon's Earliana, Penn State Earliana, Marglobe, Chalk's Early Jewel, Bonny Best, John Baer, Stone and Matchless \$3.00 per 1000. Egg Plant—Black Beauty and New York Improved \$5.00 per 1000. Send for free list of Transplanted and Potted Plants ready for field setting. PAUL F. ROCHELLE, Morristown, N. J.

CERTIFIED LATHAM AND HERBERT RASPBERRIES, Howard 17 and Mastodon Strawberries, Washington Asparagus. Other leading varieties Raspberries, Strawberries, Blackberries, Fruit trees, Shrubs, Evergreens, etc. Prices low. Everything guaranteed. Send for price list. BERT BAKER, Hoosick Falls, N. Y.

DAHLIAS. ASSORTED not labeled, \$1. a dozen prepaid. ANER L. SMITH, Sodus, N. Y.

GOLDEN BANTAM CORN; Improved, grown from Hill selected seed. \$5.00 bushel. RATH BROS., Pittsford, N. Y.

GOLD SKIN SWEET Potato Plants 60c per 100; 500 for \$2.00; 1000 for \$3.50 postpaid. BASIL A. PERRY, Georgetown, Del.

CERTIFIED RUSSET SEED Potatoes. College inspected. One year from Michigan. Special prices on large orders. J. W. HOPKINS & SON, Pittsford, N. Y.

CAULIFLOWER PLANTS ready May 10th. Field grown. Catskill Mountain Snowball, Long Island Snowball, Extra Early Erfurt \$4.50 per 1000; 500, \$2.50; 200, \$1.50. Cabbage Plants ready May 10th. Copenhagen Market, Early Jersey Wakefield, Glory, Succession, Danish Ballhead, \$2.00 per 1000, 500, \$1.50. F. W. ROCHELLE & SONS, Chester, New Jersey.

FINE PLANTS ready, open field grown, well rooted, selected, 50 to bunch, varieties labeled separate, packed careful to arrive safely. Cabbage: Early Jersey, Charleston, Wakefield Copenhagen and Flat Dutch postpaid 50, 25c, 100, 35c; 300, 80c; 500, \$1.00; 1000, \$1.75. Express collect, 70c, 1000. Tomato plants: Earliana, June Pink, John Baer, New Stone, Greater Baltimore and Redfield Beauty. Postpaid 50, 30c; 100, 40c; 500, \$1.25; 1000, \$2.25. Express collect \$1.25, 1000. Genuine Marglobe, tomato 5c hundred higher. Peppers: Ruby King, Pimento, and hot Cayenne. Postpaid 50c, 30c; 100, 50c; 500, \$1.50; 1000, \$2.50. Express \$2.00 thousand. Cauliflower plants postpaid: 50, 40c; 100, 75c; 500, \$3.00. E. A. GODWIN, Lenox, Ga.

100 ACRES VEGETABLE PLANTS. Cabbage, \$100 thousand; Onion, \$1.50; Pepper, \$2.00; Sweet Potato, \$2.50; 10,000, \$20.00. Tomato, \$1.25; 10,000, \$10.00. Prompt shipments. Good plant guaranteed. FARMERS SUPPLY COMPANY, Franklin, Va.

BERMUDA ONION PLANTS—Grow bigger and better Onions. Postpaid; 200-60c; 500-\$1.00; 1,000-\$1.75. Transplanted Cabbage: 50-55c; 100-90c; 1,000-\$7.50. Tomato, Aster: 50-60c; 100-\$1.00; 1,000-\$10.00. PORT MELLINGER, North Lima, Ohio.

DAHLIA CLUMPS, 20 assorted, from ninety kinds, \$2.00. Gladiolus mixed colors, 35c dozen, three dozens \$1.00. Ten Hardy Plants all different \$1.00. All postpaid. Large Variety Hardy Plants, Shrubs, Bulbs. List free. FLORAL COMPANY, Oxford, N. Y.

GRAPE VINES, Concord, 2 years, \$6.00 per hundred; 1 year, \$4.00 per hundred; Niagara, white and Wordens, black, 2 year, \$8.00 per hundred; 1 year, \$6.00 per hundred. Plum Farmer, black raspberry plants, \$3.00 per hundred. F. G. SPODEN NURSERY, Fredonia, N. Y.

MILLIONS CABBAGE PLANTS, Copenhagen, Wakefield, Succession, Flatdutch, Danish Ballhead, 300, \$1.00; 500, \$1.25; 1000, \$2.00 postpaid. Express \$1.25 1000. Tomato plants—Baltimore, Matchless Stone, same price. Sweet Potato and Pepper, 500, \$2.00; 1000, \$3.50 postpaid. Satisfaction guaranteed or money refunded. IDEAL PLANT COMPANY, Franklin, Va.

MILLIONS CABBAGE PLANTS—Copenhagen, Wakefield, Danish Ballhead, Succession, Flatdutch, 300, \$1.00; 500, \$1.25; 1000, \$2.25 postpaid. Express \$1.25, 1000. Tomato Plants—Baltimore, Stone, Matchless, Bonny Best, same price as Cabbage. Sweet Potato and Pepper plants, 500, \$2.00; 1000, \$3.25 postpaid. Quick and good service. GUARANTEED SERVICE PLANT COMPANY, Franklin, Va.

20 MILLION TOMATO PLANTS—Large, stalky, well rooted, open field grown, packed with damp moss to roots. Greater Baltimore, Stonc, Earliana, Ponderosa. By mail postpaid: 500-\$1.25; 1,000-\$1.75. Express prepaid: 5,000-\$8.00; 10,000-\$15.00. Late Cabbage plants same price. Prompt shipment, safe arrival guaranteed or money refunded. KENTUCKY PLANT CO., Hawesville, Ky.

VEGETABLE SEEDLINGS—Ready now for you to transplant into cold frames or greenhouse. Peppers—Ruby King, Worldbeater, Chinese Giant, Sunnybrook and Sweet Cheese \$3.00 per 1000. Tomatoes—Langdon's Earliana, Bonny Best, John Baer, Marglobe, Jewel, Stone and Matchless. \$3.00 per 1000. Egg Plant—Black Beauty and New York Improved. \$5.00 per 1000. Transplanted and potted plants of all kinds ready to plant in field for sale. Send for price list. PAUL F. ROCHELLE, Morristown, N. J.

SITUATIONS WANTED

DO YOU NEED FARM HELP. We have Jewish young men, able-bodied, some with, but mostly without experience, who want farm work. If you need a good, steady man, write for an order blank. Ours is not a commercial agency. We make no charge. THE JEWISH AGRICULTURAL SOCIETY, Inc., Box A, 301 E. 14th Street, New York City.

EXPERIENCED GARDENERS, FARMERS, Milkmen, laborers supplied immediately. INTERNATIONAL LABOR AGENCY, 153 Bowery, N. Y. C.

AGENTS WANTED

AGENTS: SELL TROUSERS, Overalls, Dry Goods, Etc. Some advertised brands. Write FREEMAN E. HUNTER CO., Riverton, N. J.

\$8 DAY selling famous Eboclo shirts. \$5 on underwear. \$5 on ties and hose. Low prices. Quick sales. Free samples. EBROCO 1121 So. Elm, Greensboro, N. C.

AGENTS MAKE \$25.00—\$100.00 weekly, selling Comet Sprayers and Autowashers to farmers and Autoists. All brass, Throws continuous stream. Established 35 years. Particulars free. RUSLER CO., Johnstown, Ohio, Box C12.

WANTED TO BUY

WANTED—HAY, GRAIN, Potatoes, Apples, Cabbage, Carloads. Pay highest market prices. THE HAMILTON CO., New Castle, Pa.

WANTED TO BUY old bags. We pay excellent prices. Write for prices. We pay freight. OWASCO BAG CO., Rochester, N. Y.

FARMS FOR SALE

VILLAGE FARM 100 acres, 14 milk cows, horses, 40 hens, equipment. \$6500. \$1000 down. \$250 yearly. Write MR. DOUGLAS, Herkimer, N. Y.

DEL-MAR-VA—THE MARKET BASKET OF THE EAST. Three to ten hours by motor truck to New York. Philadelphia, Baltimore and Washington markets. Pennsylvania Railroad permeates Peninsula. Splendid productive land, farms, town and waterfront homes. Low prices. Good schools, low taxes. Very little snow and freezing. Handsome descriptive booklet. FREE. Address 164 Del-Mar-Va Building, Salisbury, Md.

FOR SALE—120 acre farm situated on improved road. Near school. 2½ miles from town. Good house and chicken house, extra good barn. Plenty of water. Timber for fuel. Will carry 25 head of stock. Easy terms. Will discount for cash. A money maker for the right man. Write or phone L. GLOVER, E. Randolph, N. Y.

PRINTING—STATIONERY

EVERYTHING PRINTED! FRANKLINPRESS, Milford, N. H.

BEST PRINTING. Least money—Stationery, cards, tags, butterwrappers. Prompt, pleasing service. HONESTY PRESS, Putney, Vt.

HELP WANTED

COUPLE FOR COMMERCIAL farm on Long Island. Man to work on poultry farm and woman to cook for help. WENDELL STILL, Selden, Long Island.

WANTED A YOUNG man, single, to drive a 360 quart milk route, this is a responsible position, the man must be highly recommended. ROCK GATE FARM, Mount Kisco, N. Y.

MISCELLANEOUS

WANTED USED BAGS any quantity and grade. Highest prices and freight paid. HOFFMAN BROS. BAG CO., 39 Gorham St., Rochester, N. Y.

USED CIVIL WAR ENVELOPES with flags, designs, etc., \$1 to \$15 paid. Other stamps on envelopes before 1871 bought. Three-face lamps and old glassware bought. W. RICHMOND, Cold Spring, N. Y.

BALSAM PILLOWS filled with fresh Adirondack Balsam \$1.25 postpaid. Makes an ideal gift. Fill your own pillow; enough balsam in bulk for two pillows, \$1.00 postpaid. WONDER GIFT SHOP, Box 24, Newcomb, N. Y.

HONEY. Fine quality clover Autumn flower blend \$5.00 per 60 lbs. J. G. BURTIS, Marietta, N. Y.

FOR SALE—Factory fully equipped; adjacent railroad. Use as creamery, ice cream, or bottling works. Write W. J. CURTIS, Ransomville, N. Y.

KEOUGH'S—Foul remedy. For fouls or hoof rot. Used by farmers for over 25 years. Satisfaction or money back. Get a bottle at your druggist or feed dealer or send one dollar for a bottle. KEOUGH PHARMACAL COMPANY, Box A, New Berlin, N. Y.

AVIATION—Earn while learning aviation, \$18 to \$35 per week while under instruction in our factory and shops. Call or write for information without obligation. AERO CORPORATION OF AMERICA, Department DA, Plankinton Building, Milwaukee, Wis.

WALTER A. WOOD reaper and blunder. Good condition. Price \$50.00. FRED SCHULTZ, Red Hook, N. Y.

TOBACCO

HOMESPUN TOBACCO—Guaranteed. Chewing, 5 lbs., \$1.25; 10, \$2.00. Smoking, 5 lbs., \$1.00; 10, \$1.50. Pay when received. FARMERS UNION, Mayfield, Kentucky.

GUARANTEED HOMESPUN TOBACCO. Chewing, 5 lbs. \$1.50; 10-\$2.50. Smoking, 10, \$1.75. Pipe Free. Pay Postman. UNITED FARMERS, Bardwell, Ky.

LEAF TOBACCO—Good sweet chewing, 3 lbs., 90c; 5, \$1.25; 10, \$2.00. Smoking, 3 lbs., 60c; 5, 90c; 10, \$1.50. UNITED FARMERS, Mayfield, Ky.

WOMEN'S WANTS

LADIES' FINE LISLE STOCKINGS 3 pair \$1.00. Black, gunmetal, grey, beige, nude, French nude; sizes 8½-10. Good openings for agents. A. H. TALBOT SALES COMPANY, Norwood, Mass.

Who Contributes Most to Farm Success?

(Continued from Page 3)

have success blazoned from all sides and the partners called "Master Farmers."—MRS. WALTER P. DAVEY, Keeseville, N. Y.

* * *

Proud of Her Job

(Second Prize Letter)

AS a farm woman I vote for the man's contribution as more fundamental to the success of the farm, or to there being any farm institution at all. If the man does not plow and harrow, plant potatoes and take care of them, the woman cannot very well cook the potatoes, however willing she may be or however good a cook she may be. And if he does not care for the cow and milk the cow, she cannot very well serve milk to her family or make butter for them.

However, I refuse to sit down and weep because my work is not sufficiently important. Few farm women have time for such doleful employment if they had any taste for it. The job of the woman in the farm home is big enough and busy enough, and should be spiritually rewarding enough to suit almost anyone. Sometimes, in the hurry of every day, the vision of the purpose of it all becomes clouded, but it is there at the root of effort all the time, or how could we keep a tight hold on contentment and joy?

First there is breakfast; and not one of your grape-fruit, toast and coffee breakfasts either, but cooked cereal and sausage and pancakes likely enough, and served bright and early without a doubt. Then comes dinner; the kind of a dinner for which one needs a hot fire, and which means haste at dishing up time. And last, there is supper which ought to be especially appetizing and at the same time simple and digestible. But these three homely events mean three times in the day when the family is together and generally somewhat relaxed. They mean physical replenishment and the opportunity for refreshment both mental and spiritual. The pleasant telephone conversation or the news from a sick neighbor is reported. Sam Junior is keen about baseball. Martha's mark in arithmetic is the best she has had. Father wonders if there will be bargains at the auction tomorrow. Simple interests! Yes, but simple interests make pleasant conversation. And good food, good manners, cheerful times, a family joke now and then, these mean family health, happy memories stored up for the children, and better homes when these boys and girls are making homes of their own.

That new frock for Martha cut from last season's dress, and pieced where it won't show, that means joy for a very lovable little girl. Who is ready with the right book to read aloud when the children have finished their lessons, and who is there to enjoy it with them? You see I won't admit that any part of the job is without glow and vision.

So, Mr. Farmer anywhere, I vote that your job is more essential to the farm. But here's to my job. I plan to stick right to it.—WINIFRED S. PADDOCK, Brewster, New York.

* * *

"It Is Not Good for Man to Be Alone"

WHO is the most essential to the success of the farm, the man or the woman?" As I read these words the thought comes to me, would the farm enterprise be a complete success in the highest and best sense without both the man and the woman? Why do we work so hard to provide suitable homes for our families, to provide for their needs, to educate them? This is the great object with married people, also to provide for our old age.

Young people work with a vision before them, the vision of an ideal home which sooner or later they will establish. The girl has her "hope chest"; the boy is laying aside a bit toward

a payment on a farm. In the words of the old slang expression, he is planning "to get a cage for his bird." Such being the case, the object of the farm is best realized when the farm is furnishing a pleasant, comfortable home for a well fed, comfortably clothed, well trained family, and when that home rests on a fairly sound financial basis. Such a home is never quite complete without both father and mother. Husband feels lost without wife, wife feels the same without husband. The Scripture says, "It is not good for man to be alone" so woman was made to be man's helpmate.

If however, Providence has made it necessary for one to run the farm, the woman could do it best, as she is a very adaptable creature. She can fit herself to conditions better than man. She can do many things. The average farm woman is cook, housemaid, laundress, nurse, dressmaker, poultry woman, gardener, and to some extent teacher, perhaps a day school or Sunday school teacher, and maybe president of the Aid or Home Bureau. She has learned to do many kinds of work, and face many problems. Therefore, if called to manage the farm alone, she can do it well, with some aid in doing the heavy rough work. Very few women can do all the work on the farm, such work as plowing, dragging, etc. If she hires such work done by a man she is not running the farm without a man's help. As I have said, both man and woman seem very necessary on a farm. But as farm manager, a woman can do well. Personally, I know of several cases where they did. I knew one woman who, being left with three small daughters, ran the farm, provided well for the needs of her children, and sent them all through the high school in a nearby village. Another woman left with two little girls, a small farm not yet all paid for, has the farm worked on shares by a neighbor, and manages so well that her children are comfortably sheltered, well fed and clothed. Every year she pays some on the mortgage. Still another left with a mortgaged farm and two children cared for her children and paid the mortgage.

I never have known a man who, unless he had a daughter old enough to keep house and care for the younger children, tried to run a farm without a housekeeper.

If a man is without a family, and has a knack for housework, he might manage to run a farm well and keep his own house, but with a family, he cannot do so.—MRS. EBEN J. PALMER, Kanona, New York.

* * *

Man Gives Credit to Woman

I THINK the woman makes the greatest contribution to the success of the farm enterprise because if she is a successful homemaker this alone makes possible the true success of the farmer.

A cheerful, happy wife, vigorous, healthy children, well-fed and nourished, taught to do many useful chores around the farm and home, rooms tastily decorated, a plant in every room, the furniture carefully selected and arranged so as to give an idea of coziness, all these things make for happy and contented farm life.

The mother also helps with the farm accounts, the family budget, the clothing and feeding of the family, any one of which, if improperly managed, would wreck the prosperity of the home. The care of the children, their health and future usefulness to society depend in large measure upon the care and forethought of the mother. The education of the children is usually followed more closely by the mother, because father is engrossed in the Herculean task of trying to make old Mother Earth provide enough for a happy growing family in these days of keen competition. No farm enterprise will be truly successful without the loyal devotion, and patient sacrifice of Mother.—WILLIAM D. AKER, Cobleskill, New York.



An Expensive "Bargain"

This afternoon a truck with Pennsylvania license plates, (I do not know the number), came to our farm with remnants of lineoleum. They said it was Armstrong Guaranteed. I bought a piece, and paid \$10.00 for it. They said the piece contained 16 yards. After they were gone I measured it. It is three yards twenty inches long, and two yards wide. It is torn and marked "damaged." It is not Armstrong. They said they were from Lancaster, Pa., and gave me a receipt for my money signed Joe Brown. Please hurry and do what you can to stop them, as they are robbing the farmers in this district of New Jersey, and Pennsylvania.

THIS is an old game, although we had not heard of it recently, until this letter from our subscriber. We have several suggestions to make, first that our readers record the license number of all cars who come to their places to do business. In nine cases

One Letter Gets Results

I WISH to thank you for the prompt and efficient manner in which you handle affairs. I have received the pen, yesterday, from _____ company. I could get no reply from them, but since you wrote them I have had a very courteous letter from them, and have received my pen. Again I thank you and the American Agriculturist for your kindness.

out of ten, the owners are honest but in the tenth case, the license number gives us something to work on. Second, where agents attempt to sell trade marked merchandise at far below retail cost, we suggest that our subscribers exercise particular caution. The chances are that misrepresentation is being made, as in this case, or that the goods are stolen. If you should meet with the same proposition, we suggest that you get the license number, and immediately give the facts to the nearest State Police officer.

Collateral Banking Corporation Attempts to Sell Memberships

"There have been two agents in this district for about two weeks. They have been selling memberships (life) for the Collateral Banking Corporation, Philadelphia, Pa. It is a cooperative buying and financing plan which is supposed to affect savings on all cash purchases, also credit for installment purchases without fees or other costs. What can you tell me of the company and their plan?"

A booklet put out by the Collateral Banking Corporation states that the purpose of the credit system established by them is two-fold. First, it claims to enable members to purchase merchandise for cash at prices substantially below the regular retail price and second to purchase merchandise on credit at established retail cash prices without paying any interest on the notes given in payment and without making any financial charges of any nature whatever.

We have no information indicating that this company is not entirely honest in their endeavors to save our subscribers money, yet we would like to point out that the success of any undertaking depends not only on the

honesty of its backers, but also on their ability to carry through their plans.

It appears to us that this plan has many features similar to and in common with automobile service corporations which claim to secure discounts on gas, oil and accessories purchased by their members. The benefits claimed are open only to members of the system. We are informed that many of our subscribers, particularly in south Jersey have been canvassed by representatives of the Collateral Banking Corporation in an attempt to sell memberships for the sum of \$25.00. Such an investment can be classed only as decidedly speculative.

"Slightly Used"

I sent an order to the Hart Tire Company for two slightly used tires. They asked for a dollar deposit on each tire, and sent it C. O. D. I had to write them the second time before they sent the tires. Upon receiving them, I put them on the front wheels. I had them on about half an hour, when one of them blew out, while standing in the yard. I sent them back, but as yet I have not heard from them. I would appreciate your help, if you can collect the money I paid for them.

THE Hart Tire company advertises 30 x 3½ tires for \$2.98 each. The guarantee states they will be replaced at any time within eight months, at half the price paid for the original. You can figure out for yourself how valuable this guarantee is to our subscriber. He secured half an hour's use from one tire, and all he can demand from the Company, under the guarantee, is another tire at half the price of the first one.

The only correct way to figure tire costs is on a mileage basis. Although the first cost of new tires of a standard make is higher, we believe they are more economical in the long run.

Post Office Stops Another Home Work Scheme

I sent \$2.00 to the Restful Pajama Company. I have written to them twice, but have received no reply. Please help me get some word from them.

WE have learned that the Long Island City postal authorities have been directed not to deliver any mail to the firm's office, but to return all such mail to the writers, or to the "dead letter" office, as this firm is a fraud.

When officials went to the plant in Long Island City to question those involved, the floor occupied by the firm for the last few months was found tenanted, and they were informed that the company had just moved.

This is one more example of the various home work schemes against which we are constantly warning our subscribers.

Subscriber Gets Refund Check

I ordered merchandise through an agent, paying him a deposit of \$15.00, the balance to be paid when the order was received. Instead of shipping the goods I ordered, they substituted, and I did not accept them. I can get no word whatever from the company.

WHEN we first wrote to this company, they maintained that it was up to the agent to refund the \$15.00, but we were successful in convincing them of their liability, and they forwarded a check to our subscriber covering the full amount of the deposit.

Goods Not Returnable

"I am sending you a copy of contract also list of names sent in to the Arch Manufacturing Company. I had a con-

tract with them to sell their goods and keep them on display for the period of one year and I was to send them the names of persons to whom they would send advertising matter telling of their goods also where they could get same.

"They agreed to purchase back at invoice price all goods not sold at the end of the year. They now refuse to do this saying I have not lived up to my part of the agreement."

FOLLOWING an investigation of the Arch Manufacturing Company we learn that the company was incorporated in 1912 under the name of the National Novelty Company. The name was changed in 1924 to Blackstad,

A "Thank You" Is Our Pay

IT is with pleasure that I inform you that we have received \$56.00 from the _____ Company for our claim which is in full, and the case is now settled.

We have you to thank for this, and wish to extend our heartiest thanks for your help, and cooperation in the matter, as we could not settle it ourselves.

Inc. We are informed that numerous complaints have been made against the business chiefly with certain claims made as to the quality and with the understanding that the merchandise could be returned if they did not sell. Later it was found that the Arch Manufacturing Company did not accept the return of the jewelry and that the account had been placed in the hands of a third party for collection.

Posting Streams Against Fishing

Is it legal to post one's land against fishing when the stream was stocked by the State? In this case, the stream running through our property was not stocked, but a tributary to it was stocked by the State. Can we prevent fishermen from coming on our land to fish?

THE fact that waters have been stocked with fish furnished by the State does not open the waters to public fishing. As we understand the situation, a person cannot make application to the Conservation Department for fish with which to stock a private fishing pond or stream. In other words, if you want a private fishing preserve, it will be necessary to buy the fish from an independent commercial hatchery. On the other hand, the fact that the Conservation Department stocked the stream does not

We Are Glad to Help

I received my wrist watch today and words cannot express how much I appreciate the prompt action of your Service Bureau. I feel sure that I would never have received my premium if I had not called for your assistance. I shall always boost your paper and wonderful service.

prevent the owner from posting his farm against trespassing for the purpose of hunting and fishing, even though the owner may have given his consent to such stocking.

Cost of Retesting Accredited Herds Borne By State After Jan. 1, 1930

THE New York State Legislature recently passed a bill providing that the cost of retesting accredited herds in New York State would be borne by the State. Many dairymen are wondering when this law will take effect. We are informed by the Department of Agriculture and Markets at Albany, that the law does not take effect until January 1, 1930 and that in view of the fact that no appropriation has been made to make this law effective, it may be even later before the provisions of the law are carried out.



WANTED AT ONCE! 300 More Good Men

In New York and New England

to help introduce and retail Rawleigh's Good Health Products. You will be supplied from our new branch house just opened at Albany. Sell in town or country. Wonderful opportunity. Nothing new—no experimenting. On the market since 1889. Nearly 200 necessities needed daily in every home. Annual Sales over 37 million packages. Largest Company—over 15 million dollars capital—16 great factories and branches. Practically no capital, no experience needed. Quick, easy sales, repeat every 30-60 days. Big pay right from start. Stone, Vt., sold \$212.20; Reagan, N. Y., \$184.40 first week. Profits increase monthly. Thousands make more than they ever could before. You should do as well. Simply follow the same old time-tested Rawleigh Methods which have given consumers best values and satisfaction for 40 years. We supply everything—products, outfit, sales and service methods which secure the most business everywhere. Steady year round—no lay-off—no boss—you are sole owner and manager. For particulars write

THE W. T. RAWLEIGH CO., Inc.

DEPT. E-41AGR ALBANY, N. Y.
MUCH THE LARGEST INDUSTRY
OF ITS KIND IN THE WORLD

Quality Supreme Then Low Price



includes Bathtub, Porcelain Toilet and enameled Wash Basin. Complete with all Fittings and Five-Year Guaranteed Materials..... **\$52.50**

We Pay The Freight on Everything

Write for FREE Catalog 20

J. M. SEIDENBERG CO., Inc.
254 West 34th St. New York

SAVE HALF Your Paint Bills USE INGERSOLL PAINT

PROVED BEST by 87 years' use.

ONLY Paint endorsed by Grange for 50 Years.

Made in all colors for all purposes at

WHOLESALE FACTORY PRICES

INGERSOLL PAINT BOOK tells all about Paint and Painting for Durability. FREE TO YOU with Sample Cards and our PREPAID FREIGHT OFFER. WRITE US. DO IT NOW and SAVE MONEY.

PATRONS' PAINT WORKS, Inc.

Oldest Ready-Mixed Paint Factory in America. Est. 1842

252 Plymouth Street, Brooklyn, N. Y.



To benefit by our guarantee of ads, say
"I saw your ad in
American Agriculturist"



The Sign of Protection

"Do the way I do, George . . . feed 'em plenty of *MILK* and they'll grow like weeds!"

"I *do* feed my chicks milk, Bill, but they don't grow half as fast as your birds. And I've lost any number from coccidiosis, roup and white diarrhoea. My feed has buttermilk in it. The sack says so."

"Whatever the sack says, your flock isn't getting *enough* milk! I know what I'm talking about, George. You're throwing away a lot of money just trying to save a few cents."

"Pshaw! It isn't that . . . you know the buttermilk doesn't cost much."

"That's just the point. It doesn't cost hardly anything. And yet you're losing all kinds of money by not using it. Why you can't afford *not* to feed your flock buttermilk! Do the way I do, George. Feed 'em plenty of milk from the day they're hatched—an extra 10% in your feed—and watch your chicks grow. They'll surprise you."

"Do you think it is too late to start now?"

"Of course not! In fact it's chicks like yours that have been cheated out of enough milk ever since they were hatched, that need milk the most. You ought to start right away with 15% or more until the leg weakness and other troubles disappear. Then keep them on a steady diet of 10% added to your regular feed."

"Buy it at the feed store, eh? And just mix it in?"

"Yes, and insist on genuine Collis Process Pure Dried Buttermilk. It's the only brand I know of that's always uniform in quality. I wouldn't buy any other."

COLLIS PRODUCTS COMPANY

Dept. 659, Clinton, Iowa



You've *got* to add buttermilk to your feed to be *sure* there's enough. Add only the Collis brand, 100% pure and always uniform. Start today. Phone your feed store to deliver. Write for Collis book. It tells why milk-fed poultry is the most profitable.



COLLEGE OF AGRICULTURE
ITHACA, N. Y.

Q 51
7 513

AMERICAN AGRICULTURIST

\$1.00 Per Year

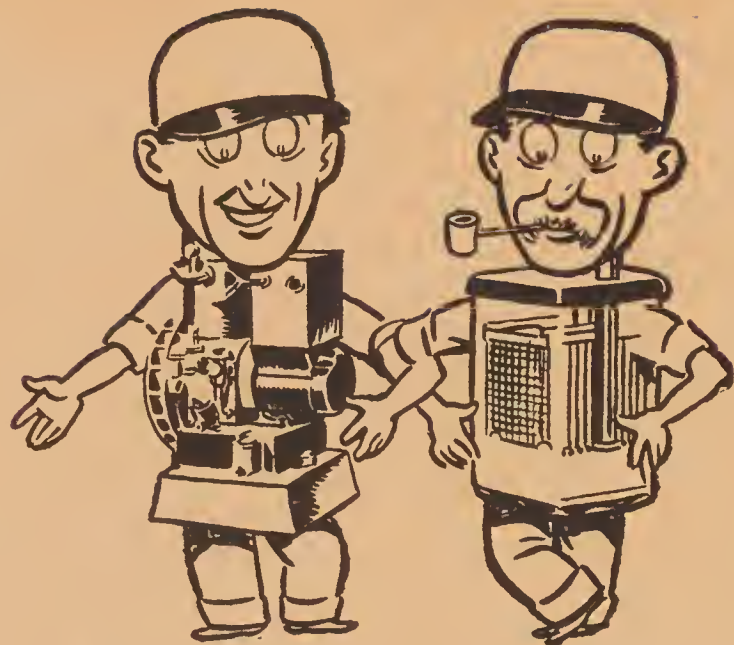
May 18, 1929

Published Weekly



Beauty Spots of the East—*Enfield Glen State Park*—See Editorial

—Courtesy, Finger Lakes State Park Commission



The electrical help you've always wanted

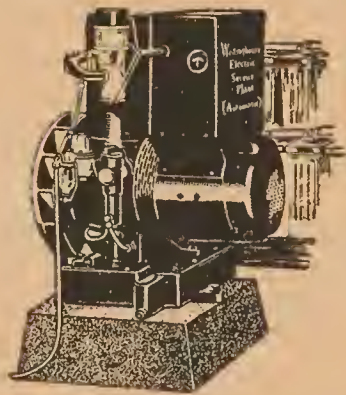
Two electrical servants to do your bidding any second of the day or night—that's what the new Westinghouse Automatic Electric Service Plant offers you in Pat, the Plant and Bill, the Battery.

This new automatic electric plant is almost human in its action. It practically runs itself. All it asks of you is to give it fuel and orders. Moreover, it plans its work systematically. Part of the time the engine generator carries the load. Part of the time the battery carries it. Sometimes both carry it. And it's this perfect team work that gives you unfailing electric service *whenever* and *wherever* you want it.

The new automatic features of the Westinghouse Automatic Electric Service Plant have been perfected by a world-famous engineering organization. Its standard features are the same time-tried ones that have made other types of Westinghouse Electric Service Plants the choice of the U. S. Government and farmers everywhere. It is the last word in reliability . . . economy . . . and efficiency.

A Westinghouse Automatic Electric Service Plant will provide you with an independent electric service of your own . . . will enable you to increase the productiveness of your farm by replacing man-power with electric-power . . . and will make it possible for you to enjoy city conveniences no matter where you live.

WESTINGHOUSE ELECTRIC & MFG. COMPANY
Farm Light Division, East Pittsburgh, Pa.
Tune in with KDKA — KYW — KFKX — WBZ — WBZA



Enjoy These Advantages Now

Send in the coupon below for the complete story of this new plant and the new electric service it offers to farmers, with an easy, convenient plan of payment.

Westinghouse

AUTOMATIC ELECTRIC SERVICE PLANT

Westinghouse Electric & Mfg. Co.,
Farm Light Division,
East Pittsburgh, Pa.

Please send me more information about your new 24-hour Electric Service and your easy payment plan.

Name

Address

County State

AA-5-18-29

New School Law Questions

Answers to What Readers Want to Know

AMERICAN AGRICULTURIST has printed a good deal of information about the new school laws and how they work, but we are still receiving a large number of questions. In order to help you, we are repeating the most important of these questions below and answering them briefly. Here they are:

Does each one-room school district have to spend all of the \$1300 for school expenses next year?

No. You will spend only what you need to run a good school and hire a first class teacher. If you spend only \$1200, the State will pay the difference between what you raise with a four-mill tax on your true valuation and the \$1200.

However, it is estimated that it usually requires \$1300 to run a first class one-room school.

What may the money be used for?

To pay teachers' wages and all the other legitimate school expenses, including library books and equipment. The new law takes the place of all the other different quotas for school purposes. The \$1300 is for the school expense running from August 1, 1929, to August 1, 1930. Great care should be taken, of course, to spend the money efficiently, but the purpose of the larger sum is to help you add to your equipment, hire the best teacher, and in general improve your school. Trustees, if necessary, may borrow funds to cover expenses until the new State aid is received.

How shall we know what to raise for the next school year?

First, find out what your true valuation is. Second, determine what your local school tax will be from a four-mill tax on your true valuation. This will tell you what you must raise locally. The State will pay the rest of the \$1300.

How do you know what the true valuations in your district are?

Divide the assessed valuation of the real property in your district by the rate of assessment for the whole town. This will give you full or true value of the real property. To this amount add the assessed valuation of personal property. For example, suppose your assessed valuation is \$80,000 and the rate of assessment for your entire town is 90 per cent of the true value. Then if you divide your assessed valuation of \$80,000 by 90 per cent, you will get \$88,888.89, which is the true valuation of real estate in your district. To this must be added the assessed valuation of the personal property in your district. If the district is located in more than one town, the value of the real property should be divided by towns and the value in each town divided by the rate for that town.

The full value of the property in the several towns, plus the value of the personal property will give the full value of the district. Assessed value should be taken from the 1928 tax list for the town. Rate of assessment will be given in a bulletin to be issued in July, 1929, by the State Department of Taxation and Finance. If in doubt, consult your district school superintendent or the town supervisor, or write American Agriculturist.

Do all one-room school districts get help from this new law?

Practically all. The poorer districts get the most help, of course, as they should, but the law provides that every district, no matter how high its valuations, shall receive at least \$425 from the State.

How about the central rural school districts? Do they get help?

Yes; \$1300 less the local four-mill tax will be allowed for each one-teacher district included in the central rural school district.

How about consolidated districts not organized under the central school act? Will they get help?

Yes. They will receive the same quotas that they have formerly under the old law except that the new law provides that no consolidated district shall receive less than the amount due

any district not consolidated. In other words, the taxpayers in those districts receive the same help and consideration as they would if they were not consolidated.

What about contracting districts?

These districts will receive apportionments under the old law, which provides an allowance equal to the amount spent for tuition and transportation in excess of five mills on the assessed valuation of the district, but with the provision that the State will pay at least an amount equal to the \$1300 less four mills on the full valuation of the district.

How does the new law help the two, three, and four teacher schools?

Schools with two teachers under the new law will receive \$1525 plus allowances for teacher conference expenses and books and apparatus.

Schools with three teachers will receive \$2275 plus allowances for teacher conference expenses and books and apparatus.

Schools with four teachers will receive \$3025 plus allowance for teacher conference expenses and books and apparatus.

Do the new laws affect the duties of the trustees?

Very little, except that the trustee will have to work out, as explained above, the new method of assessing local taxes on true valuations. The new law should increase the interest of trustees and other school officials to improve their schools.

Do the new laws raise teachers' wages?

One of the purposes of the new legislation is to give the local school a chance to compete with the cities for first class teachers without increasing local taxes. It may or may not be necessary, depending upon the local situation, to raise the teacher's wages in order to get a first class teacher.

What is being done, if anything, by the State to train teachers for the rural schools?

Much is being done to train rural school teachers. Several of the State schools of agriculture have training classes for the one purpose of preparing teachers for country schools. Normal schools are now starting courses for the same purpose, so that in a few years there should be plenty of good teachers trained especially for rural school work.

Will the new gasoline tax be used to pay local school expenses under the new law?

The money from the gasoline tax will be used for just one, and only one, purpose; that is, to build and maintain roads. The gasoline tax has nothing whatever to do with school taxes.

Will the new school laws increase farmers' State taxes?

Very little. The farmers' tax burden is a local one. The State taxes are raised chiefly by indirect taxation, as for example, inheritance taxes and taxes on stocks and bonds. As a matter of fact, the cities of the State pay most of the State taxes.

Lesson Three for Little Cooks

Dear Betty:

My mother wants me to learn to be a cook too so will you please send me one of your scrapbooks? I am sending the money with this letter.

My Daddy takes the American Agriculturist and I am glad he does because I like to read the stories in it and to look at the pictures. Mother likes the patterns and recipes and we all try to get it first to read it.

Yours truly,

M. M., Norwood, N. Y.

The third group of Recipes for Little Cooks may be found on page 7 of this issue. It is just the right size to cut out and paste in one of Betty's scrapbooks. The first two lessons are printed in the scrapbook, the succeeding lessons will appear once a month in the American Agriculturist. Send 10c for a recipe scrapbook to Betty, American Agriculturist, 461 Fourth Ave., New York City.

Slogan Contest Interests Hundreds

Winners Chosen from Nearly a Thousand Letters on Advertising

IN the April 6th issue of AMERICAN AGRICULTURIST we told you of our plan to find out whether you were keeping your issues of AMERICAN AGRICULTURIST. The answer to this question is "yes".

In spite of the fact that the notice of our advertising slogan contest was in a rather inconspicuous place in the paper, we received over 800 letters. In fact, this is just about the most popular contest we have ever had. We expected a good response, but we were not really prepared for the bushels of letters that poured into the office with every mail. If you have never seen 800 letters all at once, we are sure you have no idea of how big a pile it makes.

We Enjoyed Your Letters

Our next problem was to read and judge them. With so many entries we are frank to say that probably any other set of judges would have arrived at a different conclusion than we have. However, we did our best, and incidentally, every letter was read not only once, but many of them several times in order that we might be absolutely fair in the selection of the winners. We have saved many, in whole and in part, to print later.

In spite of the work involved, we thoroughly enjoyed the contest, and we wish to thank everyone who took part in it. Of course, it is impossible for everyone to get a prize, but letter after letter mentioned that whether or not they were in the list of winners, that they had profited from the contest, both from the fun they had in hunting for the slogans, and the information they had found. Needless to say, we would have been glad to receive twice the number which were sent to us.

Our greatest satisfaction in reading the letters was to know that so many of our readers have absolute confidence not only in the advertisements which we publish, but also that the entire editorial staff is working for your benefit. Many readers mentioned their appreciation of the fact that no questionable advertisements concerning get-rich-quick schemes, home work schemes, fortune telling fakes, or matrimonial schemes are published and that they could, therefore, feel safe in recommending AMERICAN AGRICULTURIST to be read by their children.

Our Younger Readers Also Compete

We appreciate this, yet we always wonder why readers allow papers that do publish such advertisements to come into their homes. Parents are not only laying their family open to the danger of answering these fakes, but they are also encouraging their publication, for after all, they would not be published if the public did not subscribe to papers that carry them.

We were especially pleased at the expressions of good will from our subscribers. Many of them mention instances where the Service Bureau had saved them money. Others mention our help in answering farm problems or in giving advice on personal questions. This is exactly what we are continually striving to do. A considerable number of letters received in this contest were written by boys and girls of school age. No publication can succeed without continually appealing to new readers, and this evidence that farm boys and girls read the paper naturally pleases us very much.

Now that you know how interesting they are, you will no doubt plan to read the advertisements more closely than you have in the past. Even if you do not intend to buy, you will find much to interest and inform you about new methods. Some of the most skillful artists and writers in the world are engaged in writing and illustrating advertisements. Many companies offer to send booklets and bulletins, which contain information that is thoroughly reliable and authentic. They are glad to send these to anyone interested. Send-

ing for booklets does not in any way obligate you, and you are really conferring a favor upon the company by allowing them to present their arguments to you.

The majority of those who sent in slogans were successful in finding the page and issue on which they appeared. Consequently, in order to arrive at a prize winner, it was necessary to decide largely upon the letters which accompanied the slogans, and the following are the letters which, in the opinion of the editorial staff, are most worthy of prizes.

* * *

A. A. Advertisers Are Old Friends

(First Prize Letter)

ADVERTISEMENTS are, to me, a most fruitful source of information as to economic developments, new inventions, and important discoveries. Because I firmly believe the advertisements in the AMERICAN AGRICULTURIST to be true representations of honest products published in a reliable paper

by dependable advertisers, I have formed a habit of reading them all. Now many of the advertisers seem like old friends, and reading their ads is like getting letters from them.

These advertisements are of particular interest to me:

As a farm woman because they have a direct bearing on farm life and rural development.

As a parent because they are clean in subject matter, and illustrations.

As an extensive reader because the printing is distinct and illustrations clear cut.

As a busy person because of methodical arrangement and the reference number.

As a buyer of advertised products because they are carefully investigated and guaranteed by the publisher.

As a member of various farm organizations because the AMERICAN AGRICULTURIST is loyal to us and criticizes constructively rather than destructively.

A friendly feeling of loyalty, goodwill, fair play, and confidence inclines

me toward advertisers in the AMERICAN AGRICULTURIST.—EDNA H. VANDYNE.

* * *

They Are Reliable

(Second Prize Letter)

I READ the AMERICAN AGRICULTURIST advertisements because I know that the firms advertising are reliable, that they are backed by the AMERICAN AGRICULTURIST guarantee, and that I will be assured of a square deal.

They are interesting in themselves, and most advertisers have pamphlets or written matter on their articles, or products of manufacture, and their use and advantage. Labor savers and time savers are usually fully described, so that the consumer or user knows he would be benefited by purchasing the same.

Advertising is one of the best mediums for bringing the seller and buyer together. It gives the buyer the privilege and advantage of buying elsewhere as well as from his own locality. It gives the buyer the advantage of choosing from a greater selection of goods. It also sometimes gives the buyer an advantage of buying more directly. It serves the buyer and helps him to know what is being offered for sale and where such things can be purchased. It also serves the buyer as a comparison of up-to-date values and prices.

It is the only method that the seller can use to advertise the goods to inform the people of what he has for sale away from his own locality, unless such seller should be fortunate enough to have salesmen or canvassers to demonstrate and talk for his goods. Even then he could not cover as much territory and reach as many buyers as advertising in a good reliable paper, with a large circulation, such as the AMERICAN AGRICULTURIST.

—MISS MARION POLY.

* * *

Service

TO be a success as a business man, whether as a storekeeper, manufacturer, automobile dealer, farmer or anything else, you must keep up-to-date as regards modern methods of production, management, sales, and finances.

In the advertising columns of the A. A. may be found all that is tried and true, as well as the newest in seeds, fertilizers, machinery, equipment, breeding stock, packages and containers, as well as reliable dealers to buy your own marketable products.

Not so many years ago, it seemed to be the policy of many companies to consider a sale closed as soon as the money was passed. Now all this has changed, and companies are willing, even anxious, to send you free on request, pamphlets containing much valuable information, samples, etc., even though you are not a customer.

In order to benefit by this service, as well as much other good advice and valuable suggestions in the ads themselves, you must read the ads. And since all A. A. advertisements are guaranteed reliable, you are not running any chances of getting hooked in a flim-flam game or of getting anything other than as advertised. Or if you ship your produce to A. A. advertisers, you are not going to lose all or part of your proceeds by shipping to fly-by-night produce or commission houses. Read the A. A. ads—it pays.—ELMER STACY.

* * *

From a Rural School Teacher

I AM a daily reader of your weekly magazine for I find so much really worth while material for thought that I use much of my spare time reading it. First of all, there is a reason "Why I read AMERICAN AGRICULTURIST Advertisements" (Continued on Page 10)

Subscribers Tell Why They Read A. A. Advertisements

WE have collected below sixteen definite reasons taken from letters in American Agriculturist's great "Advertising Slogan Contest". More than eight hundred letters were received and most of the following reasons were given in many different letters. No one could read all of these letters or the convincing reasons quoted from them below without being sure that the "Old Reliable" is read from cover to cover, including both editorial matter and advertisements, by thousands of our folks every week.

1. "American Agriculturist advertisements are guaranteed to be reliable." (Almost every letter mentioned this).
2. "American Agriculturist will refund the purchase price of any product bought from any advertiser who is conducting a fraudulent business or whose product fails to be as advertised."
3. "Many advertisements contain valuable information and help to keep up-to-date in farming methods."
4. "American Agriculturist advertisements are very interesting."
5. "Many advertisers will send free of cost, booklets which contain information of interest to producers."
6. "American Agriculturist advertisements save us time. We are able to read about different products in our own home and make our selections without being unduly influenced by salesmen."
7. "American Agriculturist advertisements are well organized and classified and are easy to find in the paper."
8. "We know that the editorial staff of American Agriculturist is working in every way to serve agriculture and we believe in giving them a square deal by dealing with their advertisers."
9. "The farmer cannot afford to take a chance. A mistake in buying seed, fertilizer or other products cannot be corrected for an entire year. For this reason we buy from the reliable advertisers published in American Agriculturist."
10. "We read American Agriculturist advertisements because they save us money. We are able to compare prices and buy a good product for a reasonable price."
11. "We have always received fair treatment in the past from American Agriculturist advertisers. Why should we not continue to read their advertisements and deal with them?"
12. "Reading American Agriculturist advertisements helps us to cut costs by learning of new methods and new machines."
13. "We read American Agriculturist advertisements because this paper does not permit advertisements concerning get-rich-quick schemes or home work schemes."
14. "By reading American Agriculturist advertisements we not only learn where to buy but also where to sell farm products."
15. "We are convinced that it pays to buy standard trademarked goods such as are advertised in American Agriculturist."
16. "Because I enjoy reading the attractive advertisements in this paper."

Editorial Page of the American Agriculturist

AMERICAN AGRICULTURIST

Founded 1842

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E. R. EASTMAN - - - - - Editor
HUGH L. COSLINE - - - - - Associate Editor
FRED W. OHM - - - - - Market Editor
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H. L. Bailey - N. M. Flagg

Our Advertisers Guaranteed

The AMERICAN AGRICULTURIST accepts only advertising which it believes to be thoroughly honest. We positively guarantee to our readers fair and honest treatment in dealing with our advertisers. We guarantee to refund the price of goods purchased by our subscribers from any advertiser who fails to make good when the article purchased is found not to be as advertised. To benefit by this guarantee subscribers must say: "I saw your ad in the AMERICAN AGRICULTURIST" when ordering from our advertisers.

Correspondence for editorial, advertising or subscription departments may be addressed to either
10 N. Cherry Street, Poughkeepsie, or
461 Fourth Avenue, New York, N. Y.

Entered as Second-Class Matter, December 3, 1927, at the Post Office at Poughkeepsie, N. Y., under Act of March 6, 1879.

Subscription price, payable in advance, \$1 a year, three years for \$2, five years for \$3. Canadian and foreign, \$2 a year.

Vol. 123 May 18, 1929 No. 20

Rain and More Rain

"Farming is not easy these wet weeks," writes one of our friends. "I spray a day, or part of a day, and then the good Lord sprays two or three!"

MARK TWAIN observed long ago that there was not much use talking about the weather because no one had been able to do anything about it. Nevertheless, our sympathies are certainly with farmers this spring for practically the whole month of April and the first half of May have had nothing but rains, floods, high winds and generally unsettled and disagreeable weather.

It is hard to sit by and watch the rain at this time of year when every day and every hour count so much toward the season's success. Yet there may be some comfort to remember the old adage that "a rainy May fills the barns with hay", or that "a wet summer causes much worry, but a dry summer causes short crops."

Farm Relief at Washington

LITTLE or no progress is being made toward any sensible farm relief legislation at Washington. In fact, the more Congress works the harder the problem seems to become.

As our readers know, there are two general plans for relief proposed. One of them is to increase the tariff on farm products, and the other is to establish a Farm Board to assist farmers in marketing their products.

The best chance for any real help is from increased tariffs. The bill which a congressional committee has been working on for some time, and on which it has held many hearings, was introduced into the House of Representatives on May 7th. The increases on farm products proposed in this bill are shown on page six in this issue. Unfortunately, we cannot show the hundreds of raises also proposed on many other products not agricultural. Therefore, you may get too much encouragement in studying the proposals on farm products alone. As a matter of fact, the new bill is very unsatisfactory from a farmer's standpoint, and farm leaders at Washington are very much dissatisfied with it.

Tariff increases almost always come down to the problem of "robbing Peter to pay Paul." Consumers are objecting because they will raise the cost of living, and here is something for farmers

to think about too, for farmers are the greatest consumers of all. For example, one of the largest increases proposed is on sugar, and farm people use large quantities of sugar. Note the substantial raise for corn, and remember that corn prices are already high. What effect is that going to have on the dairy feeds which our eastern dairymen purchase in such large quantities?

President Hoover wanted only a few substantial increases on leading farm products, but everybody got busy, and great pressure was brought on the tariff committee, with the result that there are raises all along the line. So we fear what is gained in one place will be largely lost somewhere else, so far as farmers are concerned.

The second plan proposed by the government to aid agriculture would establish a Farm Board and grant the board \$500,000,000 in a revolving fund to loan to farm organizations in an effort to sell farm products to better advantage by preventing fluctuations in the market, particularly fluctuations downward.

In the Senate, an amendment has been added to this plan providing for export debentures. We have explained the debenture plan several times. It is an out-and-out subsidy, chiefly for grain growers, and of little or no benefit, even if it were practical, for eastern farmers. It will only increase production. It is wrong from an economic standpoint and will, if put into practice, do far more harm than good.

On the other hand, the Farm Board plan without the debenture feature as it is now proposed puts most of the responsibility for its success or failure on the cooperative organizations. It is well known that not all farmers belong to co-operatives, so a part of the farmers would be taking the responsibility for everybody, and if the plan failed, as it is very likely to, the farmers' organizations would be blamed and it would be a great blow to the whole cooperative movement. The Dairymen's League Cooperative Association is one of the organizations taking the lead in objecting to the bill in its present form, and the League is perfectly right in this stand. Let the government itself and not the cooperatives assume the responsibility for the success or failure of any of this unsafe and untried farm relief legislation.

The whole question comes down to what can the government do anyway to aid agriculture. We would far rather see them do nothing at all than to establish some great scheme that will take farmers a generation to recover from when it fails, which it is very likely to do.

If the government really wants to help, instead of fooling around with untried theories, let it relieve local taxes by assuming with the state the entire cost of building and maintaining all of the roads, including the federal and state highways, county highways and dirt roads. Think what that would mean in better marketing facilities and for better country life throughout the nation.

Let the federal government be more generous also in working with farmers to clean up tuberculosis in dairy cattle, and so arrange it that dairymen would lose nothing in getting started with a clean herd again.

Every farmer can think of other practical ways by which Congress could give real help to agriculture without costing the government a cent more than is proposed by some of the fool schemes now under consideration.

Beauty Spots of the East

ON our cover page this time is the picture of one of the beautiful falls in Enfield Glen State Park near Ithaca in the famous Finger Lake region of New York.

Some persons travel half way around the world to see some famous beauty or scenic spot when even prettier ones may be within a stone's throw of their own front door. No land in the

world is more blessed with the beauties of Nature than our own home country here in the Northeast, so from time to time we are going to bring some of the best of these scenic spots to your attention on our front covers.

Enfield Glen Park is under the direction of the Finger Lakes Park Commission, headed by Robert H. Treman of Ithaca. There are twelve waterfalls in this wonderful glen, the main one of which is known as Lucifer Falls, which is 115 feet high. The glen is three miles long, and at the upper entrance there is a mill over one hundred years old. The mill is being preserved with its old-time machinery and is to be used as a museum for old milling machinery.

Facilities to make visitors comfortable have been provided in this park. If you have not visited Enfield Glen Park, plan to do so this summer.

What Milk Price Cutting Means

THE Dairymen's League Cooperative Association, Inc., Sheffield Farms Company Producers, Borden's Farm Products Company, Sheffield Farms Company, and other reputable dealers are to be congratulated and commended for their efforts to maintain milk prices against price-cutting this spring. As a result of these united efforts of the cooperative organizations and the better dealers, dairymen of the New York milk shed have been saved at least a million dollars a month, and probably much more than this. Every day longer that the prices can be maintained means thousands of dollars to farmers.

We think that farmers should understand this situation and give thanks where thanks are due. As we have reported before, there has been considerable cutting of milk prices on the wholesale market for several weeks by irresponsible dealers and brokers. Such dealers have no way of taking care of their own surplus, and the increased supply of milk that comes along at this time of year gives them a good opportunity of disposing of their surplus and of stealing away the markets of reputable dealers.

The great sum saved to dairymen in this milk shed by holding the market firm in spite of price-cutting emphasizes the responsibility of those farmers who sell to milk dealers and to a few independent cooperatives who try to ruin the market for everybody by price-cutting methods.

To Mothers and Little Girls

ONE of the happiest jobs we have had in a long time is to read the hundreds of letters to "Betty" that come in from little girls and their mothers in the big A. A. family. We are trying to help little girls to learn to cook, and the fine letters we are receiving are our payment.

If you did not get started with this course at the beginning, you can start anytime, and we will furnish back numbers of the lessons to paste up in the scrapbook. These scrapbooks are sent for ten cents to cover postage and mailing.

We think it is one of the most helpful things that AMERICAN AGRICULTURIST has done in a long time, so we have no hesitation in urging mothers and their little girls to write for a scrapbook.

Eastman's Chestnut

THERE are a good many farmers in the position which Sambo was in the following story:

Sambo: "Yes, suh, business ben fine. Mah wife done gib me ten dollars an' Ah bought a pig. Ah kept tradin' for eberything under de sun, till finally Ah gets a bicycle, and Ah sold it fo' ten dollars."

Rastus: "But you' all doan' make any money."

Sambo: "Co'se not. But look at de business Ah's been doin'!"

Master Farmers Are All-Around Men

Their Achievements Prove That Farming Is a Life As Well As a Living

IN the April 13th issue of AMERICAN AGRICULTURIST, we gave some facts about the life and work of several New York Master Farmers and their families. On this page we are telling you about a few more. There are many Master Farmers. We have no idea of course of finding them all, nor do we wish to set one man above another. But we do want to prove to the world



Mr. D. V. Farley

that agriculture, as well as other professions, does and can have its master craftsmen, and that farming is truly what Washington said of it:

"Agriculture is the most healthful, most useful, and most noble employment of man."

* * *

DANIEL V. FARLEY,
Goshen, Orange County

OF all the cooperators of the New York State College of Agriculture the Farley farm showed the largest labor income for the year 1927. The writer found Mr. Farley busy hauling apples from his large orchard to the packing house. It is interesting to note that he has had confidence enough in



Mr. and Mrs. F. S. Wright and two of their children

the farm business to keep setting young apple orchards during recent years. He had a large crop of apples this last fall, and it was a pleasure to walk through the orchard and see the high quality fruit, and to note how well the trees and fruit had been cared for.

Mr. Farley is another farmer who does not believe in risking too much on one crop. His business is varied. For example, he has a dairy of 39 cows with an average production of 7,586 pounds. Two farms are operated in partnership by Mr. Farley and his son, and there are two dairies operated separately.

Here is an example of a man who never grows old in spirit, a man who is planning just as confidently for the future now as he did forty years ago, a man too who has acquired a first class education, almost entirely in the "school of hard knocks". His progressive spirit leads him to follow the very

latest and best scientific farm practices, and that is the chief reason why he makes money.

It is strange how such busy men find time to devote to public work. Mr. Farley has been a noted leader of Orange County for a generation. He is a trustee of his church, was president for several years of the local Farm Bureau, a regular Grange member, an assessor of his town, and almost from its start a member and loyal worker in the Dairymen's League.

Standing in the yard of his home, we looked off across the rolling hills and valleys of Orange County, to one of the most beautiful outlooks that is to be had anywhere in New York State. Here in these fine surroundings and with a father and mother hard to beat, the Farley children were raised. These children, three in number, were given an education, and one of the sons, E. Reynolds Farley, returned to the farm to carry on the business in partnership with his father.

* * *

FLOYD S. WRIGHT,
Worcester,
Otsego County

MR. WRIGHT has proven that dreams, at least sometimes, really do come true. Nearly a half century ago, he was a little farm boy in the community where he has lived all of his life. Upon a little rise in ground above his home, there was a fine farm, one of the best in the community, and this boy got it into his head that somehow, some day, he would own that farm. Today he does own it.

The writer will always have the memory of a pleasant autumn day walking over the fields and visiting in the home of this old Otsego County farm. Mr. Wright's farm is another demonstration of the fact that clover is the basis of good farming, particularly of good dairy farming, for clover grows on every field of his farm, including the pasture.

His life is another proof that it is possible by hard work and good management, and particularly with good team work from the wife, to start in farming with little or no capital and acquire a moderate competence. The Wrights now own a good, well equipped farm and are making it pay.

The oldest boy, just past twenty-one had two years in the State College of Agriculture and then came home to become a partner with his father on the home farm. This shows what

kind of a father Mr. Wright is. The oldest girl is married and is a farmer's wife on a nearby farm. The youngest girl is a senior in the local high school.

This Master Farmer has found time in a busy life to take part in all good local enterprises. He is a member of the Dairymen's League, a leader in one of the local associations, a member of the high school board, a good supporter of the Farm Bureau, and, in short, an all-around citizen, and one whom any man may be proud to call "friend."

* * *

JAMES ROE STEVENSON,
Cayuga, Cayuga County

WE found Mr. Stevenson picking apples in the orchard and all of the rest of the family very busy in the packing house. The life and work of



Mr. James R. Stevenson

both Mr. and Mrs. Stevenson impressed us with their faith in the business of farming. They were hit pretty hard by the slump that followed the World War and for several years everything was very discouraging. But it seemed to them that if the same hard work and ability needed for success in any business or profession were put into farming, in time they must win through. And now their faith is justified.

Their chief business on this 180-acre farm is fruit growing, but they do not carry all of their eggs in one basket, for they have a considerable income from several other sources, including alfalfa, poultry, milk and general crops.

We believe that one of the reasons for the success of the Stevensons' farm is that it is run on scientific and progressive principles. The advice of leading men at the College of Agriculture is secured regularly and closely followed. There are three children, all of whom are planning to go to college. The ideals which these children have been taught are illustrated by the fact that the oldest boy is an Eagle Scout, and has more than forty merit badges.

Mr. Stevenson, during the past winter, has been a member of Governor Roosevelt's Agricultural Advisory Commission, and his practical knowledge of farming, together with his common sense, made it possible for him to be of real help to his fellow farmers on this Commission in working for the farm relief laws which were finally passed.

* * *

EARL B. CLARK,
North Norwich, Chenango County

WE visited Mr. Clark at silo filling time and found him in the very peak of his silo, busy keeping from under the falling ensilage. He operates a 355-acre farm and his chief business is dairying. He has 40 cows, and a large number of young cattle, but also has a considerable sized poultry business



Mr. and Mrs. Earl Clark

and raises a large acreage of general farm crops. In fact, one notices that many of these Master Farmers have a many-sided business so that if any part of it fails in any particular year, not all of the income is shut off.

Mr. Clark is an example of a younger man who has succeeded in the business of farming, proving that it is not always necessary for a man even in farming to wait until he is old before he has at least some measure of success.

Another point that should be made in talking about these Master Farmers is that the reason for what success practically all of them have made has been at least partly due to their wives. Farming is certainly a partnership business, and this is proven again by Mrs. Clark.

There are four children. Their home has all modern conveniences, including especially the best books and magazines. Here again is another general qualification of a Master Farmer's home. In nearly every one of them you will find a good library of the best books and particularly of the high class magazines. Children raised in such an atmosphere are sure to have a love for good literature.

Have You Nominated a Master Farmer?

LAST fall, AMERICAN AGRICULTURIST, through a board of judges selected twenty farmers from New York and two from New Jersey to receive the degree of Master Farmer. Following our recent announcement asking for the names of men worthy to receive this honor in 1929, nominations are coming in daily.

We are anxious to get all nominations at once, but at the same time we are asking that you consider the qualifications of a Master Farmer carefully before you send in your nomination. We are doing this to make the work of the judges easier and also to lessen the possible disappointment for those who may be nominated but fail to gain the award.

A man to be a Master Farmer must be successful financially and at the same time he must be a good citizen, husband and father, and must have the good will and respect of his neighbors. Nominations close June 1. If you have a neighbor who, in your opinion, meets the qualifications, send us his name and address on the blank below.

I nominate the following New York State farmer to receive the honor of Master Farmer.

Name

Address

Name of person making nomination.....

Address

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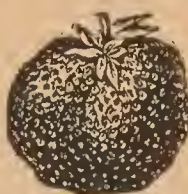
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Proposed Tariff Changes

Farm Products Scheduled for Increases

THE new revised tariff bill was introduced in the House of Representatives on May 7th. It immediately aroused a storm of protest and criticism both in Congress and in the newspapers throughout the country.

Tariff makers have a hard job, for it is always a problem of "robbing Peter to pay Paul". Many farm leaders are dissatisfied with the proposed tariff increases. If larger tariffs are put on farm products, then the consumers complain because of the increased price of living. Farmers also complain because they themselves are consumers.

For example, probably the most important single increase recommended is one of 64/100 cents per pound on raw sugar. This will increase the price of sugar, and of course farmers eat lots of this product.

In order that you may see just what is proposed, we are printing below a table showing the tariff on most farm products as it now is and what it would be should the present bill be passed. No doubt there will be many changes and amendments before the bill finally becomes a law.

Commodity	Proposed Rate	Present
Fresh beef and veal.....	6c lb.	5c
Sheep, lambs and goats.....	\$3 a head	\$2
Fresh mutton.....	5c lb.	2 1/2c
Fresh lamb.....	7c lb.	4c
Swine.....	2c lb.	1 1/2c
Fresh pork.....	2 1/2c lb.	3 1/2c
Bacon, hams and shoulders, prepared.....	3 1/4c lb.	2c
Lard.....	3c lb.	1c
Lard compounds and subs.....	5c lb.	4c
Fresh venison.....	6c lb.	4c
Milk, fresh or sour.....	5c gal.	2 1/2c
Cream, fresh or sour.....	48c gal.	30c
Skimmed, fresh or sour and buttermilk.....	1 3/4c gal.	1c
Condensed or evaporated, unsweetened.....	14-10c lb.	1c
Same, sweetened.....	2 1/4c lb.	1 1/2c
All other milk.....	2c lb.	1 3/4c
Dried milk.....	4 3/4c lb.	.....
Dried cream.....	10 1/2c lb.	.....
Dried skimmed milk.....	1 1/2c lb.	.....
Malted skimmed milk subs.....	30%	20%
Butter.....	12c lb.	8c
Oleomargarine and other substitutes.....	12c lb.	8c
Cheese and substitutes.....	7c lb.	5c
Poultry, live.....	6c lb.	3c
Same, undressed.....	8c lb.	6c
Turkeys.....	10c lb.	6c
Eggs, in shell.....	10c doz.	8c
Frozen eggs.....	8c lb.	6c
Fish, dried unsalted cod, haddock and hake.....	2 1/2c lb.	1c
Buckwheat.....	25c per 100 lbs.	10c
Corn.....	25c bush.	15c
Corn grits, meal and flour.....	50c per 100 lbs.	30c
Wheat.....	42c a bush.	30c
Wheat flour.....	\$1.04 per 100 lbs.	78c
Bran.....	10%	15%
Apples, dried or evaporated.....	2c lb.	1 1/2c
Cherries, in brine.....	5 1/2c lb.	2c
Same, stems removed.....	9 1/2c lb.	40%
Orange, grapefruit and lemon peel, candied.....	8c lb.	5c
Grapefruit.....	1 1/2c lb.	1c
Pineapples, in bulk.....	16-10c each.	3 1/2c
Almonds, unshelled.....	5 1/2c lb.	4 3/4c
Same, shelled.....	16 1/2c lb.	14c
Brazil nuts, unshelled.....	2c lb.	1c
Filberts, unshelled.....	5c lb.	2 1/2c
Peanuts, unshelled.....	4 1/4c lb.	3c
Same, shelled.....	6c lb.	4c
Same, salted or other prepared, and peanut butter.....	7c lb.	.....
Walnuts, unshelled.....	5c lb.	4c
Same, shelled.....	15c lb.	12c
Alfalfa Seed.....	5c lb.	4c
Alsike clover.....	5c lb.	4c
Crimson clover.....	2c lb.	1c
Red clover.....	6c lb.	4c
White clover.....	5c lb.	3c
Sweet clover.....	3c lb.	2c
All other clover.....	3c lb.	2c
Cabbage.....	12c lb.	10c
Radish.....	6c lb.	4c
Turnip.....	5c lb.	4c
Rutabaga.....	5c lb.	4c
Green beans and cow peas.....	3 1/4c lb.	1 1/2c
Dried beans.....	2 1/2c lb.	1 3/4c
Mushrooms, fresh or dried.....	60%	45%
Onions.....	1 3/4c lb.	1c
Tomatoes.....	3c lb.	1 1/2c
Same, prepared or preserved.....	25%	15%
Turnips and rutabagas.....	25c per 100 lbs.	12c
Peppers.....	3c lb.	25%
Egg plant and cucumbers.....	3c lb.	25%
Squash.....	2c lb.	25%
All other vegetables, including crude horseradish.....	50%	25%

on gasoline so used. Very few persons know how to obtain the refunds or rebates from the State for money spent for the tax on gasoline not used for road purposes.

In order to tell you how to do this, we wrote to the State Department of Taxation and Finance and they kindly furnished the following information. We want to emphasize the necessity of keeping careful records on all gasoline that you purchase for use on the farm.

"Persons claiming refunds should include in one refund claim all gasoline purchased during a single month, or during two months, or at most, during a three months period. Claims will not be entertained by the department for a single purchase of gasoline unless that be the only purchase in respect of which a refund is claimed for that particular month. This rule is necessary in order to avoid an unnecessary expenditure by the State in the administration of the law.

"Refund claim blanks will be available for distribution within the next two weeks and will be mailed on request. It is altogether likely that each licensed distributor will have a quantity of blanks for distribution to those who purchase gasoline for non-highway purposes. It is unlikely that the department will be in position to make any refunds before July fifteenth. This is so because distributors are given the full month of June during which to pay their May taxes, and no refunds can be made by the State until it has collected the taxes in respect of the gasoline for which refunds are claimed. The department, therefore, suggests that each farmer keep an accurate account and the sales slips for all gasoline purchased during the months of May and June for use in his farm machinery and, in fact, for all use rather than in motor vehicles on the public highways, and that at the end of June he present a refund claim covering that two months period."

What Does It Cost to Haul Milk?

THE table on this page taken from Farm Economics, published by the New York State College of Agriculture gives a very interesting comparison between the cost of hauling milk by the dairymen themselves or by commercial haulers. The average costs apply to hauling both with horses or autos and trucks. The average number of trips per dairyman per year were 327 of which 112 were trips with autos or trucks. Some dairymen exchanged hauling with neighbors. This reduces the number of trips and the cost.

It will be noticed that for distances of one mile or less, the average cost of individual dairymen was about the same as the average of rates charged by commercial haulers. But when longer than one mile, the cost of individual hauling was more than commercial rates. The average cost of individual haulers who were located more than four miles from point of delivery was more than twice as much as the average rate charged by commercial haulers.

It would seem therefore, that commercial hauling is cheaper than individual hauling. On the other hand, this may not be true if a horse and driver is available to haul the milk at times when they would not be busy otherwise.

COSTS OF INDIVIDUAL HAULING AND RATES CHARGED BY COMMERCIAL HAULERS

Length of haul	'204 dairymen cost of hauling milk per 100 lbs.	69 commercial haulers cents
1 mile or less.....	12.6	12.3
1.1 to 2 miles.....	20.0	12.5
2.1 to 3 miles.....	23.8	13.2
3.1 to 4 miles.....	27.1	14.5
Over 4 miles.....	47.1	20.0

How New York Farmers Can Get Refunds for Gasoline Tax

IT will be remembered that when the gasoline tax law was passed this last winter in New York State it contained a provision exempting gasoline not used for road purposes from the tax; that is, a farmer using gasoline for any kind of stationary engine or tractor or for any other purpose not on the highway may obtain a rebate for the tax

In computing the costs of hauling by individual dairymen, the following standard rates were used: human labor, 31 cents per hour; horse labor, 17 cents per hour; use of wagon and harness, 5 cents per hour of horse labor; use of truck or auto, 10 cents per mile. No charge was made for the second horse when two horses were used except in a few cases where the loads were apparently too large for one horse.

When writing advertisers be sure to say that you saw it in
AMERICAN AGRICULTURIST

Little Recipes for Little Cooks

by

Betty

Lesson Number Three

This is the third of the series of lessons on cooking for little girls written by Mrs. R. C. Dahlberg, mother of Betty. Betty is a real girl and it is her picture that is being shown on these pages. She has learned to cook many, many things in just the same way as she tells you in these Little Recipes for Little Cooks and she wants every little girl to be able to do it too. It is lots of fun and with the little recipes there is so little wasted if a mistake is made that mother won't mind it at all. Try all of the things on this page, for in just four weeks more there will be another one with other recipes for you to work with.



This picture shows Betty breaking an egg. Get mother to show you how she breaks them and ask her to let you practice breaking eggs for her baking when she can

Dear Little Cooks:

This week I want to tell you how I scramble eggs. Breaking eggs was quite hard for me at first and mother let me practice while making scrambled eggs. If a bit of shell gets in, it can be taken out with a fork or spoon and if the white and yolk all go together, why it doesn't matter at all for eggs that are to be scrambled.

After you have learned to break eggs a number of times for scrambling you will be ready to make a lot of other things, for it won't be long before these lessons will tell you how to make muffins and bake other goodies that all of the family will like.

I have another recipe that I am sure you will like. I have tried it and know that it is good and is real easy to make. It is a caramel custard, for that is one of my favorite desserts.

There's another recipe I made and had a lot of fun with so maybe you can. It's popovers. You may have them real often at your house but just heaps of people never do and don't know the surprise. You see popovers look like muffins but they are all empty inside and all crisp and crusty outside so even if they are hollow they are awfully good eaten hot with butter, honey or jam.

I hope these things will turn out fine.

BETTY.

How to Scramble Eggs

Break the number of eggs you think you will need into a bowl and add one tablespoon of milk for each egg, that is, for four eggs you would add four tablespoons of milk. Stir these together well. Put a tablespoon or two of butter or bacon grease into a frying pan and heat the pan until the fat or butter is melted. Tip and turn the pan a little so that all the bottom and sides will be well greased. Let the pan become a little hotter and then add the mixture from the bowl.

Stir all the time while it is cooking to keep the egg from sticking to the pan and scorching.

Do not let this get too hot. Eggs taste better and are better for us if cooked slowly over a slow fire.

When the mixture has thickened and looks done, add salt and pepper. Just a tiny pinch of salt is enough for one egg. One-half teaspoon of salt would be enough for six eggs.



You Will Like This Caramel Custard

Mother let me make plain custard and that was good, but I wasn't satisfied. I kept teasing to make the caramel kind, like she makes. It has a big spoonful of hot, melted sugar put in the bottom of the custard cup before the custard is poured in. But Mother said "Melted sugar is about the hottest stuff ever and it makes terrible burns; some little cook might get a bad burn making that part." So we just put on our thinking caps and found a good safe way for me (and you) to make caramel custard. Read the recipe and see how. Here are the things you will need.

Little Recipe

1 egg,
1½ tablespoons sugar,
1 cup milk,
Few drops vanilla,
A pinch of salt,

Have hot water ready in the teakettle.

Put the milk on in a sauce pan to heat. Break the egg into a small bowl and beat it a little with the eggbeater. Add sugar, salt and vanilla to the beaten egg. Pour in the hot milk and stir well. Take two old cups or pudding moulds and butter them. Pour in the custard and set the cups in a pan of hot water. Bake in a slow oven until firm. Test by putting a silver knife into the custard and if the knife comes out clean the custard is done. Take from the oven and take the cups from the pan and cool before serving.

For the large recipe you could use one larger dish to bake it in and then it would be a little better to use five or six eggs to make it firm enough to hold its shape well.

This plain custard may be eaten with a little cream or with fresh berries or other fruit over it.

For the caramel custard we found that we got the nice caramel taste by putting a candy caramel in each cup before pouring in the custard.

Serve on a sauce dish. Turn the cup upside down over the saucer to get it out nicely.

Here is a regular large recipe that makes enough for six people.

Large Recipe

4 eggs,
1/3 cup sugar,
4 cups milk,
1 teaspoon vanilla,
¼ teaspoon salt.

Try These Popovers

First have the oven very hot. Grease iron gem pans and put on stove to heat. Then get the following all on the table to put together:

½ cup flour
¾ teaspoon salt
7 tablespoons milk
1 egg
¼ teaspoon melted butter

Mix flour and salt; add the milk slowly and stir well to make the mixture smooth. Add egg, beaten very light, and then the melted butter. Beat four minutes with an egg beater. Pour at once into the hissing hot gem pans. Put into the oven at once and bake about thirty minutes.

Mother may like these so well that she will want to make a lot of them; tell her that she can make fourteen of them by using 1 cup flour, ¼ teaspoon salt, ¾ cup milk, 2 eggs and ½ teaspoon melted butter.

Why We Use Eggs

Because they are one of our best foods, especially for growing boys and girls.

Because they add flavor to cakes, puddings, salad dressing, custards, etc.

Because they give lightness to cakes, doughnuts, muffins, etc.

Because we like to use the good, clean, fresh foods which we have right at home.

Nine average eggs weigh a pound. Large eggs are worth more per dozen. Large, clean, graded eggs bring a better price, which makes it worth the trouble to sort and clean them. Small girls and boys can make this their task and help in this way. Real fresh eggs are never shiny, but have a soft, satin-like appearance.

Did You Get One of My Nice Scrapbooks?

If you have not yet gotten one of my scrapbooks to paste these pages in, send 10c and I will send one to you right away. They are dandies and the first two of these lessons are already in it so don't worry about not having saved them. Address your letter to

BETTY,

AMERICAN AGRICULTURIST,
461 Fourth Avenue,
New York City

EFFICIENCY

means

EFFICIENCY multiplies one dollar into many. It doesn't matter what the business happens to be—apply the principle of efficiency and the ratio of profit increase will be the same.

Tractors . . . alarm clocks . . . eggs . . . milk . . . producers of these and other things are getting rich by appreciating EFFICIENCY.

Efficiency has no use for "guess-so." "Know-so" is the order of the day for those who wish to make profits.

To be efficient, to actually "know", the feed manufacturer must institute considerable research in his laboratories and on his experimental farms. Different combinations must be tested to see which is the best in actual practice. New discoveries are constantly being made, and they also must be tested. There can be no standing still, for the running mate of efficiency is progress.

But organization in manufacturing and distributing the feed is equally important. It must reach the feeder at a price low enough for him to realize a handsome profit on its results. Large buying power, labor-saving machinery and efficient distribution are essential for an economical selling price. But nothing must be sacrificed for the sake of lowering the price. Low price is meaningless if the feed will not yield a profit to the consumer.

These are the considerations that have influenced Park and Pollard in the manufacture of their feeds. Their object is to supply an efficient feed that will aid the farmer to achieve efficiency in his own business. This makes profits for their customers and thereby makes profits for themselves.

To be sure of profit-making feeds—
look for a Park & Pollard dealer

The Park & Pollard Co
Boston, Mass.—Buffalo, N. Y.

Poultry Feeds: Lay or Bust Dry Mash / Red Ribbon Scratch / Growing Feed / Intermediate Chick Feed / P & P Chick Scratch / P & P Chick Starter—Dairy Rations: Overall 24% / Milk-Maid, 24% / Bet-R-Milk 20% / Herd-Health 16% / Milkade Calf Meal—Other Feeds: P & P Stock Feed / Bison Stock Feed / Go-Tu-It Pig and Hog Ration / Pigeon Feed / P & P Horse Feed / Pocahontas Table Corn Meal.



With the A. A.
Dairyman



Why Does the Color of Milk Vary ?

Why does the color of milk and butter differ at different times of the year, and why are the milk and butter of some breeds yellower than others?—R.E.E., New York.

THIS very interesting question is well answered by Henry and Morrison in their "Feeds and Feeding." They write as follows:

"It is common knowledge that cows produce cream and butter which is more deeply colored in summer when eating green feeds than in winter, and that Jerseys and Guernseys usually produce a yellower product than the other breeds. Extensive investigations by Palmer and Eckles at the Missouri Station have at length shown the cause of yellow color in butterfat. They find that the color is due to a substance called carotin, so named because it is the coloring matter of the carrot. This compound is commonly found in green plants along with the green chlorophyll, which masks its color. It was found that animals given feeds poor in carotin for long periods invariably produced white cream and butterfat, regardless of the breed. This shows that the yellow color of Jersey and Guernsey butter is not due to any ability of these breeds to manufacture carotin. However, when cows of these breeds are given feeds rich in carotin they transfer to their milk a larger part of the yellow coloring matter of the feed than do cows of the other breeds, and hence produce yellower butterfat. Green feeds in general were found to be rich in carotin, as well as hay of a bright green color and new corn silage. Carrots and other yellow roots also contain much of this coloring matter. On the other hand, bleached hay, dry corn fodder or stover, straw, old corn silage in which the carotin had been destroyed by fermentation, corn, both yellow and white, and all the common concentrated by-products, such as wheat bran, linseed meal, brewers' grains, etc., were found to be poor in carotin. This explains why cows usually produce light-colored butter in winter. The color of yellow corn is due to a colored substance other than carotin, which does not pass into the milk.

"The yellow color of the body fat and skin of Jerseys and Guernseys was found to be due to carotin. This shows why cows of these breeds yield a highly colored product for a long time after going on winter feed. During such periods the yellow coloring matter in their body fat is transferred to the milk. Purchasers often discriminate against beef having deeply colored fat, yet this tallow is col-

ored by the same substance that gives butter the highly desired yellow color."

Manufactured Milk in the New York Milk Shed

THOSE who are interested in continuing to supply the milk for New York City from our own territory will surely want to study the table given on this page showing the large number of dairies whose milk is still manufactured instead of being sold in fluid form. The table is reprinted by courtesy of "Farm Economics".

The table gives figures for 1927 and of course, conditions have changed somewhat since. Still there is plenty of milk right in our own territory which, if approved, would more than take care of all the shortage that is ever likely to occur. About half of this milk is delivered to plants on railroads so that it could be easily shipped. Over ten thousand cans of milk per day were made into manufactured products in November.

Why is this not one solution to the milk shortage problem?

AVERAGE DAILY RECEIPTS OF MILK FOR MANUFACTURE AT NEW YORK STATE PLANTS DURING NOVEMBER, 1927*

County	Plants	Dairies	40-qt. cans of milk
St. Lawrence.....	53	2,042	2,051
Jefferson.....	27	1,058	1,503
Cattaraugus.....	21	949	1,257
Oneida.....	25	565	835
Oswego.....	10	711	750
Allegany.....	22	690	576
Chenango.....	4	243	575
Clinton.....	4	444	568
Chautauqua.....	6	476	566
Lewis.....	20	407	494
Madison.....	6	234	471
Greene.....	4	361	463
All others.....	72	3,878	3,801
Total.....	274	12,058	13,910

*Data obtained through the courtesy of milk manufacturing companies and the Department of Agriculture and Markets of the State of New York.

Chautauqua Dairies Make Good Record

THREE members of the West Chautauqua Dairy Improvement Association have just finished their year and have made a very good showing in the county and also in the state; A. J. Harper of Mayville Community, being the highest in the Association, with 12,044 average milk for the year and 427.7 butterfat average. This was made with a herd of young cows, none of them fully mature.

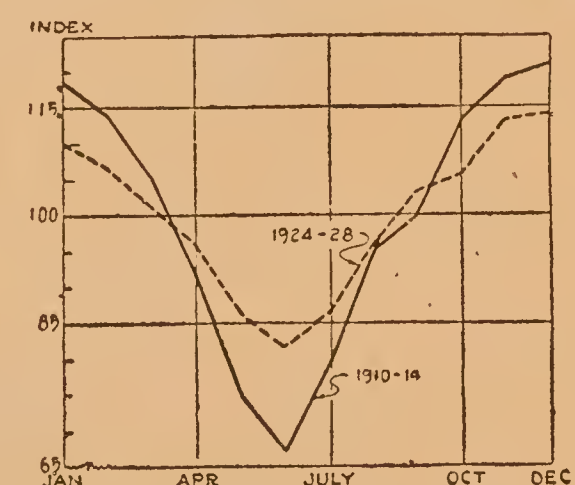
George Cowles and Son of Ashville
(Continued On Opposite Page)

No. 2—Relative Changes in Milk Prices

By V. B. HART
New York State College of Agriculture

THE relative seasonal variation in milk prices that existed in 1910-14 and the relative variations that we have had during 1924-28 are shown in the figure below taken from Farm Economics No. 57.

During the five year period, 1924-28, the price of 3.7 milk at Utica during November, December and January was 46 per cent above pre-war. However, during the same period prices of May, June, and July milk averaged 76 per cent above pre-war. The all important and immediate problem facing dairymen in the New York milk



Relative monthly prices received for milk by New York Dairymen.

shed is that of producing enough milk for next November. However, we must face the fact that the tendency for leveling out of the seasonal variation in the price of milk that we have had in the last five years has been a decided encouragement towards shifting from winter to summer milk production. The short time problem of our dairymen is that of getting more milk in November, 1929, but the long time problem is one of getting a method of paying for milk that will encourage fall and winter production.

(Continued from Opposite Page)

Community, came next, with an average of 11,555 pounds of milk for the year, and 401.9 pounds of butterfat. Mr. Cowles has a very good average considering the number of cows he had on record, which was eighteen for the year, and four which were in for at least nine months. This is also a young herd, with only a few mature cows.

Benjamin Pringle of Stedman Community, also finished this year with an average of 9,934 pounds of milk and 314.2 pounds of butterfat, with a herd of sixteen cows and only four of those were mature cows. This year was not so good as some previous years, because of so many milking for the first time.

The highest record for butterfat for a single cow was made by the cow named "Aggie", owned by A. J. Harper, Sherman, N. Y. She made 514.9 pounds of butterfat and 14,411 pounds of milk. The highest cow for milk for the year is owned by George Cowles and Son of Ashville, N. Y. She was "Dutchas", with a record of 15,296 pounds of milk and 495.9 pounds of butterfat. A. E. Meyerink, (Tester).

What Can We Do If Dairying Fails?

WE are hearing so much about the November and December shortage of milk in New York City, also the danger of western milk being brought in to make up this shortage, and thus ruining the market for the dairymen in the New York milk shed. If the danger is as serious as some advocate, it is serious enough so that every dairy farmer who depends on the New York market should awaken before it is too late. Many pooh at the idea that milk can be shipped from Ohio to New York City and compete with the milk from the New York milk shed. There are thousands of both hill and valley farmers in this section who depend upon the income from their dairy for a livelihood. If their market is ruined by western milk, what can they do?

The poultry industry cannot stand expansion, and the sheep industry has reached the peak. The hay market is gone, never to return, and the potato market is sadly demoralized. Not all live where they can cater to the tourist's trade, and it seems even this is in danger of being overdone. What honest-to-goodness farmer wants to pull up and move to the city perhaps to join the great army of the unemployed?

It has been suggested that if New York City will pay a higher price for milk during the shortage season the milk will be forthcoming. But will they do it to get it, or will they prefer to go into Ohio where they can buy it cheaper because the farmers there can produce it cheaper?—A NEW YORK DAIRYMAN.

Retailing Dogs

MILLIONS of dollars, according to the United States Department of Agriculture, have been mulcted from farmers by vendors of nostrums and fake cures for abortion in cattle, which has no cure except the immunity that nature often develops in the body of the cow as a result of the disease itself. Analysis of one "cure" showed that it consists of 85 per cent brown sugar and 15 per cent wheat bran. Neither do stock tonics and mineral mixtures cure the disease.

Years ago a Medicine Show came to town which offered for sale various kinds of soaps, syrups, tonics, and cures for almost everything. But most potent of all was Wilson's Magic Ointment which had such great healing power that, when the chief showman's dog got his tail cut off on the railroad track, the Magic Ointment grew a tail on him in five minutes. The showman said he got arrested for "retailing dogs without a license." It sometimes seems as though retailers of patent stock medicines and stock tonics ought to have licenses passed upon by the best authorities. As for medicine to cure abortion, there just "ain't no such animal."—Charles A. Taylor.

Invest Now in August Milk



WHEN you look at May pasture, and May milk production, it's easy to forget all about cow feed.

But nature moves right on. Almost before we know it the hot days of July and August have burned the pasture, flies are worrying the cows, and milk production is down.

But milk and cream checks will be bigger than ever for the thousands of Cow Chow feeders. They'll feed Orange Checker (16%) Cow Chow while grass is fresh and green.

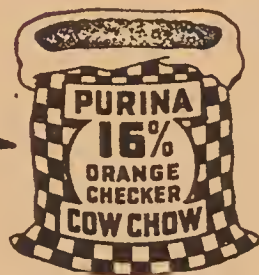
When grass turns yellow and gets

low in protein, they'll change to Green Checker (24%) Cow Chow. Then when flies get bad and pastures parched, they'll add Bulky-Las. It's sweet and clean, and supplies just what dry grass lacks. Summer . . . fly time . . . *all* times . . . there's a Purina ration to fit your needs. Join the ever increasing army of Checkerboard users, who deposit the most cash in the bank per cow, each twelve months.

Give your checkerboard feed dealer an idea of your requirements, so that he'll be ready to supply you as conditions change.

PURINA MILLS

898 Gratiot Street
St. Louis, Mo.



Sold at the stores with the checkerboard sign in the United States and Canada

Buy the Advertised Article!

You want to get full value for every dollar spent. That is natural—all of us do.

You will find it pays to buy standard, trademarked goods. Let The AMERICAN AGRICULTURIST advertising columns serve as your shopping guide. They contain the latest information regarding farm machinery, household helps, work, clothing and other merchandise of interest to farmers.

The American Agriculturist Advertisers Are Reliable

Have a Debate in Your Grange

Send 2 cents to cover postage for an outline on the subject:

What should congress do about farm relief?

American Agriculturist
461, 4th Ave. New York City



CATTLE

CATTLE

SALE

Dual Purpose Shorthorns

BERGEN, New York

June 11th

At this sale you will have an excellent opportunity to purchase stock to breed up your present herd or to start a herd of Dual Purpose Shorthorns.

All have pedigrees. Herd of twenty-seven will be sold. Catalogue now ready for mailing, contains ten bulls age seven to fifteen months. Sixteen cows and heifers. Write now for your copy.

WILLIAM J. BREW

Black Creek Farm

Bergen, N. Y.

HOLSTEINS FOR PROFIT!
More Dollars per Cow per Year
Everywhere There is always a ready market for Holsteins. They predominate in 30 states and comprise nearly 60% of all pure-bred dairy cattle in the United States. Wide distribution makes selection easy.
The HOLSTEIN-FRIESIAN ASSOCIATION OF AMERICA
 230 East Ohio Street, Chicago, Illinois

CATTLE

SWINE

For Sale Two carloads, fresh and close-up springers, 3 to 6 years old, all Federal tested.
 Prices from \$135 to \$165. Delivered by truck.
 E. CLAUDE JONES, Phone 6F5, Craryville, N. Y.

Hereford Cattle For Sale

Steers, calves, yearlings and two-year-olds. Uniform in size. Choice quality. Tested cows and heifers. Many cars.
 JOHN CARROW, Box 193, OTTUMWA, IOWA

Pure Bred and High grade T. B. tested Canadian Holstein cows and heifers, fresh and near fresh. Car lots or less.
 HUTCHINS & LEGGETT, MALONE, N. Y.

FOR SALE Registered purebred Jersey bull, 18 months old. Price, \$80.00.
 DONALD KINYON, Route 2, Marietta, N. Y.

TWO REGISTERED HOLSTEIN BULL CALVES
 Seven months old. Sire exceptionally well bred. Dams uow ou test. Two real bargains for someone.
 R. A. DAVIS, R. No. 2, Ballston Spa, N. Y.

100 DAIRY COWS

for sale at all times. Tuberculin tested. Holsteins and Guernseys, real milk producers. Carload lots or less. Priced to sell. Jacob Zlotkin, Phone 330, Freehold, N. J.

HEREFORDS For Sale

4 loads weaned calves; 3 loads short yearlings; 2 loads long yearlings; 4 loads heifer calves; 3 loads springers. Well bred, the good kind. Can sort, other cattle, pasture flesh. Write or wire.
 FLOYD JOHNSON STOCKPORT, IOWA

FARMERS BUY FROM FARMERS

Let us suggest to you as breeders the best kind of a pig to start to raise is a good one. You save time and money. We sell all pigs with a trial of two weeks, and then if dissatisfied, return pigs and we will return your money.

6-8 wks. old, \$5.25 ea.; 8-9 wks. old, \$5.50 ea.
 Breeds—Chester and Yorkshire cross, and Berkshire and Chester cross. Crating free. These prices F.O.B. our depot. Will ship any number C.O.D. or send check or money order.

MISHAWUN STOCK FARM,
 MISHAWUN ROAD, WOBURN, MASS.
 P. S. No pigs sold at the farm; only by appointment.

SPRING PIGS FOR SALE

Buy where quality is never sacrificed for quantity. We sell only high grade stock from large type Boars and Sows, thrifty and rugged, having size and breeding. Will ship any amount C.O.D.

Chester & Yorkshire — Berkshire & Chester
 7 TO 8 WEEKS OLD \$5.00
 8 TO 10 WEEKS OLD \$5.50

Also a few Chester barrows 8 wks. old, \$6.50 each
 Satisfaction guaranteed or money refunded. 10 days trial allowed. Crates supplied free. A. M. LUX, 206 Washington St., Woburn, Mass. Tel. Wob. 1415.

PIGS FOR SALE

OLD RELIABLE STOCK

Heavy-legged, square-backed Berkshire and Chester crossed, and Yorkshire and Poland China crossed, Barrows, boars and sows—8-10 weeks old, \$5.50 each. Also, Chester Whites and Poland China and Durocs from registered Boars—7-8 weeks old, \$7.00 each. We ship sows and unrelated boars for breeding. They are the kind that make large hogs. Shipped C.O.D. No charge for crates. If dissatisfied, return pigs and I will return your money. Yours for quality hogs.

ED. COLLINS, 35 Waltham Street,
 Tel. 0839-R LEXINGTON, MASS.

REGISTERED OHIO IMPROVED CHESTER PIGS, BROOD SOWS. When buying, why not buy the Best? 17 years careful breeding.
 GEORGE N. RUPRACHT, MALLORY, N. Y.

Slogan Contest Interests Hundreds

(Continued from Page 3)

vertisements". I am a rural school teacher. It is a fertile source of nature study material. We use them also for English work. The children write letters sending for things in which their parents are most interested. At the present, the chick business holds the first place. We use the advertisements for geography lessons, too. We locate the place of business on the school maps. The children are going to study crops and fertilizers next week and I feel sure they will learn many valuable reliable lessons that will be of use to them as they grow older for they all live on farms. I know you guarantee your advertisers so I read them so I may use them to good advantage in my classes. I use them for English, Spelling, Geography and Nature Study.—VESTA TOMPKINS.

* * *

Why I Read American Agriculturist

1. Because they are guaranteed by the publisher, all of them from the smallest classified ad to the large double page ad.
2. Because no gyp business, nostrums, puzzle fakes, work at home, fee in advance, free lot, or other bunk schemes are exploited in your magazine.
3. Because the advertisements reflect the last word in new farm equipment and other standard products used on the farm.
4. Because the advertisements cover a big assortment of representative advertisers of the many commodities used in and about farm livelihood, so that from the texts the reader acquires advanced agricultural information not found elsewhere in your columns.
5. Because the buyer of merchandise can remit with order in confidence of getting a square deal, and in like manner a subscriber may ship farm products to any buyer of such whose ad is displayed in the A. A. columns.—JOSEPH WICKHAM.

* * *

Brief But to the Point

I ALWAYS read the AMERICAN AGRICULTURIST advertisements, first, because they are interesting; second, because we know from experience that they are trustworthy and we know that if we should lose money through a company which had slipped in under false colors, AMERICAN AGRICULTURIST would make it right, and that advertiser could never "show his face" on the A. A. pages again.

Third, the advertisements are the kind that farm folks need, want and are interested in. Fourth, we like to know what is newest and best for the farm, the home and the farm home folks. Last but best of all, the AMERICAN AGRICULTURIST seems like a big, friendly community and its advertisements are those of the community dealers, where we naturally like best to trade.—LULA A. CAMP.

* * *

The A. A. Has Fought For Us

WE read AMERICAN AGRICULTURIST advertising because we believe in the AMERICAN AGRICULTURIST. For years it has been fighting the battles of the American Farmer. Its attitude on the milk question has been fair. It has fought and will continue to fight for better schools for the country boy and girl. It has been successful in its fight to get tax reduction. Better roads have also had a friend in your splendid journal. Because of these things, we are sure we will not be deceived by reading the advertisements in the AGRICULTURIST. We are sure that you will not take any advertising that is not honest. We read the ads because in this way we are able to know of the new developments that are beneficial to our business.

A well advertised product is a safe buy. It does not pay for a firm to advertise.
 (Continued on Opposite Page)

NEW 2 Unit Power Milker
Lowest Price 2 Cow Milker EVER OFFERED
Fully Portable
FREE TRIAL—EASY TERMS
Extra Unit for 3 Cows At Slight Extra Cost
10 Year Guarantee
\$5 Down AFTER FREE TRIAL
 The last word in Milkers and the biggest value ever offered. PAGE Milkers are fully PORTABLE. No pipe lines. No pulsators. Nothing to install. Just wheel it in and start milking. Milks 2 cows at once. Extra unit for 3 cows can be attached for small extra cost. Also can be equipped with our High Speed Milking Device. Simplest and best electric milker on market. Easy terms—pay for it out of your milk checks. We also sell complete line of 2, 3 and 4-cow PORTABLE Milkers with Hand, Gasoline or Electric power for \$129 and up. Free Trial and Easy Terms where we have no agent or salesman. Write for FREE catalog and rock bottom prices.
User Agents Wanted No canvassing—just demonstrate our Milkers on your farm. Write for full details.
BURTON - PAGE CO., Dept. 221
 537 So. Dearborn Street CHICAGO, ILLINOIS

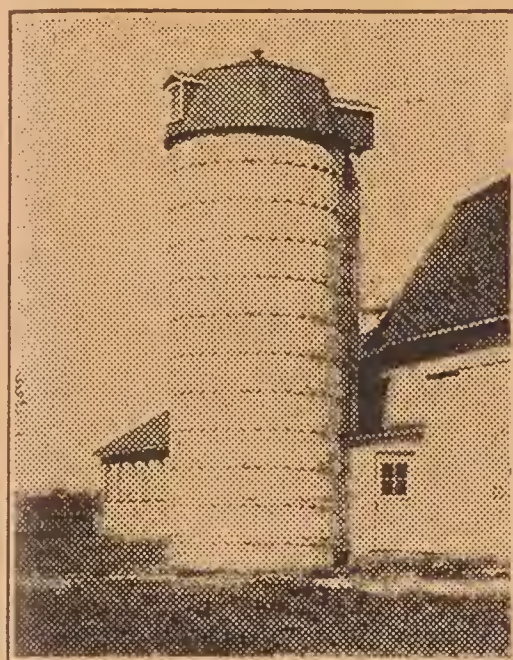
BURRELL
 MILKING MACHINES AND CREAM SEPARATORS
 A Single Tube System—now 1/2 METAL
I am using a BURRELL that has been milking cows for 20 YEARS
 This machine has cost me very little for repairs, and all around has given wonderful service.
 —George A. Burney, Richmond, Vt.
 "IT MILKS THE COWS CLEAN"
 Cherry-Burrell Corporation
 27 Albany St., Little Falls, N. Y.

WICO
 Magneto Equipped
300,000 In Use All Over the World
 A wonderful engine for the home, farm, shop or mill. The cheapest reliable power for pumping, feed grinding, shelling, sawing, cream separating, churning and similar work. Put one to work for you and watch it pay for itself.
Send for Big Free Catalog
WITTE ENGINE WORKS
 1805 Oakland Avenue, KANSAS CITY, MO.
ENGINE BUILDERS SINCE 1870

WANTED
 Your old and new address if you are moving this Spring.
AMERICAN AGRICULTURIST
 461 Fourth Ave. New York

HART SILOS

RE-INFORCED CONCRETE STAVE
COMPLETE—ERECTED.
GUARANTEED.
LOWEST PRICES IN OUR HISTORY



Will Not Burn or Blow Down. Write
FORREST S. HART & SON, INC.
667 WYOMING AVE., BUFFALO, N. Y.

THE UNADILLA SILO

lightens work
saves time
is safer

Makes Perfect Ensilage
Endures for a Lifetime

Write for free catalog. Dis-
count for cash and early
orders. Terms if wanted.

UNADILLA SILO COMPANY
Box B, Unadilla, N. Y.

A New Blizzard Ensilage Cutter and Hammer-Mill in One



Cuts ensilage and fills silos with Blizzard economy and thoroughness. Changed in less than 1/2 hour into wonderful hammer-mill. As mill it requires less power and speed than others; it cuts roughage into 3-16-in. lengths before grinding. Grinds and mixes roughage and grain (see picture). Write for circular describing this marvelous machine which has much greater capacity than other hammer-mills, due to larger screen area.

We continue to make the standard Blizzard Ensilage Cutter. Light tractor gives ample power. Gears run in oil. Self-feeding saves one man. Feeds as fast as 2 can unload. No choking or clogging. Unlimited elevating capacity. Outlet adjustable.

Write for Catalog.

THE JOS. DICK MFG. CO., Dept. 85 Canton, O.

BARN EQUIPMENT that Saves Money!

Get our prices on your Barn Equipment first! You'll save money—now and later—by investing in Rochester-made Quality. Cow Stanchions, Steel Stalls, Hay Carriers, Litter Carriers, Water Basins, Tracking, Slings, Pulleys, Repairing, etc. Write for Catalog and prices on your needs.

ROCHESTER BARN EQUIPMENT CO.,
185 NORTH WATER ST., ROCHESTER, N. Y.

(Continued from Opposite Page)

vertise any product these days unless it is as advertised. We have never been disappointed in the purchases we have made of goods advertised by you. Our business, 317 acres general farm, fruit, dairy, calls for an expenditure of considerable cash every year in the line of feeds, equipment and supplies. We consider it good business to check carefully everything advertised before making our final purchase. We are thankful for the service you are rendering farmers by advertising only good brands.—MRS. WILLIAM D. AKER.

* * *

Told in Slogans

I READ the AMERICAN AGRICULTURIST advertisements because we like to "turn idle acres into profit" and to "be sure of profit making feed" and "more dollars per cow per year". If we use "pedigreed seeds", "just dip and plant", we can "double the dollars at harvest".

The AMERICAN AGRICULTURIST tells the best method in an interesting and instructive way and is always reliable.—MRS. H. O. THURSTON.

* * *

For New Ideas

ONE of the reasons why I read these advertisements is because I am an instructor in Agriculture. In this position, I must keep myself informed on all the newest practices in agriculture. I believe that there is no better way to do that than by reading the different agricultural advertisements. It is here that all the latest practices, inventions and improvements are put before the people, for this is the purpose of advertising.

Second, I must be able to advise my pupils and the farmers of the community as to the best line of equipment, stock, fertilizers, seed, etc., to buy when they are planning on improvement, replacements or expansion. I know that if I recommend any advertiser of the AMERICAN AGRICULTURIST that I need not be afraid of recommending any unreliable dealers.

Therefore, I read these advertisements in order to obtain the new ideas in agriculture that cannot be found any other place, and also because I know that these dealers must be reliable.—J. A. WHITNEY.

* * *

We Get Fair and Honest Treatment

WE think the AMERICAN AGRICULTURIST is truly the farmer's best friend among all the farm periodicals, therefore when in need of any article for the farm we know you advertise only the best.

The AGRICULTURIST guarantees its readers fair and honest treatment in dealing with its advertisers, thus eliminating worry on the part of those ordering.

Our subscription to the AGRICULTURIST is never allowed to expire, because the magazine does all in its power to help and educate the farmer, so we always have it handy when we are ready to order. This is not always the case with the other farm magazines.

For the last nine years, ever since we have been on a farm, we have ordered a number of things advertised in the AGRICULTURIST, and have never been disappointed as they were always just as represented.

We obtain valuable information from the advertisements, regarding orchard sprays, cattle remedies, auto equipment, etc., and where to obtain them.

We learn about the new things which are being placed on the market, for instance, "Mulch Paper" and "The Mastodon Strawberry".

—ROSE R. HAERNWE.

* * *

EDITOR'S NOTE: Space in this issue will not permit us to print all the ten letters awarded a prize of one dollar each, and others will be printed in an early issue. In fact, so many excellent letters have been received that we are planning to print more than ten, and to pay one dollar each for all those that we print.

HOW BIG ARE YOUR ACRES?



MAKE EVERY POUND OF GRAIN COUNT

These Books Tell You How

Dr. Bailey has said, "An acre of land varies directly with the size of the man who manages it." The production of your farm, the profit from your labor, depends on how well you have managed—your use of livestock and feedstuffs grown or purchased. Increase the efficiency of every bushel of grain, every acre of pasture, every ton of hay, every hour of labor by the use of the proper amount of COTTONSEED MEAL—the concentrated protein—which is both tonic

and feed to dairy cattle, beef cattle, sheep and swine. The Educational Service has published a series of folders on "How to Feed Livestock for Profit." Every farmer, feeder, dairyman should have them. All information is the result of actual feed tests, conducted by agricultural colleges, universities and practical feeders. Here is the road to greater profit. The information is free. What others have done you can do. Write today.

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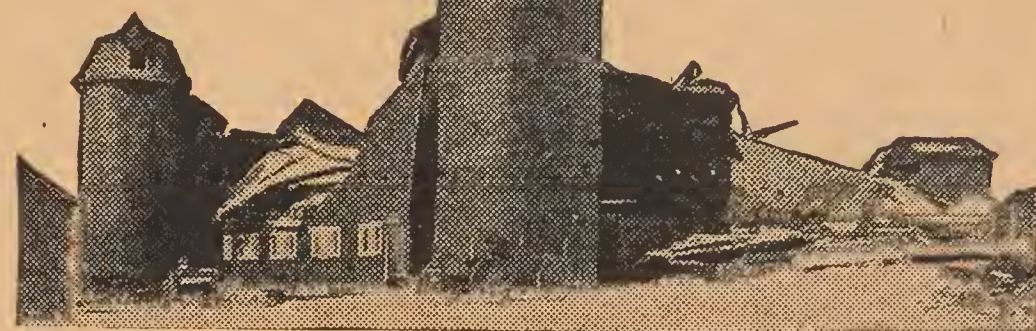
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You can easily understand the strength of the Craine Silo from its construction. But the HIDDEN value that enables it to keep almost ALL the food value of the corn in the silage, thus producing more milk—is even more important. Our catalog explains this and also contains tables of capacities; the number of acres to plant; ideal rations; probable profits; descriptions of various types of Silos and parts, etc., etc. Worth real money to every dairyman—sent free on request.

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AMERICAN AGRICULTURIST

Reviewing the Latest Eastern Markets

Milk Prices

The following are the May prices for milk in the basic zone of 201-210 miles from New York City.

Dairymen's League prices are based on milk testing 3.5%. Sheffield on the basis of 3%.

Class	Dairymen's League	Sheffield Producers
1 Fluid Milk...	3.37	3.17
2 Fluid Cream		2.05
2A Fluid Cream	2.26	
2B Cond. Milk...		
Soft Cheese...		
3 Evap. Cond. Milk Powder	2.51	2.05
Hard Cheese	2.25	

4 Butter and American cheese. Based on New York City Market quotations on butter and American cheese.

The Class 1 League price for May 1928 was \$2.90 for 3.5% milk and Sheffield's \$2.80 for 3%.

The above prices in each class are not the final prices the farmer receives. The final price received from the dealer is the result of the weighted average.

Butter Sharply Lower

CREAMERY	May 8, 1929	May 1, 1929	Last Year
SALTED			
Higher than extra...	44 -44 1/2	46 -46 1/2	45 -45 1/2
Extra (92sc).....	43 1/2 -	45 1/2 -	44 1/2 -
84-91 score.....	40 3/4 -43 1/4	43 -45 1/4	42 1/2 -44 1/4
Lower Grades.....	40 -40 1/2	42 -42 1/2	

The butter market has dropped two cents on creamery extras since our last report. Readers will recall that last week we expressed the opinion that the butter market was headed downward. The buying element has been exerting a lot of pressure for lower prices basing their arguments on poor color and too much butter. We have been receiving a lot of butter here in New York and as we have said previously, a large percentage of it shows the change to grass. New York wants a light col-

ored butter and anything other than that is bound to be criticised especially where criticism may mean a lower price.

The New York market has been considerably above par with New York and under ordinary circumstances would mean that values here might be headed upward. However, in this day and age most anything is apt to happen in New York and Chicago, from sudden price changes to machine gun massacres. There is one statistical factor that looks very good for the egg market and is acting as a control, namely, cold storage holdings. We are running behind a year ago by several hundred thousand cases. On May 3, there were in the warehouses of the ten cities making daily reports a total of 2,229,000 cases, whereas on the same day in 1928 the same ten cities reported 2,483,000 cases. The trade is holding back fearful of a heavy increase in the lay later in the season. Before the end of May we are likely to see a change of heart on the part of the trade but the difference has got to be greater and the time for May options must be less.

At this writing, May 8, it is a little difficult to anticipate how the market is going to turn by the time next week's report is written. It involves a lot of hazard because so many factors are at work. The consuming trade in general seems to be fairly good. Some jobbers have reported that retail buying and consumptive demand have been backing up a little. The chain stores, on the other hand, are offering attractive figures so that the situation looks fair in that quarter. The wholesale trade shows a high degree of nervousness. This nervousness underlies the entire market. Any material increase in receipts is going to act as a damper on prices. The receipts are increasing but not as rapidly as might be expected due to unseasonably cold weather. On May 3, the four largest cities reported 2,215,979 pounds of butter on hand in their cold storage houses, whereas a year ago on the same day they reported 1,576,084 pounds. From April 26 to May 3, the holdings in those four cities increased 109,815 pounds whereas, during the same period last year the holdings decreased almost exactly the same amount as they increased this year. Taking all statistical factors into consideration we look for the market to hold about steady at the present level. When receivers lowered the price level, buyers took hold and more butter has been moving into distributing channels. There is not much speculative activity. That element in the trade is holding off awhile to see where the chips are falling.

No Changes in the Cheese Market

STATE FLATS	May 8, 1929	May 1, 1929	Last Year
Fresh Fancy.....	22 -	22 -	22 -22 1/2
Fresh Average.....			
Held Fancy.....	27 1/2 -29 1/2	27 1/2 -29 1/2	29 1/2 -30 1/2
Held Average.....			28 -28 1/2

There have been no changes since last week in the cheese market, compared with the situation we reported last time. There is a good demand for fine quality State flats, well cured. Fresh cheese is selling slowly. New York cheese appears to be in a firmer position than Western products.

On May 2, the ten cities making daily reports had in their warehouses 10,217,000 pounds of cheese compared with 7,801,000 pounds at the same time a year ago. From April 25 to May 2, holdings in the ten cities were reduced 224,000 pounds. During the same period last year the same cities reported a reduction of 133,000 pounds. Statistically the market is in a slightly better shape than reported several weeks ago.

Nearby Brown Eggs Improve

NEARBY WHITE	May 8, 1929	May 1, 1929	Last Year
Hen's Sel, Extras...	35 -36 1/2	34 -37	35 -37
Hen's Av'ge Extras...	33 1/2 -34	33 -	34 -34 1/2
Extra Firsts.....	32 1/2 -33	32 -32 1/2	32 -33
Firsts.....	31 1/2 -32	30 1/2 -31	30 1/2 -31 1/2
Undergrades.....	29 -32	27 -32	28 -32
Pullets.....			
Pewees.....			
NEARBY BROWNS			
Hennery.....	34 1/2 -36 1/2	34 -36	36 -36 1/2
Gathered.....	30 -34 1/4	28 -33 1/2	30 1/2 -35

There have been minor shiftings in the egg market during the past week but as a whole, the situation is very much the same as it was a week ago. At this writing, some of the better grades of nearby Jersey shipments are not clearing promptly. There is just enough drag to create an uneasiness that does not carry any foreboding but still is annoying. Nearby browns have taken the front of the stage, having shown considerable improvement

for several days. Some Jerseys still bring premiums.

Just where the market is going is hard to say. The West is considerably above par with New York and under ordinary circumstances would mean that values here might be headed upward. However, in this day and age most anything is apt to happen in New York and Chicago, from sudden price changes to machine gun massacres. There is one statistical factor that looks very good for the egg market and is acting as a control, namely, cold storage holdings. We are running behind a year ago by several hundred thousand cases. On May 3, there were in the warehouses of the ten cities making daily reports a total of 2,229,000 cases, whereas on the same day in 1928 the same ten cities reported 2,483,000 cases. The trade is holding back fearful of a heavy increase in the lay later in the season. Before the end of May we are likely to see a change of heart on the part of the trade but the difference has got to be greater and the time for May options must be less. At this writing, May 8, receipts are lighter than they were a year ago. Western markets hold firm with a slight tendency toward strengthening. However, the trade is reluctant to make much of an advance because of the fact that as soon as values go up there is going to be interference in distribution. The consuming trade is moving very nicely at present levels and the trade is reluctant to throw a monkey-wrench into the smooth working machinery at this time.

Live Poultry Holding Firm

FOWLS	May 8, 1929	May 1, 1929	Last Year
Colored.....	33-35		28-29
Leghorn.....	33-35		-27
CHICKENS			
Colored.....			
Leghorn.....			
BROILERS			
Colored.....			30-52
Leghorn.....			25-40
CAPONS.....	35-50		
TURKEYS.....	25-40		
DUCKS, Nearby.....	30-35		
GESE.....	23-28		-24
	16-17		

The live poultry market is holding firm both in fowls and broilers. The broiler market is especially satisfactory, favoring the selling element. Last week (May 4) the market closed with the best Leghorn broilers bringing 38c. At this writing, May 8, they have recovered their loss and easily bring 40c. Heavy fowls are not selling as well as good quality Leghorns. Most of the demand is in that direction. A peculiar situation exists in the live poultry market. Buyers are complaining of slow killing in the slaughter houses throughout the city. At the same time, there is an active demand and desirable lines of white fowls and fancy broilers are snapped up quickly.

Shippers who are contemplating consigning broilers to market are urged to use care in grading of the birds. Every year a lot of money is lost by farmers who mix their stock. Broilers averaging a pound and three quarters should be placed in one coop while lighter or heavier birds should be crated separately. Furthermore, where it is possible, it is highly profitable to separate the birds as to breed. If a coop contains Leghorns and colored stock invariably the buyer will hold his price very close to the Leghorns and the premium enjoyed by colored stock will be lost. It seems peculiar that the market works this way; as long as the buyers are willing to pay premiums for color and selection it is a good idea to play up to those peculiarities as long as it makes money.

Meats and Live Stock

Live veal calves have got to be extra fancy to bring \$17 this week. Most of the arrivals fail to bring better than \$16.25, with poor stock down to \$10. The demand is slow but prices are holding fairly steady.

Steers are holding steady, meeting a good active demand; good stock bringing from \$13.50 to \$14.50 with common to medium from \$12 to \$12.75. A few good bulls are bringing \$10

per hundred. Most of the arrivals bring \$9.25 to \$9.75. The bull market is irregular.

A few good cows brought \$9 on May 8. Reactors sold anywhere from \$5 to \$8.50. Some low cutters down to \$4.25.

Good choice spring lamb, have been bringing from \$18 to \$19.25. The market has been steady with an active demand. Good to choice clippers are quoted at from \$14 to \$15.

Hogs are steady. Those weighing 85 to 130 pounds bring \$11 to \$11.25; medium weights from 130 to 160 lbs. \$11.50 to \$11.75; Heavier and up to 220 lbs. \$12.10 to \$12.25.

Live rabbits are steady bringing from 25c to 30c per pound.

Old Potatoes Moving Slowly

STATE	May 8, 1929	May 1, 1929	Last Year
150 lb. sack.....	2.00-2.25		
Bulk, 180 lbs.....	2.35-2.75		
MAINE			
150 lb. sack.....	2.50-2.75	2.75-3.00	2.50-3.25
Bulk, 180 lbs.....	3.00-3.25	3.25-3.50	3.50-4.00
PENNA.			
150 lb. sack.....			
No. 1.....			
Bulk, 180 lbs.....			
LONG ISLAND			
150 lb. sack.....			
No. 1.....	3.00-3.25	3.25-	4.00-4.25
Bulk, 180 lbs.....		3.75-4.00	4.85-5.10

The old potato market is gradually growing to a close and a lot of strength that was exhibited a couple of weeks ago is ebbing away. However, Long Islands at this writing are still bringing from \$3 to \$3.25 for 150 pound sack, and Maines manage to bring from \$2.50 to \$2.75. Some of the better States are also bringing that price but others are lucky to bring \$2. Where such a poor market exists there is no excuse for shipping poor potatoes. The market has lost a lot of speed and the trend is downward. New potatoes are getting cheaper and the swing of the trade is to that product.

Medium Hay Moving Slowly

The hay market has lost a good deal of the pep that it had for the past few weeks with the exception of straight timothy No. 1. Medium and lower grades are moving very slowly and the market as a whole is barely steady. Timothy containing mixtures of grass or clover sell anywhere from \$19 to \$26 with very little bringing over \$24. Straight timothy seldom brings over \$25, some of it down to \$15 (although strictly choice No. 1 brings \$26 or \$27.

Feeds and Grains

FUTURES	May 8, 1929	May 1, 1929	Last Year
(At Chicago)			
Wheat, (May).....	1.06 3/4	1.13	1.58 1/4
Corn (Mar.).....	.86 1/2	.90 1/2	1.07 1/4
Oats (Mar.).....	.47 3/4	.49 1/4	.65 1/4
CASH GRAINS			
(At New York)			
Wheat, No. 2 Red..	1.32 1/4	1.41	2.23 1/4
Corn, No. 2 Yel....	1.29 1/4	1.07 3/4	1.29 1/2
Oats, No. 2.....	.81 1/2	.62	.81 1/2
FEEDS			
(At Buffalo)			
Grade Oats.....	33.50	33.00	43.50
Spring Bran.....	26.50	26.50	42.50
Hard Bran.....	28.50	28.00	44.00
Standard Mids.....	26.00	26.00	43.00
Soft W. Mids.....	34.00	33.00	48.00
Flour Mids.....	33.00	32.50	45.00
Red Dog.....	36.00	36.00	45.50
Wh. Hominy.....	37.00	37.00	46.00
Yel. Hominy.....	37.00	37.00	46.00
Corn Meal.....	38.00	37.50	45.00
Gluten Feed.....	39.75	42.50	44.75
Gluten Meal.....	47.25	52.50	59.00
36% C. S. Meal....	41.00	41.50	59.00
41% C. S. Meal....	44.00	44.50	66.00
43% C. S. Meal....	47.50	46.50	68.00
34% O. P. Linseed			
Meal.....	51.50	52.00	54.50

The above quotations are those of the local Buffalo market and are F.O.B. They are reported in the weekly letter of the N. Y. State Department of Agriculture and Markets.

Licensed Commission Merchant Discontinues Business

IF you shipped farm produce to H. J. Caul & Company, Inc., 280 Washington Street, New York City, to be sold on commission, and have not received your pay for same, you can file a verified complaint with the Commissioner of Agriculture and Markets, Albany, N. Y., against its commission merchant's bond. Blank form of complaint can be obtained from the Commissioner of Agriculture and Markets, Albany, N. Y., and must be filed with him on or before July 24 to receive consideration.

Broiler Shippers

WHY WASTE WORDS? If you want to get EVERY CENT you are entitled to for your poultry and 100% SERVICE—SHIP TO U.S. Write for any information, tags, coops, bulletins, etc.

BAEDECKER & WILLIAMS, Inc.,
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EGG PRODUCERS

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by shipping their eggs to a house making a specialty of Fancy Quality White and Brown Eggs. Our 25 Years experience in the business will be of some benefit to you if you ship high quality.

ESCHENBRENNER & CO., INC.
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SHIP YOUR EGGS

WHITE AND BROWN

To R. BRENNER & SONS

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Live Broilers and Poultry Wanted

HIGHEST PRICES CHECKS SENT DAILY
Oldest Live Poultry house in New York City. Established 1883, offers you an unlimited outlet for your live poultry. Write for shipping tags and free holiday calendar folder K 27.

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Ship BROILERS MARKET GOOD

Live and Dressed Poultry, Calves, Lambs and Eggs

Write or wire for quotations, tags, market conditions, etc. Prompt returns—Top prices—Take advantage of 25 years experience. Try us.

JOSEPH C. BERMAN, Inc.,
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EGG CASES Wholesale dealer and shipper of second hand egg cases. Car lots a specialty.
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NOTICE TO CREDITORS OF WELLS J. AGENT TO PRESENT CLAIMS

Any person having a claim against Wells J. Agen for milk and cream of his own production sold to said Wells J. Agen, is hereby required to file with the undersigned Commissioner at 122 State Street, Albany, N. Y., a verified statement of such claim on or before June 15, 1929.

Dated: Albany, N. Y., April 22, 1929.

WILLIAM A. PYRKE,

Commissioner of Agriculture and Markets

Two Reasons and one Proof

There are two main parts to an automobile tire.

One part is called the *tread*; the other part is called the *carcass*.

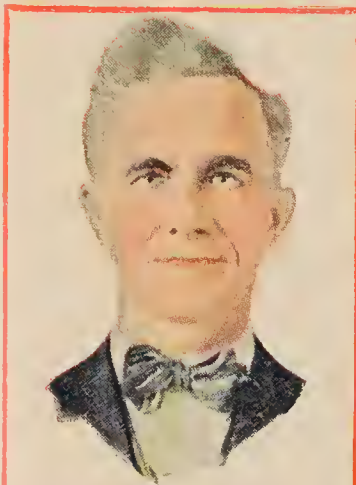
There are definite reasons why Goodyear Tires are superior in *both* these two main parts.

These reasons can be demonstrated and proved:

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Press your hand down on the Goodyear All-Weather Tread. Feel the *grip* of the deep-cut sharp-edged blocks, placed in the *center* of the tread, where they belong.

That shows why the Goodyear Tread imprints its safe and slipless pattern on the road, and why it has superior traction.



J.H. Warne, of DuPage County, Illinois, one of the best-known farmers in the middlewest, writes:

"I have used Goodyear Tires for 15 years, and for last 6 years exclusively on passenger cars and truck and find they give complete satisfaction. Have been used on all kinds of country roads under all weather conditions. In my opinion they stand hard usage and give the most mileage of any and I shall continue to use them.

I have 2 passenger cars and 1 truck equipped with Goodyear Tires at present."



Ask any Goodyear dealer to show you on his cord-testing machine the greater stretch—up to 60%—in Goodyear Supertwist Cord over ordinary cord.

This extra stretch gives the Goodyear Supertwist Carcass its unmatched vitality, enabling it to withstand road-shocks and continuous flexing without premature failure.

These advantages in Goodyear Tires are concrete and real; so plain that a child can comprehend them.

The proof of their validity and that they are popularly understood is found in the fact that, year after year, **MORE PEOPLE RIDE ON GOODYEAR TIRES THAN ON ANY OTHER KIND!**

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The New Chevrolet Six gives you everything you want in a fine motor car . . at prices within the reach of all

The new Chevrolet Six is more than just a Six in the price range of the four. It is an entirely new creation which makes available, for the first time at prices within the reach of all, everything you want in a fine car.

It gives you great reserve power to meet every road condition. It gives you high speed, fast acceleration and freedom from annoying vibration. It gives you sturdiness and rugged dependability that assure long life. It gives you fine car appearance, comfort and completeness of equipment. Yet it provides all this with outstanding economy—better than 20 miles per gallon of gasoline.

When you drive the new Chevrolet Six you will be impressed by the exceptional smoothness of its powerful

six-cylinder valve-in-head engine, by the effortless handling resulting from the full ball bearing steering mechanism and the positive action of the quiet, non-locking, four-wheel brakes.

When you study the new Fisher bodies you will be immediately impressed by their beauty. And by those features that contribute to riding comfort—restful cushions and ample leg room, adjustable driver's seat and Fisher VV one-piece windshield in all closed models, complete instrument panel with electric motor temperature indicator and theft-proof Electrolock—all of which are typical of the outstanding value provided in the new Chevrolet Six.

Visit your Chevrolet dealer and see this remarkable automobile today!

The COACH

\$595

The Roadster	\$525
The Phaeton	\$525
The Coupe	\$595
The Sedan	\$675
The Sport Cabriolet	\$695
The Convertible Landau	\$725
Sedan Delivery	\$595
Light Delivery Chassis	\$400
1½ Ton Chassis	\$545
1½ Ton Chassis with Cab	\$650

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Q U A L I T Y A T L O W C O S T

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Division of General Motors Corporation

- a Six in the price range of the four !

Farm News from New York

Annual Holstein-Friesian Meeting at Philadelphia, June 4-5 --- County Notes

The annual meeting of the Holstein-Friesian Association is scheduled June 4 and 5, at the Benjamin Franklin Hotel at Philadelphia. Tuesday, June 4, will be open forum day. Delegates will discuss a number of topics of interest to breeders of blacks and whites.

Delegates are asked to get a certificate when they buy their railroad tickets which will entitle them and members of their families to one-half fare on their return trip, provided that 150 new certificates are turned in to the quarters at the Benjamin Franklin Hotel. The following are the delegates from American Agriculturist territory:

NEW YORK

H. Wing, Ithaca.
D. Robens, Poland.
W. Stevens, Liverpool.
J. Yates, Buffalo.
J. Morgenthau, Jr., Hopewell Jct.
A. Irtshorn, Hamilton.
J. Stevens, Cortland.
T. Wood, Liverpool.
J. H. Stevens, Newark Valley.
W. H. Stevens, Lacona.
M. Thompson, Heuvelton.
M. Howard, Sherburne.
W. McLaury, Portlandville.
M. D. Brown, West Winfield.
I. Thomson, Holland Patent.
N. Decker, Clay.
V. Noyes, Kenwood.
H. Thomson, Holland Patent.
G. Houghton, Lowville.
Charles W. Lamb, Poolville.
B. Marshall, Morrisville.
R. Munro, Elbridge.
Henry K. Jarvis, Syracuse.
V. Bump, Camoridge.
J. Williams, West Winfield.
J. F. Farrington, Lowville.
J. I. a v, Canton.

PENNSYLVANIA

John A. Bell, Jr., Coraopolis.
M. Thompson, Montrose.
E. Robertson, York.
J. Brownell, State College.
G. Kerrick, Towanda.
V. Otto, Carlisle.
Raymond B. Arnold, Milan.
Albert B. Craig, Sewickley.
Charles S. Chaffee, Ulster.
Abner J. Deysher, Reading.
James W. Hunter, Grove City.
H. D. Allebach, Trappe.
W. A. Woods, Carlisle.

NEW JERSEY

Martin J. Sheridan, Jr., Lebanon.
D. D. Brill, Jamesburg.
Peter P. Van Nuys, Bellemead.

MASSACHUSETTS

E. Elder, Mt. Hermon.
Frank P. Knowles, Auburn.
Enos J. Montague, Amherst.
R. Walter Hurlburt, Ashley Falls.

NEW HAMPSHIRE

Fred A. Lovering, Manchester.
Edward P. Vose, Peterboro.

RHODE ISLAND

Wm. W. Carpenter, Saylesville.

VERMONT

A. P. Bigelow, Middlesex.
D. A. Thomas, Rutland.
R. E. Eddy, Poultney.

CONNECTICUT

T. S. Good, West Cornwall.
Angus P. Thorne, Bridgeport.

League Women Visit Markets

The educational marketing trip for women sponsored by the Dairywomen's League Association and the New York Central railroad marks another step forward for rural women. Many farm women help with packing the farm products and it cannot fail to be instructive to see the stress and strain packages must bear in getting to the consumer. Representatives from six league counties in New York and Pennsylvania for three days visited New York City markets and stores, getting glimpses of the enormous quantities of food stuffs marketed every day in this great city. To the league locals who sent representatives, the educational workers of the league who aroused their interest and the Agricultural Department of the New York Central who arranged the itinerary, goes credit for this educational, constructive opportunity for rural women to study their own problems. The city campaign of education in the uses of milk as a great health food

is one of the fine things the League is doing for the city people. In New York this takes the form of health talks and demonstrations to city children and mothers, in co-operation with the so-called Bellevue-Yorkville health demonstration. Naturally, milk, taking first place as a health food especially for children, is the item emphasized by League workers.—G. W. H.

New York County Notes

Cattaraugus County—On May 3rd, C. V. Young, Cattaraugus county president of the local Dairymen's League, was chosen president of the Big County Picnic and Field Day Committee to meet every two weeks until the big day, June 29, when the event will be staged at the County Fair grounds in Little Valley. Charlotte B.

Agricultural Programs From WGY

12:00 Noon—Eastern Standard Time, daily except Saturday and Sunday—weather report, farm produce report, farm talks.

6:10 P. M.—Eastern Standard Time, daily except Saturday and Sunday—farm produce report, farm talk.

7:00 P. M.—Eastern Standard Time, (8:00 P. M. Daylight Saving Time). Thursday—Half-hour agricultural program.

Culver is vice-president and Charles Abbey is secretary and treasurer. A. L. Milks, Director of the Dairymen's League, Senator Kirkland, the Olean and Salamanca Chambers of Commerce, the merchants, business men, farmers and farm organizations all work together to make this the one big field day of the year in the county.

Cattaraugus and McKean Counties Dairymen's League will hold a chicken dinner and program in West Valley, May 28, at 7:30 P. M. It is to be held in connection with the regular sub-district meeting for May. Weather is still cold and rainy. Farm work is at a standstill. No planting has been done. It is too wet to plant in many places. Farmers who had their oat ground plowed last fall have been unable to drill them after having prepared it half a dozen times only to find it rainy the next morning. Young stock is being put out for the summer as pastures are good and many are out of hay. Alfalfa fields are looking better than other meadow lands. Cherry and plum trees are in bloom.—M. M. S.

Genesee County—We are having a backward spring. Little farming has been done as yet in this vicinity. Most of the land is even too wet to plow. A few have gardens planted. Veal calves are 15c to 16c a pound. Eggs are 25c to 27c at local stores. Farm help is cheaper this year because of the fact that the Gypsum Mills are not hiring so many laborers.—Mrs. R. E. G.

Cortland County—Continued wet weather has delayed spring work. Not many oats are in yet. Pastures and meadows are looking fine. T. B. Eradication is making fine progress in Cortland County. Farmers generally are very much gratified over the outlook for farm relief from taxation, much credit being given Governor Roosevelt and his Agricultural Commission.—W. N. G.

Madison County—Just as we were sure spring was here it turned cold in early April and we had a cold month. Now the weather has changed again and farmers are hurriedly putting in early crops—peas and potatoes—no oats as yet. Fire destroyed the house and barn of a farmer near De Ruyter, Madison County. Fortunately a neighboring farm was for sale and unoccupied, so a purchase was immediately made and the farmer will soon be ready to continue spring work. The chicken industry is thriving and eggs bring a moderate price. The outlook is encouraging.—Mrs. C. A. P.

Allegany County—Rain, rain, and still more rain. Farmers are becoming discouraged over the continued cold wet weather. A few early peas and oats have been sown but all farm work is practically at a standstill. The total rainfall for April was 5.41 inches, which broke all previous records. There were but seven clear days in April. The highest temper-

ature was 77 degrees. Early fruit trees are blooming but prospects are for a light crop as it is cold and cloudy. The Allegany sub-district League meeting was held in Belfast April 30. About 300 attended. Director H. H. Rathburn was the speaker. The annual election of county League officers will be held in Belmont, May 27. Potatoes have taken a sudden rise. The bulk of producers in this section recently sold for 25c a bushel but local dealers are now paying 65c and 75c. Unless growers cut down the percentage the same mistake will be made again next year.—Mrs. O. H.

Tioga County—A severe wind, rain, and electrical storm visited here all the evening of May 2. All lowlands were inundated. A short distance from Owego, flood trash dammed against a railroad bridge over a creek causing the immense body of water to go around it. It undermined the tracks of the Lehigh Valley Railroad, leaving just the ties and rails. A double header box car rode over it and the track collapsed, plunging both engines into the water and killing the engineer and fireman of one engine and injuring those on the other engine. Many from Owego came to Endicott April 29 to witness the ovation given to George T. Johnson, head of the Endicott-Johnson Shoe Company; 17,000 persons were present. The Boy and Dog Parade in Owego called out boys and dogs throughout the county. One hundred four boys, each with their dogs, marched through the streets, headed by a band. It was a unique sight and the streets were lined with spectators. Farmers are agitated over the continued rain because they cannot plant crops. Everything is at a standstill. Prices of crops remain low. Potatoes are bringing 40c in some villages and 50c to 75c in others. Butter is 50c to 55c a pound and eggs 25c a dozen. All meats are high in price. Government Inspector, William J. Mackensie, is coming to Owego soon to consider a location for a U. S. Airport. A four-way field is desired.—Mrs. D. B.

Columbia County—On Wednesday we had a snowfall of about 3 inches, accompanied by a cold north wind. It snowed on three other days also. A hailstorm was the termination of the last one. The ferry boat running from Hudson to Athens has a new coat of paint. The Night Line is to have a boat especially for autos. Germantown folks have many chickens. Quarantine removed from Ghent residents, for scarlet fever. There

is an Orthopedic Clinic at Kinderhook High School with an Albany doctor in charge. Lebanon Valley had a hard hailstorm. Trees were blown down and windows broken. A telephone pole blew down near Jackson Corner. Scarlet fever is on the wane in Chatham. A week ago lightning struck Lyke House in Livingston. Damage was estimated at \$90. Kinderhook Garden Club was addressed by the Founder of the Federated Garden Clubs. Eggs are 26c a dozen.—Mrs. C. V. H.

Sullivan County—Nearly one thousand visitors go through the National Union Bank at Monticello on Saturday afternoon and evening. Trout fishing is the best it has been for some years and many are busy with the line. On April 13, there was a double funeral for Wessell Hornbeck and his mother. Eggs are low, milk remains the same and corn is \$2.25 a cwt. Meal is also \$2.25. Daylight savings will go into effect on April 28 in most villages although many farmers are against it.—P. E.

Railroads Reduce Freight on Wheat for Export

ON May 4th, a number of railroads applied to the Interstate Commerce Commission to change freight rates on wheat for export, on one day's notice instead of the usual thirty days' notice. This action came following a suggestion by President Hoover to the Secretaries of Commerce and Agriculture, that such action would be desirable in view of the fact that large supplies of wheat are stored in this country.

The reductions which were announced on May 2, were 2c per bushel from Buffalo to the seaboard and 7c from Kansas City to the Gulf of Mexico. It is believed that this reduction in rate will make it possible for exporters of wheat to compete with wheat from Argentina and Canada in the Liverpool market. It is estimated that approximately 50,000,000 bushels of wheat are stored in the Kansas City area. The rates are emergency rates and will continue until September 30.

Naturally, there is considerable protest from certain quarters concerning the reduction. Flour manufacturers object to the reduction without a corresponding reduction in trade rates on flour and representatives of water carriers operating on the Great Lakes and the New York Barge Canal feel the reduction will divert grain from boats to the railroads.

Use the dip that's standardized

ALWAYS full strength, always uniform. Dr. Hess Dip and Disinfectant has a fixed carbolic acid coefficient of 5, which means that it is five times as strong as carbolic acid. Being standardized, you always know exactly how much water to add to make your dipping mixture right for scab, sheep ticks, cattle ticks and hog lice.

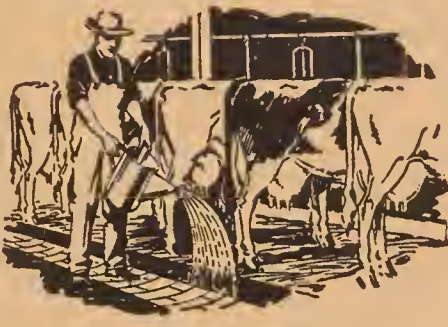


DR. HESS DIP AND DISINFECTANT

The superior emulsion it makes is an outstanding feature—the finest, milk-white emulsion of any dip you can buy. No settlements, no gathering oil streaks on top, no matter how long your emulsion stands.

A powerful disinfectant and destroyer of disease germs. Keeps down foul odors, makes living quarters healthful. Fully guaranteed.

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There is nothing like a Model 12 Remington .22 Caliber Repeater to stop his raids on the chicken yard, and make you some money for his pelt.

Shoots .22 shorts, longs, or long-rifle cartridges interchangeably. Pump action, fast, accurate and smooth in operation. Trim graceful lines, dark American walnut stock and fore-end.

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American Agriculturist, 461 Fourth Ave., New York City.

Gentlemen: Kindly classify and insert my advertisement of words to appear times in your paper. Enclosed find remittance of \$..... to pay for advertisement, which reads as follows:

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For only 7 cents a word you can place your story of your wants or what you have to sell in nearly 150,000 homes.



With the A.A. Crop Grower



A New Method of Marketing Potatoes

NEW YORK farmers will be interested to know that by shipping potatoes in cloth bags, 15 pounds to the bag, Michigan growers have found a new and more profitable way to merchandise "spuds." A carload of 2,400 of these small sacks to the Buffalo market met with an excellent demand from the best class of trade at premium prices. The Farmers Marketing Cooperative Exchange, Boyne City, Mich., shipped the first car. F. P. Coward & Sons, commission merchants, were the Buffalo receivers. The deal was handled through the Michigan Potato Growers Exchange at Cadillac.

Encouraged by the success of their initial venture, Michigan growers are making plans to make further shipments of the same kind to other markets throughout the country where there is a demand for northern potatoes.

Better Prices for Quality Products

A whole new method of merchandising potatoes is looked for as a result of this new idea of packaging potatoes in small sacks. The intention is to pack only large, clean, selected potatoes in these small sacks and to create a permanent demand for these by guaranteeing the product right through to the consumer. In this way they hope to receive the better prices usually brought by quality products but also to do away with the need of diverting cars from market to market. Above all, they hope to put an end to the hit-or-miss system under which potatoes are marketed at present.

Not only the grower, but everyone in the potato deal, stands to benefit from the new arrangement, according to Mr. Hibst, manager of the Michigan Potato Growers Exchange. The wholesaler will always be able to get the same kind of potatoes from the same source. The retailer will save a lot of time now spent by him or his clerk in weighing out potatoes. But the housewife perhaps stands to make the greatest gain. Not only will she always be able to get the potatoes exactly to her liking, but with every purchase she knows she will get without cost a bag of strong durable cloth which she can use as a jelly strainer, broom cover, "dustless" duster, vegetable or fruit bag or many another use around the home or for the family.

Growing Squash in Sweet Corn

I NOTICE an inquiry in a recent issue from a subscriber about raising squash in sweet corn. I have had some experience along this line.

In early, small fodder corn mix four

ounces of squash seed to each peck of seed corn and drill with a single row planter. Thin the squash to one plant at a place. There will be a good crop of corn and squash. With larger corn, plant with a one row planter. Leave every fifth row blank, going over these rows later with a hoe and a pocket full of squash seed, planting five seeds every two steps (approximately every six feet). Thin stand to two plants to hill when the true leaves have started so you can detect the most sturdy plants.

This was on sod land well manured. I gave the squash hills one light application of nitrate of soda when thinning. This made an excellent crop both of corn and squash. I planted green, blue and golden Hubbards. I rather favor Hubbard as it seems more prolific. It does not grow so large and ripens earlier and keeps well. The Delicious is also an excellent medium size squash.—E. P. ALLEN.

Seed Treatment Increases Crop

CANTALOUPE and Cucumber growers in New Jersey are being urged, this year, to treat all seed prior to planting. Results obtained last year at the New Jersey Experiment Station showed that germination was increased 1200 per cent where seed had been treated by mercuric compounds. According to results secured, better germination and reduced damping off was secured where the seed had been treated. Treatment of seed with the commercial compounds on the market did not injure the seed in the least. The observations showed that results were equally effective on cantaloupes. The following tables show the results of experiments conducted at the College during the past year:

Test No.	Untreated No. Seed	% Germination
1	300	1.3
2	200	1.0
3	600	5.1

The Treated seed gave this result:

No. Seed	% Germination
300	67.3
200	67.5
2160	66.4

Growers of cantaloupes and cucumbers are advised that seed once treated will keep for a long time without any deterioration. The experiments showed that there is no danger of injuring the seed by an excessive amount of dust.—A. K.

A load of manure on the fields where it can do good is worth two on the manure pile where it only wastes away.



A group of Buffalo housewives examining the potatoes packed in the Bag-ettes.

With the A. A.
POULTRY
FARMER



Producers and Dealers Discuss Proposed Egg Grading Changes

PRODUCERS, middlemen and retailers of eggs, met in Commissioner Pyrke's office at Albany on May 8th, to discuss the proposed changes in the New York State Retail Egg Grading Law. In 1927, the state legislature enacted a law giving the Commissioner of Agriculture and Markets authority to establish rules and regulations relative to egg grades. Grades were established and went into effect in the fall of 1927. Since that time, there has been a considerable amount of criticism of these grades both from producers and retailers. Following some discussion a schedule of proposed changes was drawn up and notices sent to producers and dealers that a hearing would be held on them.

Unclassified Grade May Be Eliminated

One of the principal objections from producers has been that many retailers, instead of grading eggs, have sold to consumers only as "unclassified" or perhaps as grade A and unclassified, and as a result have not been willing to pay producers more than the unclassified grade price regardless of the quality of the eggs. This has been especially serious where up-state producers have sold to local grocers. Retailers on the other hand have been hesitant to grade or sell by grade because of the fear that they would violate the law and make themselves subject to a fine.

The first proposed change was to eliminate the unclassified grade altogether. The producers present at the hearing were unanimously in favor of this move, while retailers and jobbers were inclined to feel that this would result in hardship to them. It was brought out that consumers have a feeling that grade C eggs are not good eggs, a feeling which they do not seem to have toward the unclassified grade. In other words, the same eggs marked "unclassified" will sell better than they will if marked "grade C". In the opinion of many retailers present, doing away with the unclassified grade, and selling only nearby fancy, grades A, B and C, would make it extremely difficult to dispose of all the eggs as grade C, which failed to meet the three higher grades. On the other hand, producers feel that consumers will learn to buy by grade when they are graded. Perhaps the reason they like to buy unclassified is that in many cases they are excellent eggs. In some cases they are really grade A eggs, BUT the quality of them is not uniform. Where eggs are properly graded as nearby fancy or grade A, B or C, the buyer knows what she is getting. The opinion was also expressed by dealers that the elimination of unclassified grades would not result in the improvement of conditions to the extent expected by producers.

Restrictions on the Term "Fresh"

The intent of the law was that eggs should be sold according to grade but as it has worked out in many cases, two grades only have been sold, namely, grade A and unclassified. In fact some stores have sold unclassified eggs at two or three different prices. Where as this was not a violation of the law it was directly opposite to the intent of the law.

The second proposed change is in regard to the use of the term "Fresh". According to the proposed change the term "fresh" may be applied, in addition to the grade, to any lot of nearby fancy or grade A eggs, which are free from objectionable odor and flavor and are not over 30 days old, but that the term "fresh" cannot legally be applied to any other grade below the requirements of "grade A" or to eggs more

(Continued on Page 18)

Refrigeration...

-that protects health!

-that stops germ growth in food!

-that saves thousands of footsteps!



DR. WM. H. PETERS
Health Commissioner,
City of Cincinnati

"Bacteria multiply rapidly in warm milk. All milk must be cooled immediately after milking and kept at a temperature low enough to check the growth of bacteria."

(Signed) Wm. H. Peters, M.D.

Wm. H. Peters

BACTERIA IN MILK MULTIPLY ENORMOUSLY WHEN TEMPERATURE RISES ABOVE 50°

In fifteen drops of finest milk obtainable 3000 germs were counted. In 24 hours, at a temperature of 50°, these germs had multiplied to 11,500. When the temperature was raised to 55°, the germs increased to 18,800. At 60°, there were 180,000 of them. At 68° nearly one half million. Properly operated the Crosley Icyball unit will keep a constant low temperature in the Icyball refrigerator.

Saves Us \$3.00 a Week

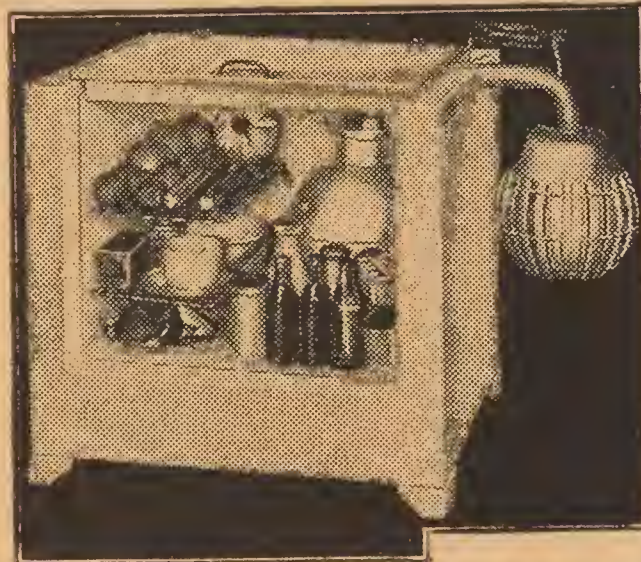
"From the cream produced by seven cows we get \$2.25 and more than we got before we used the Icy ball because with it we can always get Grade One cream. Besides we make one trip to the creamery instead of two as before. This makes a total saving of more than \$3.00 a week which in one season will pay for itself. Then we have ice for the table and ice cream whenever we want it."

—Carl Moyer, Kansas.

Better Than Ordinary Ice Box

"It sure is a wonderful blessing for people that are unable to get ice. We think it keeps food better than an ordinary refrigerator and is much cleaner."

—C. C. White, Colorado.



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Gentlemen: Please send me all information about your Icyball Refrigerator, without any obligation on my part.

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is NOT the result of CHANCE.

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Today 102,789 New York State families read American Agriculturist; in 1923 there were 69,012.

In five years editorial leadership has won the confidence of 33,777 new families in New York State. This is the equivalent of a new paper for every farm family in the ten combined counties of Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Hamilton, Herkimer and Jefferson.

BABY CHICKS



SIEB'S GUARANTEED CHICKS

from **CERTIFIED HOGAN TESTED**
HEAVY LAYING FLOCKS

STILL LOWER PRICES
WHY PAY MORE?

SIEB'S "OVERSIZE" CHICKS are from **PURE-BRED** flocks of **THE WORLD'S FINEST BLOOD LINES**. They are a new Sieb Development—an advanced step in scientific breeding to produce chicks that grow larger, stronger, mature quicker and lay more and larger eggs. All one quality only **THE BEST**.

WHY SIEB CHICKS PAY BETTER

Fortunes have been spent to produce a superior quality chick. It costs just as much to raise a chick that weighs 6 lbs. at 6 months old as it does a Sieb Chick that will weigh 8 lbs. or more at 6 months old. The best proof of this wonderful achievement is the testimonials from our customers. Think of young cockerels weighing 9 lbs. and pullets 8½ lbs. with remarkable egg laying records. If you want larger, stronger stock, more eggs, more meat, and more profits, buy Sieb's "OVERSIZE CHICKS". Our great capacity of over five million per year insures quick delivery, cuts down cost of production and enables us to give you **THE BEST GRADE ONLY** at prices even less than many hatcheries charge for second and third grade chicks. **SEND FOR CATALOG** or order from this ad. 100% live delivery guaranteed.

PRICES PREPAID	25	50	100	500	1000
Wh. Br. & Bl. Leghorns	\$3.00	\$5.75	\$11	\$52.50	\$100.
Brd. Wh. & Buff Rocks	3.50	6.75	13	62.50	120.
Wh. Min. S. C. R. I. Reds	3.50	6.75	13	62.50	120.
R. C. R. I. Reds, Wh. Wyand.	3.75	7.25	14	67.50	130.
Wh. & Buff Orps. Sil. L. Wyand.	3.75	7.25	14	67.50	130.
Black Minorcas	3.25	6.25	12	57.50	110.
Anconas & Heavy Assorted	3.00	5.75	11	52.50	100.
Heavy & Light Assorted	2.75	5.25	10	47.50	90.
Light Assorted	2.50	4.75	9	42.50	80.

SIEB'S HATCHERY,
BOX 230 LINCOLN, ILL.
Members Int'l. Mid-West, Ill. & America
B. C. P. Association



(Continued from Page 17)

than thirty days old. The principal objection to this proposal on the part of the retailers was that many eggs purchased by them as "fresh" would not quite meet the requirements of grade A and particularly at certain seasons of the year, must be put in the "B" grade which puts them in direct competition with storage eggs. It was suggested that a "grade B fresh" might be added to the proposed grades but this proposal did not receive much support on the theory that the number of grades should be restricted as much as possible to avoid misunderstanding on the part of the buyer.

Shell Treated Eggs

The third proposed change which received little discussion at the hearing is that eggs preserved by treating the shells with oil or any other substance may be sold under any of the various grades, but if they are sold as fresh eggs they must be designated as "shell treated".

Another change proposed is that a retailer be permitted to purchase eggs which have not been candled and candle them himself. Under this regulation, any one selling eggs not produced on his own farm to a retailer would be required to either mark the grade on the case, or if they have not been candled to state on the invoice, "These eggs have not been candled." In addition the invoice must designate the eggs as "Cold Storage" if they have been in cold storage more than 30 days either within or without the state.

Weight of Various Grades

There was some discussion as to the advisability of requiring that retailers mark the weight per dozen of eggs sold. Under the proposed change, retailers may use the word "large" to describe eggs only where they weigh not less than 24 ounces to the dozen. If they use the term "Medium" they must weigh not less than 20 1-3 ounces per dozen. "Small" eggs may weigh less than 20½ ounces per dozen. The sentiment of those present was that the proposed changes are advisable but that retailers should not be required to state the weight of the eggs unless the terms mentioned are used in describing them.

Every one present at the hearing stated their views in a fair manner and although on one or two occasions a slight tone of bitterness was evident, in general everyone seemed to be looking at the problem from the viewpoint of the best interests of everyone concerned. Retailers present expressed the feeling that the grading law is unduly hard on them because the State Department checks up on their sales and holds them responsible for violations, regardless of the original source of the eggs. There was a strong feeling that wholesalers and jobbers or even producers should be held accountable for the grading of the eggs sold by them.

Eggs a Perishable Product

On the other hand it was pointed out that eggs are a perishable product and that they should receive the same care as butter or milk. If retailers will give them this care they need not fear that eggs will deteriorate below the grade for which they are purchased, providing they are sold by the retailer within a reasonable time.

While the law specifically states that producers are not required to candle their eggs, there is no reason why farmers should not candle them, if it seems advisable in working up a special market for eggs of exceptional quality. One retailer emphasized a point of great importance to eastern producers, when he stated that eggs from the Pacific Coast are graded and packed much more satisfactorily than eggs from New York State and that eastern producers should study the markets and improve the quality of the pack.

Commissioner Pyrké stated that any changes finally decided upon would not go into effect until July 1st, but that it was only fair to all concerned that they should be announced as soon as possible, in order to give all concerned a chance to familiarize themselves with them.

The Easy Way to Kill Lice on Poultry



Paint the Roosts

No matter how big the flock or how lousy, only a small paint brush, a can of "Black Leaf 40" and a few minutes time for "painting" it on top of the roosts are required to rid an entire flock of body-lice. Do away with old laborious and disagreeable methods of dusting, dipping and greasing!

Just Paint the Roosts with "Black Leaf 40"

About a half hour before fowls perch, "paint" "Black Leaf 40" on top of roosts. When fowls perch upon roosts that have been so "painted", fumes are slowly released that permeate the feathers, killing the lice. The treatment is so easy, effective and cheap that poultry owners need never be bothered by lice on their flocks. Think of the time, labor and expense that this method saves! There is no individual handling of fowls.

"Black Leaf 40" is sold by poultry supply dealers, druggists, hardware and seed stores, etc. Ask your dealer or write us.

Tobacco By-Products & Chemical Corp. Incorporated
Louisville, Ky.

"Black Leaf 40"
WORKS WHILE CHICKENS ROOST

20th CENTURY "MARVEL" CHICKS

from Special Mating Imported Barron White Leghorns

This Superb Mating consists of 350 Yearling hens, imported from TOM BARRON, of England. The hens weigh not less than 4½ pounds and up to 6 pounds, and produce better than 250 eggs per year, per hen.

BIG HEALTHY CHICKS FROM THE WORLD'S BEST STRAINS

14 varieties. Matings sired by pure-bred Males from the World's finest Trapped Egg Strains. Dams of high production, 250 to 302 egg lines. Park's, Burroughs, Fishel, Sheppard, Dustin, Pape and others of similar famous breeding.

1. Guarantee Satisfaction and give you personal service. Prices reasonable. 100% Live Delivery Guaranteed. Ref: Commercial Bank, Dun and Bradstreet.

ORDER NOW AT THESE LOW PRICES—EFFECTIVE MAY 15

	50	100	500	1000
S. C. White, Br., Buff Leghorns; Anconas	\$5.50	\$10.00	\$46.00	\$90.00
Barred and Wh. Rocks; S. C. & R. C. Reds; Blk. Minorcas	6.50	12.00	55.00	110.00
Wh. Wyandottes; Buff Orpingtons; Buff Minorcas	7.00	13.00	62.00	120.00
Imported Barron Leghorns; Wh. Minorcas; Park's Rocks	8.00	15.00	67.00	125.00

Heavy Mixed, \$10 per 100; Light Mixed, \$8 per 100; W. P. Ducklings, 25c each.

Ship C. O. D. if desired (pay postman on delivery). FREE illustrated Catalog tells all about our big size Winter Laying Chicks and profits you can make with them. Send for your copy.

20th CENTURY HATCHERY Box R NEW WASHINGTON, OHIO

WOLF SELECTED CHICKS

CHICKS C. O. D. Send only \$1.00 and pay Postman the balance

Special pen mated and extra bred chicks at slightly higher prices. Ship-ment made any time you wish.

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S. C. Wh., Br. & Buff Leghorns, S. C. M. Anconas	\$3.00	\$5.50	\$10	\$46.00	\$90
Barred Rocks, Reds, Minorcas, Anconas	3.50	6.50	12	55.00	110
Bd. & Wh. Rocks, S. C. & R. C. I. Reds, Bl. Min.	3.50	6.50	12	55.00	110
White Wyandottes, Buff Orpingtons	3.75	6.75	13	57.00	115
Jersey Black Giants	5.00	9.50	18	87.50	170
Assorted Odds and Ends, Mixed Chicks	2.50	4.50	8	38.00	75
Assorted Heavy Mixed Chicks	3.25	6.00	11	50.00	97

WOLF HATCHING & BREEDING COMPANY, Box 1 Gibsonburg, Ohio

IMMEDIATE DELIVERY

QUALITY BABY CHICKS Five extra given or one hundred ordered. June and July hatched chicks. Leghorns, White, Brown, Buff, Black—\$10.00 per 100; Barred Rocks, Reds, Minorcas, Anconas, \$12.00 per 100; White Rocks, Wyandottes, Buff Orpingtons, \$14.00 per 100. May \$2 more. Aug. \$2 more. Sept., \$4 more. Custom hatching. Eggs for hatching. Odds and Ends, Left Overs: Mixed broiler chicks, Light, 10c; Light and heavy, 12c; All heavy, 14c; Better order now. Will send C.O.D. Thousands hatching daily all year around. Active, husky, chicks hatched from healthy free range breeders that will live, grow and lay. Prompt shipments. Postage prepaid. Live delivery. Send for folder. **SCHOENBORN'S HATCHERY**, 335 Main St., Hackensack, N. J. Phone 1603 or 1604.

BABY CHICKS ORDER DIRECT from this ad. and save time.

	25	50	100	500	1000
Wh. & Brown Leghorns	\$2.75	\$5.25	\$10.00	\$47.50	\$90
Anconas & Black Leghorns	2.75	5.25	10.00	47.50	90
White & Barred Rocks	3.25	6.25	12.00	57.50	110
Col. Wyand. & R. I. Reds	3.25	6.25	12.00	57.50	110
Heavy Mixed Broilers	3.00	5.75	11.00	52.50	100
Light Mixed Broilers	2.25	4.25	8.00	38.75	75

Full count and quality guaranteed. Catalogue free. Hatchery Chicks **ULSH POULTRY FARM & HATCHERY** For Greater Profit Port Trevorton, Penna. Box A

BABY CHICKS Tanager Strain W. Leg. \$10 per 100. Wh. Leghorns..... 9 per 100. Barred Rocks..... 12 per 100. S. C. Red..... 12 per 100. Heavy Mixed..... 10 per 100. Light Mixed..... 8 per 100. 500 lots ½ c less; 1000 lots 1c less. 100% live delivery guaranteed. Order from this ad. or write for free C. P. Leister, McAlisterville, Pa. circular.

Before BUYING LEGHORN CHICKS Get our circular of a Tanager Strain Single Comb White Leghorns. Every chick hatched from our own breeders. We guarantee satisfaction. **ADRIAN DeNEEF**, Sodas, N. Y.

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TURKEYS—Buying Eggs or Baby Turkeys from Esben-shade's Famous Bronze Strain is an economical way to improve your stock at minimum cost. Guaranteed. Catalog. Esbenshade Turkey Farm, Box A, Ronks, Pa.

CHIX FROM LARGE BREEDERS

Summer Prices	100	500	1000
Ferris Strain White Leghorns	\$10	\$47.50	\$90
Everlay Brown Leghorns	10	47.50	90
Basom's Barred Rocks	12	57.50	110
Owens' R. I. Reds	12	57.50	110
Mixed Chicks	8	37.50	75

Our breeders are selected for size, type and egg production. The kind that lay and pay. Send for literature. It's free. Tells all about our great egg machines.

Junjata Poultry Farm, BOX T RICHFIELD, PA.

BABY CHIX THIS IS MY 11TH YEAR OF EXPERIENCE

Cash or C. O. D.	100	500	1000
Barred Rocks	\$12.00	\$57.50	\$110.00
Tanager Strain S. C. W. Leghorns	10.00	47.50	90.00
Heavy Mixed	9.00	42.50	80.00
Light Mixed	8.00	37.50	70.00

These chicks are from free range and heavy egg producing flock. 100% live delivery guaranteed to your door. Write for Special Mating prices.

FRANK NACE, Cocolamus, Pa., Box No. 120

MAY PRICES

	100	500	1000
S. C. White Leghorns	\$9.00	\$42.50	\$80.00
Barron & Wyckoff Leghorns	10.00	47.50	90.00
Barred Rocks & R. I. Reds	12.00	57.50	110.00
Light Mixed \$8. Heavy Mixed \$10. Our chicks are properly hatched, strong and vigorous. 100% live delivery. Postpaid. Circular free giving full details of all breeds. CLEAR SPRING HATCHERY , McAlisterville, Pa. R. D. No. 2. F. B. Leister, Prop.			

BABY CHICKS

FROM A HEAVY LAYING STRAIN. Three years blood tested for white diarrhea and under State supervision. Barred Rocks, White Wyandottes, Reds, White Leghorns. Moderately priced. Write for Catalogue and Prices.

BYRON PEPPER & SONS
BOX 11, GEORGETOWN, DEL.

CHICKS, 8c UP HEALTHY, FREE RANGE STOCK
Rocks - Reds - Wyandottes - Leghorns - Mixed
Circular and Price List. Delivery Guaranteed.
LONG'S RELIABLE HATCHERY, Box 12, Millerstown, Pa.

Baby Chicks

WHY TAKE CHANCES on CHEAP CHICKS when you can get our **STURDY CHICKS** of the **HIGHEST QUALITY STOCK**

at the old price, at the old stand now 17 years. Also **STARTED CHICKS**

THE OLD RELIABLE LINESVILLE HATCHERY, Linesville, Pennsylvania.

Have You A Farm For Sale?
An American Agriculturist classified ad costs little but reaches over 150,000 readers.

BABY



CHICKS

FINGER LAKE REGION BABY CHICKS

with an official record. Ask for our Baby Chick Book describing our Pedigreed Cornell Chicks from stock that has laid from 200 to 312 eggs in their pullet year and mated to breeders that have averaged over 200 eggs in their pullet year. Also describes our 144,000 egg hatchery with 22 years' experience in hatching Baby Chicks, Leghorns, Reds, Rocks, Wyandottes, Minorcas, and Giants. The home of better Chicks at lower cost.

THE DERORY TAYLOR CO.,
NEWARK, NEW YORK

BABY CHICKS

hatched by the best system of incubators from high class bred-to-lay stock. White, Brown, Buff Leghorns, Anconas \$14.00 per 100; Barred, White Rocks, Minorcas, Reds \$16.00 per 100; White Wyandottes, Buff Orpingtons \$17.00 per 100; Giants \$20.00 per 100; Heavy Broilers \$12.00 per 100; Light Broilers \$10.00 per 100; Peking Ducklings \$30.00 per 100. Add 25c on orders for less than 100. Safe delivery guaranteed by parcel post.

Nunda Poultry Farm, Desk H, Nunda, N. Y.
Member of the International Baby Chick Ass'n. and the N. Y. State Co-Operative Chick Producers Ass'n.

200,000 CHICKS 1929

Goodling's Super Quality. Healthy, Strong and Vigorous

	50	100	500	1000
Single Comb, White Leghorns.....	\$6.50	\$12.00	\$57.50	\$110.00
Barred Plymouth Rocks.....	7.00	13.00	62.50	120.00
S.C. Rhode Island Reds.....	8.00	15.00	75.00	
Broiler Chicks, Heavy Breed.....	5.50	11.00	52.50	100.00
Broiler Chicks, Light Breed.....	5.00	10.00	47.50	90.00

Order direct. Prepaid 100% live delivery guaranteed. Circular free.

THE VALLEY HATCHERY Box A, R. No. 1, RICHFIELD, PA.

PENNA. "State Supervised" CHICKS

Keystone CHICKS 1929
Flocks inspected by officials from the Penna. Dept. of Agriculture. Our 19th year. Get our low prices on Reds, Rocks, Leghorns and Minorcas. Member I.B.C.A.
Catalogue free.

THE KEYSTONE HATCHERY,
(The old reliable plant) RICHFIELD, PA.

BETTER BABY CHICKS

\$12 to \$25 per 100
Barred and White Rocks, White and Columbian Wyandottes, R. I. Reds, Jersey Black Giants, Black Minorcas, White and Brown Leghorns, Mottled Anconas, 20,000 Weekly. Finest purebred, heavy producing, free range stock, under State inspection. 100% Safe delivery guaranteed. Catalog free.

ULSTER POULTRY FARMS, Box 40, WALDEN, N. Y.

BABY CHICKS

13 Leading Varieties—White Leghorns, Black Minorcas, Rocks, Reds, Wyandottes, Hamburgs, Speckled Sussex, Buff Orpingtons.
\$9.00 per hundred and up.
Free Catalog and Price List

Lantz Hatchery, Tiffin, Ohio

BARRED ROCK CHICKS

A large modern Breeding Farm and Hatchery devoted exclusively to the production of BARRED PLYMOUTH ROCKS.
MARVEL POULTRY FARM, GEORGETOWN, DEL.

CHICKS

Pure bred. Blood tested free range breeders. Leghorns, Anconas, 10c. Rocks, Reds, 12c. Wyandottes, Orpingtons, Minorcas, 13c. Black Giants, 18c. 100% live delivery. Valuable Chick Manual Free.

Seidleton Farms, Washingtonville, Pa.

BRED TO LAY BABY CHICKS

Barred Rocks; White Leghorns \$10.00 per hundred for May and June deliveries. 25 chicks \$2.75; 50 chicks \$5.25. Scarborough Poultry Farm, Box A, Milford, Del.

R SINGLE COMB RHODE ISLAND REDS

Vt. Certified: Tested free from B.W.D. Males from 200-300 egg hens. Pullets: Started Chicks: 3000 Baby Chicks weekly. Circular.

ASCUTNEY FARMS, A10, HARTLAND, VT.

DUCKLINGS

\$33; EGGS \$14-100 "Duck News" Free. ROY PARDEE, Islip, L. I., N. Y.

SPECIAL FALL

prices for breeding Turkeys, Geese, Ducks, and Guinea. Write your wants and for mailing list. PIONEER STOCK FARM, TELFORD, PA.

Hall's Chicks

Leghorns-Reds-Rocks-Wyandottes

"WELL BRED FROM WELL BREEDERS"

New England Accredited stock. All breeders 100% White Diarrhea free

Week of	Grade A.....	S. C. W. LEGHORNS	S. C. R. I. REDS	BARRED ROCKS	WHITE WYANDOTTE
May 20	Special Matings..	\$14.00	\$16.00	\$17.00	\$20.00
After	Grade A.....	12.00	15.00	16.00	18.00
May 26	Special Matings..	14.00	17.00	18.00	20.00

Prices are per hundred. For orders of 25 chicks add 75c. For orders of 50 chicks add \$1.00.

We ship Prepaid and guarantee safe delivery

Everyone answering this advertisement will receive FREE our suggestions for brooding, feeding and rearing chicks.

Hall Bros.

POPLAR HILL FARM
BOX 59 WALLINGFORD CONN.

EIGENRAUCH FARMS

RED BANK, NEW JERSEY

18TH YEAR

breeding White Leghorns for size, vigor and heavy production of large White EGGS.
8,000 LAYERS are housed on our farm.

Our Chick Guarantee

100% satisfactory arrival on the exact date we promise shipment. Every chick sold by us is hatched from eggs laid by breeders on our own farm.

Write for Free Folder and Prices on Pullets and Chicks
EIGENRAUCH FARMS - Dept. G, Red Bank, N. J.



Fairport Quality Chicks

are bred to make money for you. Strong, healthy, vigorous from the world's best and heaviest laying strains such as—Tancred, Ferris, Owen Farms, Daniels, Thompson, Martin, Shepard, Fishel and others. Free range flocks, scientifically culled and supervised, Smith Hatched. 100% live delivery guaranteed. 16 breeds 9c and up. Postpaid. Members International Baby Chick Association. Send now for free poultry book and prices. Buy Hatchery Chicks for Greater Profits.

FAIRPORT HATCHERIES Box 44 Fairport, N. Y.



Here: Nearly Everyone Raises Full Blooded "AMERICAN" Quality Chicks

Write now for our new low prices. Your opportunity to get our special flock mating chicks at utility prices. Chicks shipped C. O. D. Catalogue and prices on request. 100% live arrival guaranteed. 15 breeds. Write now.

American Chickeries, Box 214, Grampian, Pa.



Schwegler's "THOR-O-BRED" BABY CHICKS

THEY LIVE because they are bred from healthy, free range breeders that have thrived and gained in vigor for generations. They LAY because they are from selected and tested high egg power stock. White, Brown and Buff Leghorns, Barred and White Rocks, R. I. Reds, Anconas, Black Minorcas, Buff Orpingtons, White Wyandottes. 25c and up. 100% live delivery guaranteed. Postpaid. Member International Chick Assn. Write today for FREE Chick Book.

SCHWEGLER'S HATCHERY, 204 Northampton, BUFFALO, N. Y.

Buy C.M.L. Chicks

C.M.L. chicks cost no more than ordinary chicks from the average hatchery, but our Quality is far superior. For many years we have specialized in Barrons. We import direct from England. 100% Live Delivery Guaranteed. Prepaid.

	25	50	100	500	1000
Barron S.C. Wh. Leghorns.....	\$3.00	\$6.00	\$11.00	\$52.50	\$100.00
Barred & Wh. Rocks; Wh. Wyandottes & R. I. Reds.....	3.25	6.25	12.00	57.50	
All stock carefully selected for size and health. C. M. L. chicks mature early and are sure to please you. Better chicks cannot be had at these low prices. Write for Free Catalog or order direct from this ad.					
C. M. LONGENECKER, BOX 40, ELIZABETHTOWN, N. Y.					

BABY CHICKS

	25	50	100	500
White Leghorns.....	\$2.75	\$5.25	\$10.00	\$47.50
Barred Rocks.....	3.25	6.25	12.00	57.50
Rhode Island Reds.....	3.25	6.25	12.00	57.50
Heavy Mixed.....	2.75	5.25	10.00	47.50
Light Mixed.....	2.50	4.75	9.00	42.50
Peking Ducklings.....	7.50	14.50	28.00	
Mixed Ducklings.....	6.50	13.00	25.00	

John Shadel Hatchery McAllisterville, Pa. Route 2.

Pennsylvania Co-Operative Leghorn Farms

Breeding COCKERELS with RECORDS to 303 EGGS. PURE TANCRED-HOLLYWOOD-BARRON STRAINS White Leghorns—Brown and Buff Leghorns—QUALITY EXTRAORDINARY—PRICE WAY DOWN—SHIP C. O. D. Get our prices quick.

Pennsylvania Co-Operative Leghorn Farms, Box 314, Grampian, Pa.



CHICKS with vim and vigor

Hatched by men with 19 years experience, from culled flocks. 100 per cent live delivery guaranteed by Prepaid Parcel Post at the following prices:

PRICES FOR MAY

S. C. White Leghorns.....	9c each—\$ 80.00 per 1000
S. C. Brown Leghorns.....	9c " 80.00 " 1000
Barred Rocks.....	10c " 90.00 " 1000
S. C. R. I. Reds.....	12c " 110.00 " 1000
S. C. Black Minorcas.....	12c " 110.00 " 1000
H. B. Mixed.....	9c " 80.00 " 1000
L. B. Mixed.....	8c " 70.00 " 1000

\$1.00 will book your order. Catalogue free.
THE PENNSYLVANIA HATCHERY
LIVERPOOL, PA.

CHERRY HILL CHICKS

S.C.W. Leghorns—Wyckoff Strain.....	100
S.C. Everlay Brown Leghorns.....	\$10.00
Barred Rocks—Wm. Nace's select.....	12.00
S.C. Rhode Island Reds.....	13.00
Mixed or Broiler Chicks.....	7.00

1/2c less in 500 lots. 1c less in 1,000 lots.
25 chicks add 2c. 50 chicks add 1c. Full count. 100% live arrival guaranteed. Parcel Post prepaid. Bank reference. Order direct from this ad or write for free circular.

CHERRY HILL POULTRY FARM,
WM. NACE, Prop. Dept. A, McAllisterville, Pa.

Chicks C.O.D.

Immediate delivery. Leghorns \$13 per hundred. Hatched from healthy Mountain-Bred, 5 lb., tested, 2 and 3 year old breeders. Order quick, pay post man and have your own Heavy-weight pullets laying in five months time. Our customers do it. So can you. \$63 for five hundred. Satisfaction guaranteed. A postal card will do.

FARM SERVICE

ROUTE A10 TYRONE, PENNA.

BABY CHICKS

PROMPT DELIVERY—WILL SHIP C.O.D.

	50	100	500	1000
White and Bd. Rocks.....	\$6.50	\$12.00	\$57.50	\$110.00
S. C. R. I. Reds.....	6.50	12.00	57.50	110.00
S. C. White Leghorns.....	5.50	10.00	47.50	90.00
Heavy Mixed.....	5.50	10.00	47.50	90.00

PINECREST POULTRY FARM & HATCHERY
Herbert Miller, Prop. Box 12, Richfield, Pa.

STOP! LOOK! LISTEN!

Cash or C.O.D.	25	50	100	500	1000
Wh. Wyandottes.....	\$4.00	\$7.50	\$14.00	\$67.50	\$130.00
Rocks or Reds.....	3.50	6.50	12.00	57.50	110.00
Wh. Leghorns.....	3.00	5.50	10.00	47.50	90.00
Heavy Mixed.....	3.00	5.50	10.00	47.50	90.00
Light Mixed.....	2.50	4.50	8.00	37.50	70.00

From carefully selected free-range flocks. 100% arrival. Postpaid. Valuable illustrated 96-page booklet FREE. Telling all about poultry.

The Commercial Hatchery,
Box 75-A (The dependable plant) Richfield, Penna.

BABY CHICKS

From Heavy Laying Free Range Flocks

	25	50	100	500	1000
S.C.W. & Br. Leghorns.....	\$3.00	\$5.50	\$10.00	\$47.50	\$90.00
S.C.B. & Wh. Rocks.....	3.50	6.50	12.00	57.50	110.00
Buff Orpingtons & Reds.....	3.50	6.50	12.00	57.50	110.00
White Wyandottes.....	3.50	6.50	12.00	57.50	110.00
Assorted Chicks.....	2.75	4.50	8.00	37.50	70.00

100% prepaid safe delivery guaranteed.
Order from this ad. or write for circular

J. N. Nace Poultry Farm Box 161 RICHFIELD, Pa.

TAKE NOTICE 75,000 CHICKS for MAY DELIVERY

	25	50	100	500	1000
S. C. White Leghorns.....	\$3.00	\$5.50	\$10.00	\$47.50	\$90.00
Barred Rocks or Reds.....	3.50	6.50	12.00	57.50	110.00
Silver Laced Wyandottes.....	4.00	7.50	14.00	65.00	
Light Mixed.....	2.50	4.50	8.00	37.50	70.00
Heavy Mixed.....	2.75	5.00	9.50	45.00	85.00

From carefully selected free range flocks. 100% arrival Postpaid. Write for illustrated catalogue.

The Richfield Hatchery, Box 80, Richfield, Pa.



FERRIS STRAIN WHITE LEGHORN CHICKS

Our breeders are large birds; long, deep, rectangular bodies. Selected for size, type and egg production.
\$10 Per 100; \$47.50, 500; \$90, 1000
Junata Poultry Farm, Box T, Richfield, Pa

CHICKS 8 1/2c

CLASS A CHICKS at low prices, also pullets. Special discounts. Several varieties. No money down. 100% live arrival; postpaid. Catalog free.

BOS HATCHERY, R 2A, ZEELAND, MICH.

WYCKOFF and BARRON STRAIN, White Leghorn
Chicks for May 9c each; \$80 per 1000. Prepaid and safe delivery guaranteed. Our 19th year. Circular free. \$1.00 books order. **THE PENNSYLVANIA HATCHERY,** Box W, Liverpool, Pa.

The Little Girl was taken Ill . . .

A Bell System Advertisement

A FARMER'S family in Pennsylvania had guests visiting them from the city—a man, his wife and a young daughter. Suddenly the little girl was taken with a high fever. They rushed to the telephone and called the doctor six miles away. He jumped into his car and came immediately. It developed that if there had been no telephone at hand her life in all probability would have been lost.

The telephone is a dependable aid in any emergency. It summons help in time of fire, accident or sickness. It calls the repair man in case of breakdown. It is never too tired to run errands to neighboring towns.

And whenever there is something to sell, telephone calls will find the best prices. A New York farmer got \$20 more on 2000 pounds of hogs by telephoning two other dealers after one had made him an offer. A Colorado farmer got \$300 more on a car of cattle by telephoning the Denver market. The telephone pays for itself many times over.

The modern farm home has a telephone.



What League Women Did

New York Trip Gave Chance to Study Markets

COMING to the city did not mean a late rising hour for the Dairymen's League women who came to New York on the market-visiting expedition arranged by Mr. R. W. Quackenbush of the Agricultural Department of the New York Central Railroad, in co-operation with Mrs. Hope B. Minor, field-worker of the League's Home Department. The program began April 29th thus: 4:45 A. M.—leave hotel,

us perhaps, but nevertheless useless and which makes housekeeping difficult.

I was recently called upon to help dismantle a house, where a family had lived for forty years. It was a sad experience, also a big job. Dusty piles of old magazines, useless school books hopelessly out of date, broken toys which once belonged to children long since dead, baby clothes too antique to be of any use, other clothing fit for only the rag man, and boxes of old letters, which no one dared to burn without examining. Days were spent sorting, and nearly all went to the rag man.

While I toiled, I solemnly vowed a vow that no one would ever be required to do this for me.

Grimly, I have carried out the resolution. Nothing has been destroyed which will be of use to me or my descendants for I firmly believe in perpetuating family records, but much which had a sentimental value to me only has disappeared.

One can usually find a mother, clever with her needle, who is glad to have the contents of hand boxes and trunks; failing this, there are organizations who gladly take articles which they repair or remake and give or sell for a small price to needy folks.

Old letters worth saving and all papers of value or interest have been arranged and labeled. Last but not least, I have compiled lists of all these articles. Each box, trunk or drawer has its list; making it unnecessary to search for any desired article.

This has not been an easy task; often I have been torn by the desire to keep some useless thing, but it is over now. My house is in better order and easier kept that way and I have been brave enough to do it for myself.

When that inevitable break comes,



INFANT'S DRESS
No. 1675 is a cunning little frock made up on good quality white lawn and stamped for embroidery. It can be obtained in either six months or one year size. Price 75c, postpaid. Ten cents extra will bring our new catalogue of materials stamped for embroidery, pillow cases, aprons, scarfs, luncheon sets, vanity sets, pillow cases and other novelties. Address Embroidery Department, American Agriculturist, 461-4th Avenue, New York City.

5:00 A. M.—arrive Pennsylvania Produce Terminal where southern fruits and vegetables arrive. And on through the entire day until evening—when all were ready to rest—every minute was filled with visits to markets, with the business of eating and finally by a sight-seeing trip.

The second day did not begin quite so early but was just as full when it did begin. It began with a trip to the United States Appraisers Public Stores where imports some years amount to \$400,000,000.00. B. Altman's Department Store on Fifth Avenue was the next stop. The working departments of the store other than the selling departments were visited, the shipping room, the power room, the cold storage, and the store hospital. The store entertained the party at luncheon at which time the problems of merchandising and the selling in a big store were explained by the merchandising and personnel managers, respectively.

The Commodore Hotel kitchen was visited as an example of the organization necessary for such a large dispenser of food.

Altogether three very full days were spent visiting all kinds of markets, poultry, egg, milk, fruit, produce, meat and fish. A bank was included as a proper feature of such a trip intended to show the receiving end of farm products.

What a story the League women will have to tell when they appear before their respective locals with reports of the trip! And for the members who stayed at home, a trip by proxy is next best thing to going one's self. Of course, the object of such a trip was to give an understanding of market conditions. The program of increased production for dairymen in this section makes it all the more necessary for them and their good wives to understand the market they serve.

Those attending the marketing trip were:

Mrs. Lowell Huntington, Westford, Otsego County, N. Y.; Mrs. Jesse I. Carrier, Fulton, Oswego County, N. Y.; Mrs. C. S. Smith, New Milford, Susquehanna County, Pa.; Mrs. E. A. Razey, Avoca, Steuben County, N. Y.; Mrs. L. T. Truex, Gelatt, Susquehanna County, Pa.; Mrs. James Blair, Mansfield, Tioga County, Pa.

I Learn a Lesson

BEING human, I quite frequently wish I had more of this world's goods; except at house cleaning time when I decide I have far too much.

Most of us like some types of animal are acquisitive, and we gather and tuck away many articles, treasures to



NO. 5175—A quilted bag is the last word in smart sophistication and quilting is so easy to do. This bag is of fine quality tan silk and rayon faille taffeta, and the package includes material for the straps and clasp, wire frames already packed and covered, wooden button, fastener, floss and padding for quilting. Price \$1.10. Address Embroidery Department, American Agriculturist, 461 Fourth Ave., New York City.

the dear ones left behind have enough sorrowful tasks and this extra burden should not be required of them.

COUNTRY CONTRIBUTOR.

Do You Know That—

Many wild plants in New York state make excellent salad or cooked greens. Among these are dandelion, live-for-ever, marsh marigold, watercress, and wintercress.

Cotton and sateen prints and checked or novelty linen are smart materials for nursery or school room wear this spring.

Fine steel wool will remove starch or rust from the iron.

Eggs are most digestible if cooked at a temperature below the boiling point.

Sickness and Accident NEW Protection — for \$10 a year

Guaranteed

American Agriculturist Subscribers have the special privilege of examining this new policy for 10 days. Policy pays \$25 weekly and \$1,000 to \$10,000 death benefit. Special features covering hospital bills and any accident. Send for "Facts About New Policy."

E. C. Weatherby
General Agent
Ithaca, N. Y.

Opportunities for Agents in Local Communities

WANTED

Your old and new address if you are moving this Spring

AMERICAN AGRICULTURIST

461 Fourth Avenue, New York City, N. Y.

Aunt Janet's Counsel Corner

How High Would You Grade Yourself by This Score?

TO do some very important research work in chemistry several young men have been picked out all over the United States. These young men are to study and experiment still more and they are expected to discover facts about chemistry which may revolutionize industries altogether. The basis upon which these people were chosen shows how much importance is attached to the various qualifications of a man hoping to do a thorough research job. These points were compiled by studying nearly 70 corporations to ascertain the qualities upon which they base promotion and employment. To him who thinks that success is a matter of luck, this may be something of a revelation.

- 1—Health (7.8).
- 2—Creative ability (13.7).
- 3—Book ability (7.3).
- 4—Intellectual honesty (11).
- 5—Perseverance (8.9).
- 6—Faculty of observance (10.1).
- 7—Enthusiasm (8.9).
- 8—Conduct (7.8).
- 9—Character (9.2).
- 10—College standing (15.3).

Even if the item "college standing" has to be left off the score, "school standing" might take its place. I like that term "intellectual honesty". No excuses, no alibis, just seeing things as they actually are—it is a great help in tracing out why things happen and how they may be improved. If you are

making a score for grading yourself and others, how would you change this one?—AUNT JANET.

Tested Recipes

Black Walnut Cakes

- | | |
|--------------------------|--------------------------|
| 4 eggs | 1/3 cup blanched almonds |
| 1 lb brown sugar | 1 1/2 cups flour |
| 1 1/2 teaspoons vanilla | pinch salt |
| 1 cup black walnut meats | |

Beat eggs and sugar until quite light and spongy, then put in saucepan and set within another one of boiling water. Stir steadily ten minutes, and remove from fire, sifting in flour and baking powder together. Set back in boiling water and continue to stir until the flour is well blended, about six minutes. Remove from fire, add vanilla and nut meats, mixing well. Turn out into a medium size warm (but not hot) greased biscuit pan, and bake about twenty or twenty-five minutes in moderate oven. When done, take from oven, cut in small squares but do not remove from pan until quite cold. To be iced or not as desired.—ROBERTA SYMMES.

This "butterless, milkless cake" is quite a boon to housewives in the off season when milk and butter are apt to be scarce. This makes a rather "chewy" cake but is good nevertheless.

Pineapple Nut Filling for Cake

- | | |
|-------------------------------|--|
| 2 lbs. crushed pineapple | 2 1/2 cups sifted confectioner's sugar |
| 1 1/2 cups rolled pecan meats | 2 egg whites |
| | 1 tablespoonful lemon juice |

Put unbeaten egg whites into bowl, stir in sugar slowly until mixture forms thick paste. (A little more or less sugar may be required). Add lemon juice and carefully drained pineapple and nuts. Use half the amount for one layer.—ROBERTA SYMMES.

Press the pineapple as dry as possible before using, otherwise the cake is apt to be soaked.

Pecan Muffin Cakes

- | | |
|------------------------------|----------------------------|
| 1 cup brown sugar | 2 eggs |
| 1 cup coarsely ground pecans | 1/2 teaspoon vanilla |
| 1/2 cup sifted flour | 1/2 teaspoon baking powder |

Beat eggs very light add sugar by degrees, beating until smooth. Add vanilla, then flour and baking powder sifted together. Add nuts just before putting in oven. Bake in well greased muffin rings about twenty or twenty-five minutes in a moderate oven. When cold ice. This turns out a dozen cakes.—ROBERTA SYMMES.

Where pecans are plentiful any housewife would like to use this recipe often. It makes such a good wholesome dessert to tuck into lunch boxes or to have handy for serving friends.

How to Control Household Pests

House Flies

The house flies carrier of disease, hence a menace to health.

Prevention.

1. Do away with breeding places of maggots in manure piles, chicken yards, privy vaults. Build fly-proof. Destroy maggots with kerosene, borax, chloride of lime, hellebore, iron sulphate.
2. Screen all windows and doors, especially kitchen and dining room.
3. Absolute cleanliness in house.
4. Keep food and garbage containers tightly covered.
5. Store no soiled papers and cloths.

Extermination.

1. "Swat the fly".
2. Sticky flypaper.
3. Fly traps—various good types. A good home-made trap consists of a cup or can on the end of a stick with hot soapy water in cup; hold under flies on ceiling.
4. Natural enemy is the centipede.
5. Poisons: to get best results from these remedies, darken the

room except one window; place poison in light near this window.

Pyrethrum:—Persian insect powder and bulach. Sprinkle liberally at night in unused rooms. Sweep up in morning.

Formaldehyde:—1 part formaldehyde to 10 parts water. Place in saucers.

Bichromate of Potash:—1 part bichromate to 2 parts water. Place in saucers.

Bungalow Apron



BUNGALOW APRON No. 2727 is a fine protector to the housewife's clothing. The skirt completely covers the dress and the apron is easily donned and doffed again. Printed cretonnes, percales, or checked ginghams are lovely for this useful garment. The pattern cuts in sizes large, medium and small. The medium size requires 2 3/4 yards of 36-inch material with 4 3/4 yards of binding. PATTERN PRICE 13c.



Extra help for washing machines

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The Plains of Abraham—By James Oliver Curwood

THERE was a point on the ancient Indian trail over and beyond Tonteur's Hill where a narrow path made by generations of Caughnawaga, Algonquin, and Ottawa feet ran close to the edge of a precipitous height with miles and miles of glorious country under it. This valley lay to the westward and was rich with deep forests and glimmering lakes, a quietly slumbering land filled with mystery and beauty and with seldom the smoke of an Indian camp fire rising out of it. It was a fortunate valley in many ways, for it was far enough from the Richelieu to escape the desecration of white men's axes, too near to the long-houses of the Mohawks for the safety of the red hunters of their enemies from above the St. Lawrence, and too closely a part of the French and their allies to be more than adventurously invaded by the hunting parties of the Six Nations. So it had lain for many years in peace and silence. Yet countless eyes must have looked upon it in the centuries that had gone by, for on its valleyward side the shelving rock was worn smooth by those who had rested there to gaze down into its forbidden lure, where life would have been so pleasant to live.

Viewed from where Catherine and Henri paused to rest, the valley under them was a huge oriental rug of greens and golds and blacks and silvers—greens where the meadows ran in and out and the hardwoods were bursting into tender leaf, golds where the slanting sun struck floods of yellow light upon poplars and birch, blacks where the thick evergreens grew in deep masses of darkening gloom, and silvers where the still waters of three small lakes gleamed with the warm splendour of jewels.

As Henri's eyes rested upon the pleasant scene, he told the story of Jeems, and he was still chuckling over the humour of what had happened when he discovered the clouded and serious look in Catherine's face.

"It is what I have been guessing of late," she said, and there was no laughter in her voice. "Madame Tonteur hates me and she has been training Toinette to hate Jeems!"

"What are you saying?" cried her husband. "Madame Tonteur hate you! It is impossible. Of all people in the world not to like—"

"I am the one," said his wife. "And you, poor Henri, with your foolish notion that everyone must love us, have never been able to guess the truth. She hates me so much that she would like to poison me, and not being able to do that, she has turned little Antoinette's mind against Jeems."

"You went in to see her to-day!"

"Yes, because I am a woman."

"She cannot hate you!"

"No more than she can hate bugs and snakes and poison."

"But—Tonteur. It is impossible, I tell you! He does not feel that way."

"No, I am sure he does not," said Catherine.

"If Tonteur likes us and treats us so well, why should his wife dislike you?" he demanded.

"First, because I am English. You must always remember that. Though I have come to love your country as dearly as my own, I am still English, and Jeems is half English. We are of a people who are your country's enemies. That is one reason why she hates me."

"And there is another?"

"Yes. She hates me because her husband sees fit to look upon me in a kindly way," answered Catherine. She was ready to say more, but the glad laugh which she loved came from Henri's lips, and in a moment she was tightly held in his arms.

Then he thrust her from him with

playful roughness and pointed down the valley.

"As long as we have that, what do we care about Madame Tonteur or all the rest of the world?" he cried.

"Let it fight, I say, and let women like Tonteur's wife quarrel and hate if they must. So long as you are not unhappy in a land such as this we look upon yonder, I would not trade my place for all the kingdoms on earth!"

"Nor I, as long as I have you and Jeems," said Catherine, and as Henri turned to his corn again she added, "but I am not thinking of you or of

our place often and bring Toinette with him."

"You think he will come?" asked Henri eagerly.

"I am sure he will," replied his wife, and now that she was thinking only of Jeems, she was glad she had not told her husband what had been at her tongue's end—the secret of her discovery that afternoon. "He will come," she added, "and I am sure, if I ask him, he will bring Toinette."

Henri laughed his pleasure.

"Tonteur is one man I love," he said.

"He is a man made to love," agreed Catherine.

Bringing the Story Up to Date

JEEMS BULAIN with his French father and his English mother lived in colonial times near the border between Canada and the English colonies. Their neighbor, Tonteur, is their friend but Madam Tonteur hates Catherine Bulain because of her beauty and her English blood and tries in every possible way to teach her daughter Toinette to hate Jeems Bulain.

Jeems admires Toinette and is deeply hurt by her disdain. He hates Paul Tasche, Toinette's cousin from Quebec, because Paul assumes a superior air and because he is in the good graces of Toinette.

Catherine Bulain sees and understands the situation to which her husband is blind. Jeems is brooding over the situation as he, his mother and father and Odd, his dog, walk home from a visit to Tonteur Manor. Jeems walks ahead and sees a strutting turkey cock whose actions remind him of Paul Tasche. A well directed arrow brings the cock to earth, not only providing an excellent dinner for the next day, but giving Jeems a comfortable feeling that he had struck the first blow against his enemy.

myself. I am thinking of Jeems."

They started slowly up the trail.

"Madame Tonteur's dissatisfaction with me has been amusing, and I have had my innocent frolics out of it, like to-day, for instance," she continued in silence of her husband's pondering thoughtfulness. "With you and Jeems I need no other company to keep me happy, and so Madame Tonteur's dislike has caused me no special pain. I have even liked to tease and plague her, for which I should properly feel shame. To-day I let my braids down, feigning a bit of headache as I did it, but truthfully to let her see how long and thick they are and how skimpy her own hair is, for she is only a little older than I. You should have heard her sniff when her sister from Quebec said my hair was beautiful and that it would be a crime to pomade or powder it. I may be wicked, Henri, but I cannot hold myself from pestering her in these ways, for all the trouble she has taken to make me so distasteful to her own unreasonable self. I tried so hard to be her friend, but when at last there ceased to be a hope, why, I began to see the humour of it, just as you have always taught me to catch the whimsies in unpleasant things. But with Jeems and Toinette—it is different. He has dreamed of her for a long time and has made her a spirit companion in his adventures and play."

Henri looked at Catherine. "I know—I can see—I was stupid to laugh at him down there. But Tonteur laughed, too. I did not think a boy so young would take it to heart."

"A child is like a woman," said his wife. "Both are more easily hurt than man ever dreams."

"I will hurry to Jeems and tell him how sorry I am, said Henri.

"You will do nothing of the kind," replied Catherine.

"But if I have done wrong—"

"You will keep it to yourself—this once," decided his wife. So he waited discreetly, and after a moment she said, "Henri, I know that Louis Tonteur is a good and noble man and that in his heart is a great loneliness and want of something, although he worships Toinette. No man could love his wife, even with her blue blood and high ways. He is so pitifully lonely that I am going to ask him to come to

"But—Toinette—" and Henri shifted the bag of milled corn to his other shoulder. "If Madame Tonteur says no, what then?"

"Monsieur Tonteur will still bring her," replied Catherine. "That is, if I tell him it will please me very much, she added, smiling up at him.

"That he will!" cried Henri confidently. "He will bring Toinette if you look at him like that, *ange!* But if he does such a thing, and Madame Tonteur protests, and he dares to do it again—"

"Possibly she will accompany him after that," said Catherine. "It may add to Madame Tonteur's liking for me, Henri." She laid her hand on his arm, for they had come to the edge of the woodland open, and ahead of them Jeems and Odd were standing over their slain turkey cock.

The wild hot pride of youth and achievement possessed the lad as his father and mother came toward him, and like a bristling gargoyle on four legs Odd stood joyously wagging his stump of a tail. Here was triumph, and the boy's eyes lighted up when he saw his mother's interest in what he had done, and the unfeigned amazement in his father's face as he dropped his milled corn to the ground and looked down upon the magnificent turkey cock with the feathered arrow transfixing it.

Catherine regarded her boy unobserved by the two whose hunting instinct drew their eyes to the fallen game. Her own eyes were shining, and after a moment Henri saw what she was seeing and thinking and placed one of his big hands tenderly on his son's slim shoulder. Yes, Jeems was like his mother except for his blond hair and gray eyes, and in these two things he resembled his mother's brother, that worthless, wandering, always fighting and forever lovable vagabond, Hepsibah Adams. Henri's heart was happier at his wife's proud contemplation of her son, and he burst forth in praise of the lad's exploit.

"What a shot!" he cried, bending low to examine the bird and the arrow. "Straight through from wing to wing as clean as a bullet—and right up to the shaft of the feathers! I'd swear you did not have that strength in your arm, lad! Yet the arrow was sped from

back there at the edge of the open, you say? I scarce believe it! It is a shot for Captain Pipe and White Eyes and Big Cat, and not for you!"

These three were the Caughnawaga Indian friends who had taught Jeems to shoot, and it was Captain Pipe who had made his bow of choice seasoned ash.

They went on as the sun was setting behind the wilderness, and the golden pools of light grew dimmer about them and shadows grew heavier and more velvety dark among the trees. Because of this approach of evening with all of its stillness and beauty, an instinct born of the solitudes made the four travel so softly that one could scarcely hear the footsteps of the others. The sun was not yet down and would light the western sky with springtime glow for another hour, but the forest through which the old Indian trail wound its way had grown thick and gloomily vast, so that it made a dusk like night within itself. To the boy and the dog this timbered country which lay between the seigneurie and their home was a silent and mysterious realm of adventure, a place filled with whispers of mighty things to happen, and with ghosts—ghosts everywhere of promising and lureful things of which neither was afraid. To the man and the woman it was different, for to them, with their experience and understanding, the beauty and greatness of God in nature had never grown common or old. In this great forest, with its age-old trees and battlemented tops, Catherine's heart beat faster and her soul rose to the awe and majesty of spirit which she could not see, but which, like a warm presence closing in softly about her, she could clearly feel. Through the woods, though the trail was narrow, she walked with her hand in Henri's, and for half an hour they spoke no word except in whispers. A little more, and there was sky to see again with its glow in the west, and then small opens and scattered maples and chestnuts and beech, with green meadows running like ribbons between them, and at last, coming to a broader meadow that looked down a gentle slope into the forbidden valley which they had viewed from Squirrel Rock, the four saw their home.

It lay in a sheltered dip which was like a diminutive child of the larger valley, a low and cheerful cabin of peeled logs, with more windows in it than a cautious man would have had, and with a huge chimney of clay and stone at the end. It was not a "rolled-up" house, with logs standing endwise in a trench, and possibly built around the stump of a great tree which could be used for a table within, but a home of beauty and comfort and luxury, as those things were measured on the frontier, and the best that Henri Bulain could build. Catherine's love for this home was next to her love for Henri and her boy. From its windows, which were unshuttered against foe of any kind, she could look east, west, north, and south from the knoll in the dip on which it stood—south and east over the forbidden valley, where every morning she could see the sun rising over the Tonteur seigneurie and Squirrel Rock; northward up the slope into the dark depths of the forest; and westward to the sinking sun where lay the vast reaches of unexplored country of which Henri Bulain was always dreaming, and toward which Jeems was beginning to turn wondering and sometimes yearning eyes as he grew older.

But Catherine possessed the feminine glory which would forever hold her men folk back. Close about the cabin

(Continued on Page 26)

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LORDS GOLDEN AGE extra early yellow sweet corn. Good size, productive, tender, deliciously sweet. The originator has grown it ready for the table 57 days from planting. \$1, quart; \$1.70, 2 quarts; \$2.50, 4 quarts; \$4.50, peck; \$6.50 half bushel; \$12.00 bushel. JAMES E. LORD, Stonington, Conn.

STRAWBERRY PLANTS: Senator Dunlap, 100, 90c; 300, \$2.25; 500, \$3; 1000, \$5. Premier—Gibson—Big Joe—Cooper—Stevens Late Champion, 100, \$1; 300, \$2.50; 500, \$3.50; 1000, \$6. Everbearing, Champion, 25, 75c; 50, \$1; 100, \$1.50; 500, \$5; 1000, \$10. Mastadon, Everbearing, 25, \$1; 50, \$1.75; 100, \$3; 200, \$5; 500, \$8; 1000, \$16. Figure each variety separate. Write for prices on Black, Purple and Red raspberry plants. Our plants are strictly fresh dug, from new fields. F. G. MANGUS, Maple View, N. Y.

SEND \$1 for 12 Labeled Dahlias, flowers of marvelous beauty, all colors, regular value \$3.50. BOLTS DAHLIA FARM, Stepney Depot, Conn.

CAULIFLOWER PLANTS, 100-60c; 1,000-\$4.00; 5,000-\$18.00. Cabbage plants, 100-40c; 1,000-\$2.50; 5,000-\$10.00 prepaid. E. FETTER, Lewisburg, Pa.

STRAWBERRY PLANTS, Bubach, Corsican, \$1.25 per 100 postpaid. Delicious, Warfield, Dunlap, \$1.00 per 100. Free circular. W. G. SEUBERT, Camden, N. Y.

FINE OUTDOOR GROWN Cabbage Plants—300, 75c; 500, \$1.00; 1000, \$1.50 prepaid. 5,000, \$5.00 expressed. Tomato & Onion Plants \$1.50 thousand. Pepper and Sweet Potato Plants \$2.50 expressed. All now ready. Prompt shipments, good delivery guaranteed. OLD DOMINION PLANT COMPANY, Franklin, Va.

Additional Classified Advertising

On Page 24

HANDY ANDY Says "Here's How"

To Keep the Horses Away from the Hog Feed

By Ray Inman

You can keep horses and cattle from special feed for hogs you are pasturing in the same field.

JUST A MINUTE, ELLERY—IT'S POSSIBLE TO KEEP YER COWS AN' HOSSES OUTA THE HOG FEED WITHOUT USIN' A CLUB!

IKNOW IT—BUT I AINT GOT ANY SHELLS FOR MY SHOTGUN RIGHT NOW

Set some steel posts in a square, 100 feet around the hog feeders

HEY, YOU! WHATSA IDEA HORSIN' AROUND OUR FEED BOX?

TAINT MY FAULT IF I WAS BORN A HORSE IS IT?

Stretch a strip of fairly narrow woven wire around posts 20" from the ground

DON'T CRY WILLIE! YOU CAN ALLUS CRAWL UNDER THIS FENCE

WA-A-A-A! TAINT NO FUN CRAWLIN' UNDER A FENCE. — I WANNA CLIMB OVER IT!

OF COURSE YOU GOTTA RUN THE RISK O' BUILDIN' A FENCE YOUR BOY CAN'T CLIMB.

This will let the hogs in and keep the larger animals out

THESE HOG PERSONS IS GETTIN' AWFUL EXCLUSIVE

YA-A-A-A! AN PORK FETCHIN' ONLY 30¢ A POUND!

The Question Box



EDITOR'S NOTE: The editorial staff of AMERICAN AGRICULTURIST is always ready to aid readers by answering questions on farm problems. Questions are answered by personal letter. Only questions that are of general interest to readers are printed so it is necessary that all letters be signed with your full name and address.

Hens Produce Small Eggs

"I am having trouble with my flock of White Leghorn hens laying small eggs. I have two year olds that are laying more of them than the pullets. I am feeding mixed feed twice a day, wheat, oats and barley, with one feeding of boiled potatoes mixed with bran. Do you think there is anything in the way I am feeding them that would cause them to lay small eggs?"—F. E. L., New York.

SO far as we know, there is no relation between feed and the laying of small eggs. If small eggs are produced it is probably due to one or two causes. Either the hens come from a strain that lay small eggs, or that the pullets were not matured properly before they began to produce.

A Question About Radio

I have a phonograph attachment for my electric radio receiving set. I find that I can remove the radio frequency 226 tubes without interrupting the phonograph music although the other tubes seem to get a little brighter and there seems to be a slight hum in the set which can be heard after the record stops. Why

is it necessary to waste the radio frequency tubes by running them when using the phonograph?

THE radio set must be designed with all its current requirements taken into consideration, for a definite number of tubes. With some tubes removed the "B" and "C" voltages are upset and you may even endanger the rest of the tubes by lighting them too brightly, due to the reduced load on the transformers supplying the lighting current. As the "C" voltages are reduced when some of the tubes are withdrawn, the power tubes do not receive sufficient grid bias and the hum and improper amplification results. You are not spending much extra money, either for current or for tubes, by having two or three A.C. tubes lighted, even though not used, when the phonograph is being operated.

Legumes Increase Yield of Following Crop

Do you know any figures showing the effect of a crop of clover on succeeding crops?

A NUMBER of experiment stations have done work along this line. For example, the Ohio Station found that plowing under sweet clover for wheat increased the yield of wheat nearly one-half.

Additional Classified Advertising

SEEDS—NURSERY STOCK

FINE FROSTPROOF CABBAGE and Onion Plants—Copenhagen Market, Ballhead, Wakefields, etc. 300, \$1.00; 500, \$1.50; 1000, \$2.50; Prepaid, 10,000, \$10.00. Expressed, Tomato Plants—300, \$1.50; 500, \$2.00; 1000, \$3.50. Prepaid, 10,000, \$15.00. Expressed, Pepper & Sweet Potato Plants—500, \$2.50; 1000, \$4.00. Prepaid, 10,000, \$25.00. Expressed, Transplanted Tomato and Pepper Plants 100, \$1.50; 500, \$5.00; 1000, \$8.00; 5000, \$35.00. Good delivery guaranteed or money refunded. J. P. COUNCILL COMPANY, Franklin, Va.

DAHLIAS, ASSORTED not labeled, \$1. a dozen prepaid. ANER L. SMITH, Sodas, N. Y.

GOLDEN BANTAM CORN; Improved, grown from hill selected seed. \$5.00 bushel. RATH BROS., Pittsford, N. Y.

GOLD SKIN SWEET Potato Plants 60c per 100; 500 for \$2.00; 1000 for \$3.50 postpaid. BASIL A. PERRY, Georgetown, Del.

CERTIFIED RUSSSET SEED Potatoes. College inspected. One year from Michigan. Special prices on large orders. J. W. HOPKINS & SON, Pittsford, N. Y.

FINE PLANTS ready, open field grown, well rooted, selected, 50 to bunch, varieties labeled separate, packed careful to arrive safely. Cabbage: Early Jersey, Charleston, Wakefield Copenhagen and Flat Dutch postpaid 50, 25c, 100, 35c; 300, 80c; 500, \$1.00; 1000, \$1.75. Express collect, 70c, 1000. Tomato plants: Earliana, June Pink, John Baer, New Stone, Greater Baltimore and Redfield Beauty. Postpaid 50, 30c; 100, 40c; 500, \$1.25; 1000, \$2.25. Express collect \$1.25, 1000. Genuine Marglobe, tomato 5c hundred higher. Peppers: Ruby King, Pimento, and hot Cayenne. Postpaid 50c, 30c; 100, 50c; 500, \$1.50; 1000, \$2.50. Express \$2.00 thousand. Cauliflower plants postpaid: 50, 40c; 100, 75c; 500, \$3.00. E. A. GODWIN, Lenox, Ga.

100 ACRES VEGETABLE PLANTS. Cabbage, \$100 thousand; Onion, \$1.50; Pepper, \$2.00; Sweet Potato, \$2.50; 10,000, \$20.00. Tomato, \$1.25; 10,000, \$10.00. Prompt shipments. Good plant guaranteed. FARMERS SUPPLY COMPANY, Franklin, Va.

BERMUDA ONION PLANTS—Grow bigger and better Onions. Postpaid: 200-60c; 500-\$1.00; 1,000-\$1.75. Transplanted Cabbage: 50-55c; 100-90c; 1,000-\$7.50. Tomato, Aster: 50-60c; 100-\$1.00; 1,000-\$10.00. PORT MELLINGER, North Lima, Ohio.

GRAPE VINES, Concord, 2 years, \$6.00 per hundred; 1 year, \$4.00 per hundred; Niagara, white and Wordens, black, 2 year, \$8.00 per hundred; 1 year, \$6.00 per hundred. Plum Farmer, black raspberry plants, \$3.00 per hundred. F. G. SPUDEN NURSERY, Fredonia, N. Y.

20 MILLION TOMATO PLANTS—Large, stalky, well rooted, open field grown, packed with damp moss to roots. Greater Baltimore, Stone, Earliana, Ponderosa. By mail postpaid: 500-\$1.25; 1,000-\$1.75. Express prepaid: 5,000-\$8.00; 10,000-\$15.00. Late Cabbage plants same price. Prompt shipment, safe arrival guaranteed or money refunded. KENTUCKY PLANT CO., Hawesville, Ky.

CERTIFIED LATHAM AND HERBERT RASPBERRIES, Howard 17 and Mastodon Strawberries, Washington Asparagus. Other leading varieties Raspberries, Strawberries, Blackberries, Fruit trees, Shrubs, Evergreens, etc. Prices low. Everything guaranteed. Send for price list. BERT BAKER, Hoosick Falls, N. Y.

CABBAGE—Quaker Hill Danish is one of the leaders in college and farm bureau tests. Outfields imported seed 2 to 8 tons per acre. Write for full description and yield records. E. C. LIVERMORE, Box A, Honeoye Falls, N. Y.

SEEDS—NURSERY STOCK

BUY GENUINE GRIMM Alfalfa seed direct from the Introducer at reduced prices. Hardest of alfalfas. Yields for years without replanting. A. B. LYMAN, Introducer, Excelsior, Minn.

SEED CORN—Genuine West Branch Sweepstakes, Cornell No. 11, and early maturing 8-row flints. Grown from tested disease-free ears. Thoroughly cleaned and graded. Passed corn borer inspection. \$3 per bushel, 10 bushels, \$2.80, bags free. Ninety per cent or better germination and satisfactory condition guaranteed. K. C. LIVERMORE, Box A, Honeoye Falls, N. Y.

TOMATO AND CABBAGE Plants, Baltimore, Stone, Matchless, \$1.00 thousand; 500, 65c; 5,000, \$4.50. Roots moss packed. BURGESS PLANT FARMS, Pemhroke, Ga.

FROSTPROOF CABBAGE PLANTS 75c, 1000; Bermuda Onion \$1.00; Collards 75c; Tomatoes \$1.00; Ruby King Pepper \$2.00; Porto Rico Potato Plants \$1.75. QUITMAN PLANT CO., Quitman, Ga.

BIG REDUCTION Porto Rican potato plants. Better quality, fresh direct to your mail box \$1.45 thousand plus postage, large orders express \$1.25. Cash with order. BULLARD BROS. PLANT FARMS, Baxley, Ga.

SEED POTATOES, Certified Green Mountain from Prince Edward Island, finest obtainable. Michigan and New York Certified Russsets, none better. Write for closing out prices. QUAKER HILL FARM, Box A, Honeoye Falls, N. Y.

FIELD PEAS with oats, cut for green feed will keep up the summer milk flow, but be sure to use disease free peas. Write for explanation and prices of our tested seed. QUAKER HILL FARM, Box A, Honeoye Falls, N. Y.

GENUINE HOWARD 17. Just the money maker you should grow this season. Freshly dug, well rooted. Northern grown strawberry plants, carefully packed in moss, reaching you in growing condition. 5000, \$32.50; 1000, \$7.25; 500, \$3.75; 100, \$1.00. JAS M. BRITTON, Box 29, Chepachet, R. I.

PLANTS POSTPAID. All varieties: Beet, Cauliflower, Mangle, Lettuce, 3 dozen., 25c; 100, 50c; 1,000, \$3; 5,000, \$10. Cabbage, 3 doz., 25c; 8 doz., 40c; 400, \$1; 1,000, \$2. Sweet Potato, Asters, 3 doz., 25c; 100, 65c. Celery, Tomato, Pepper, Zinnia, 3 doz., 40c; 100, 85c; 1,000, \$6.75. Egg Plant, Coleus, Coreopsis, English and Shasta Daisies, Pansies, Dianthus, Snapdragons, Salvia, Verbena, doz., 40c; 3 doz., \$1; 100, \$2. ROHRER'S PLANT FARM, Smoketown, Pa.

CORN HARVESTER

RICH MAN'S Corn Harvester, poor man's price—only \$25.00 with handle tying attachment. Free catalog showing pictures of harvester. PROCESS CO., Sallna, Kans.

SITUATIONS WANTED

DO YOU NEED FARM HELP? We have Jewish young men, able-bodied, some with, but mostly without experience, who want farm work. If you need a good, steady man, write for an order blank. Ours is not a commercial agency. We make no charge. THE JEWISH AGRICULTURAL SOCIETY, Inc., Box A, 301 E. 14th Street, New York City.

YOUNG MAN 23, Jewish, some experience, wants job on up to date general farm or estate. H. KONOWITZ, 10862, 53rd Ave., Corona, Long Island.

PRINTING—STATIONERY

EVERYTHING PRINTED! FRANKLINPRESS, Milford, N. H.

Not How Cheap—but How Good



TO MAKE your money go as far as possible is the effort of every successful man. You cannot measure what you get for your money by the amount you pay. Cheap goods are usually a total waste of money. To buy a tool, for instance, because it is "cheap" often brings you little more than the trouble of taking it home, using it a few times and then having to go buy another—a waste of the cost of the first one. The expenditure of a few cents more in the first place would have provided you with an article that would give you a long period of service, save your time and trouble and give you real satisfaction. It is this idea of giving satisfaction that is back of every sale made to you at a "Farm Service" Hardware Store that makes it so wise for you to trade there—where quality at the lowest possible prices brings you genuine thrift and economy.

You will need tools to carry out your summer building and repairing needs. Get the quality kind at a real saving at your nearest "Farm Service" store.

Look for this tag in their window.



Your Farm Service HARDWARE STORES

Where prices are lower because you get personal help in the selection and maintenance of your purchases.

FARMS FOR SALE

VILLAGE FARM 100 acres, 14 milk cows, horses, 40 hens, equipment, \$6500, \$1000 down. \$250 yearly. Write MR. DOUGLAS, Herkimer, N. Y.

DEL-MAR-VA—THE PENINSULA OF PLENTY. Three to ten hours by motor truck to markets supplying twenty millions of people. Pennsylvania Railroad permeates entire Peninsula. Low-priced farms, town and waterfront homes. Very little snow and freezing. Finest concrete highways. Good schools, low taxes. Hand-some descriptive booklet, FREE. Address 164 Del-Mar-Va Building, Salisbury, Md.

FOR SALE—120 acre farm situated on improved road, near school. 2 1/2 miles from town. Good house and chicken house, extra good barn. Plenty of water. Timber for fuel. Will carry 25 head of stock. Easy terms. Will discount for cash. A money maker for the right man. Write or phone L. GLOVER, E. Randolph, N. Y.

75 ACRE POULTRY and Dairy farm. Tourists place, modern improvements, road stand. Liberty highway half way from New York to Niagara Falls. Price \$12,000; \$5000 first payment. C. P. TAYLOR, Apalachin, N. Y.

MISCELLANEOUS

WANTED USED BAGS any quantity and grade. Highest prices and freight paid. HOFFMAN BROS. BAG CO., 39 Gorham St., Rochester, N. Y.

USED CIVIL WAR ENVELOPES with flags, designs, etc. \$1 to \$15 paid. Other stamps on envelopes before 1871 bought. Three-face lamps and old glassware bought. W. RICHMOND, Cold Spring, N. Y.

AVIATION—Earn while learning aviation, \$18 to \$35 per week while under instruction in our factory and shops. Call or write for information without obligation. AERO CORPORATION OF AMERICA, Department DA, Plankinton Building, Milwaukee, Wis.

COTTON DISCS for your milk strainer, 300 sterilized 6 inch discs at \$1.30, postage prepaid. HOWARD SUPPLY CO., Box 30, Canton, Maine.

RUBBER TUBING for all makes of milkers. Attractive prices. Cotton strainer discs (sterilized) 300 in package 6 inch \$1.40, 6 1/2 inch \$1.60 Postpaid prepaid. Tubing and cotton discs very highest quality obtainable anywhere. ANDERSON MILKER CO., Jamestown, N. Y.

WANTED TO BUY

WANTED—HAY, GRAIN, Potatoes, Apples, Cabbage, Carloads. Pay highest market prices. THE HAMILTON CO., New Castle, Pa.

WANTED TO BUY old bags. We pay excellent prices. Write for prices. We pay freight. OWASCO BAG CO., Rochester, N. Y.

COD LIVER OIL

Pure Golden Cod Liver Oil for poultry animal feeding. Richest known anti-rachitic and growth promoting food. Five gallons \$6.75, 10 gallons \$13., at New York, special prices on barrels. CONE IMPORT COMPANY, 624 Kent Ave., Brooklyn, N. Y.

POULTRY SUPPLIES

POULTRY DRESSERS! Send for our new catalog of Equipment and Supplies for Fattening and Dressing Poultry. H. G. HAGER, Dept. 22, Gossville, N. H.

TOBACCO

GUARANTEED HOMESPUN TOBACCO. Chewing, 5 lbs. \$1.50; 10-\$2.50. Smoking, 10, \$1.75. Pipe Free. Pay Postman. UNITED FARMERS, Bardwell, Ky.

LEAF TOBACCO—Good sweet chewing, 3 lbs., 90c; 5, \$1.25; 10, \$2.00. Smoking, 3 lbs., 60c; 5, 90c; 10, \$1.50. UNITED FARMERS, Mayfield, Ky.

CIGARS FROM FACTORY—Trial 50 large Perfectos postpaid \$1.00. SNELL CO., Red Lion, Pa.

WOMEN'S WANTS

SPECIAL VALUE, while they last. 6 Piece Ruffled Cottage Sets Neatly made of good quality White Muslin. Size of Lower Curtain 33x30. Size of Upper Curtain 44x31, 3 inch Ruffle. Tiebacks. Hemmed and Headed per set 50c. 6 Turkish Towels size 20x36 splendid Quality Double Loop Pure White unhemmed. Pay postman \$1.00 plus postage. Silks or velvets, large package 25c postpaid. NATIONAL TEXTILE CO., 85 B Street, South Boston, Mass.



The Service Bureau

A Department Devoted to the Interests, Welfare and Protection of A. A. Readers



Auto Accidents--What to Do

NO one wishes to have an automobile accident, yet at times an accident seems unavoidable and at such times it is important that those concerned know their legal rights and just what they should do in order to clear up the trouble quickly and to the satisfaction of everyone concerned. Prevention is always better than cure and it is needless to say that many accidents could be avoided by using less speed and more care, by knowing and observing traffic rules, refusing to take a chance and giving the other fellow more than half the road in case he insists on it.

In case of accident we suggest that you take the following action immediately:

1. Take the license number of the other car involved in the accident and also the license numbers of any cars which may contain witnesses to the accident. It is especially unfortunate if you are alone and the other car contains four or five who are willing to swear to evidence in court that is contrary to the facts. If you are alone try to locate witnesses to the accident at once.

2. If anyone was injured in the accident you are required to notify the

nearest police station at once. Even though no one was injured you should notify the police in case you believe the other driver was at fault. Although damaging a car in a collision is not a criminal matter and therefore the police have no jurisdiction, they can, upon your complaint, arrest the man for reckless driving, driving while intoxicated or other violations of the highway law.

3. Notify the insurance company in which you hold a policy.

4. Do not admit or deny your liability in the matter. There may be some conditions of which you do not know and everyone concerned in an accident is likely to be excited and not sure of the exact facts in the case. The first question following an accident is "Whose fault was it?" Frequently the person responsible makes the most noise and is loudest in his denunciation of the other driver.

Collecting Damages

Assuming that the driver of the other car was at fault, it is only fair that you should be reimbursed for the cost of putting your car in shape. Your chances of doing this will depend upon

a number of factors. It is only fair to state here that you will be able to collect only in case negligence can be shown on the part of the other driver. In case you, yourself, were negligent or in case neither party was negligent, loss must be accepted and charged up to bad luck.

The following are a few typical examples which may happen:

1. The owner may be insured against property damage, may accept responsibility and the insurance company may settle.

2. The owner may not be insured, but may accept responsibility and settle

Warning

ANY subscriber having dealings with Albert A. Becker or A. Becker, giving his address as Brocton or Arcade, N. Y., who have not received their subscription or insurance policy please communicate at once with E. C. Weatherby, Circulation Manager, Ithaca, New York.

tle for damage without legal action.

3. The owner may admit responsibility at the time and may later change his mind and refuse to settle unless sued for the amount.

4. The owner of the car may have no property, carry no insurance and although he may admit his liability he may be unable to settle and the chances of collecting through legal action are rather slight.

In all cases it is important that action be taken promptly. Probably the best advice we can give in case serious damage is done, is to immediately consult a good attorney. In many cases where the damage is small and where the owner of the other car refuses to accept responsibility, the easiest way out of the difficulty will be to forget the whole matter rather than to attempt to collect through legal action.

Where Car Belongs to Another State

It is particularly important to take quick action where the car responsible for the accident carries a license plate from another state. If the car is allowed to leave your own state, it becomes a rather difficult matter to collect damages through legal action. The action against a resident of another state must be taken in his own county and you, if you are trying to collect, will be obliged to go to the expense of attending the trial and testifying against him.

In such cases, results are sometimes secured immediately by having the man arrested for reckless driving. A lawyer should then be seen immediately for his advice as to what steps can be taken to collect before the one responsible for the accident can leave the state. If the man does get out of the state, and refuses to accept responsibility, it becomes a question of deciding whether the damage was serious enough to warrant the trouble of suing him and whether he has any property on which damages might be collected in case you win the case.

Can An Insurance Company Be Sued

We are frequently asked whether an insurance company can be sued in case they refuse to settle for an accident caused by one of their policyholders. The answer is that they cannot be sued. As a rule, we have found that insurance companies are fair in settling for damages where it was clearly the fault of the driver who held one of their policies. Unfortunately, some drivers attempt to collect for more than the damage sustained or in cases where it is doubtful who was responsible for the accident. In case an insurance company refuses to settle, suit can be brought against the person responsible for the accident and if the suit is won it then becomes necessary for the insurance company to settle the claim.

Another question frequently asked is whether the owner of a truck or the driver of the truck is responsible in case of accident. The answer is that the company owning the truck is re-



WANTED AT ONCE! 300 More Good Men

in New York and New England

to help introduce and retail Rawleigh's Good Health Products. You will be supplied from our new branch house just opened at Albany. Sell in town or country. Wonderful opportunity. Nothing new—no experimenting. On the market since 1889. Nearly 200 necessities needed daily in every home. Annual Sales over 37 million packages. Largest Company—over 15 million dollars capital—16 great factories and branches. Practically no capital, no experience needed. Quick, easy sales, repeat every 30-60 days. Big pay right from start. Stone, Vt., sold \$212.20; Reagan, N. Y., \$184.40 first week. Profits increase monthly. Thousands make more than they ever could before. You should do as well. Simply follow the same old time-tested Rawleigh Methods which have given consumers best values and satisfaction for 40 years. We supply everything—products, outfit, sales and service methods which secure the most business everywhere. Steady year round—no lay-off—no boss—you are sole owner and manager. For particulars write

THE W. T. RAWLEIGH CO., Inc.

DEPT. E-41AGR ALBANY, N. Y.
MUCH THE LARGEST INDUSTRY OF ITS KIND IN THE WORLD

Money Paid to A. A. Subscribers During April, 1929

Insurance Indemnities

To April 1, 1929.....\$128,142.50
During April 1929.....1,634.99

\$129,777.49

L. D. Mayo, Limerick, N. Y.....\$ 10.00	Mrs. Scott W. Phelps, Perry, N. Y.....130.00
Auto overturned—fractured ribs.	Auto collision—concussion of brain.
Albert V. Ritchie, Olean, N. Y.....14.28	William Joslyn, Baldwinsville, N. Y.....40.00
Auto collided with train—contusions	Auto accident—lacerated head and cheek.
Frances Milks, DeRuyter, N. Y.....90.00	Leo Leary, W. Bloomfield, N. Y.....30.00
Auto struck tree—fractured pelvis.	Travel accident—sprained ankle.
Susanna W. Nifong, Benson, Vt.....60.00	William Jarvis, Elba, N. Y.....20.00
Auto collision—fractured elbows.	Travel accident—contusions.
John F. Hannon, Berlin, Conn.....112.86	Walter Guillaume, Wolcott, N. Y.....20.00
Auto collision—fractured skull.	Car struck tree—lacerated hand and nose.
Floyd Alfred, Naples, N. Y.....17.14	Edward A. Rapke, Rome, N. Y.....42.86
Struck by auto—fractured ribs.	Auto collision—sprained thumb, contusions.
Ray Lindsay, Sandy Creek, N. Y.....22.86	H. S. Whitmarsh, Canton, N. Y.....10.00
Travel accident—fractured left side	Auto accident—contusions.
A. T. Case, Simsbury, Conn.....130.00	Mrs. Mabel Trank, So. Wales, N. Y.....30.00
Auto collision—fractured legs.	Struck by auto—fractured ribs, bruises.
Cynthia M. Spencer, Burlington, Pa.....30.00	Geo. A. Crane, Warsaw, N. Y.....25.71
Auto accident—contusions.	Team ran away—scalp wound.
Hattie More, Shavertown, N. Y.....90.00	John O. Ceder, Unionville, Conn.....40.00
Auto accident—sprained left ankle.	Travel accident—fractured collar bone.
Carrie L. Truman, DeRuyter, N. Y.....50.00	W. E. Tubbs, Maryland, N. Y.....40.00
Auto hit tree—bruises and injured leg.	Wagon tipped over—fractured scalp.
Richard W. Snyder, Pine City, N. Y.....14.28	Mamie E. Miller, Roscoe, N. Y.....25.00
Auto collision—contusions.	Auto collision, bruised back and shoulders.
Donald L. Davis, Odessa, N. Y.....60.00	Royal L. Sargent, Troy, Pa.....50.00
Travel accident—sprained ankle.	Auto accident—fractured ribs, lacerations.
C. W. Roan, Alfred Sta., N. Y.....30.00	Philip Dittmeier, Manorville, N. Y.....80.00
Cutter overturned—fractured big toe and nail.	Travel accident—fractured knee.
Clara D. Howard, Mannsville, N. Y.....90.00	Fred Frey, Macedon, N. Y.....10.00
Auto accident—fractured skull, bruises.	Travel accident—fractured shoulder and knee.
Emmet Eckert, New Kingston, N. Y.....90.00	
Travel accident—fractured leg.	
Scott W. Phelps, Perry, N. Y.....130.00	
Auto collision—fractured back and bruises.	

\$1,634.99

Service Bureau Claims Settled

James Patnode, Morrisonville, N. Y.....\$ 8.50	Floyd Alexander, Mineral Point, Pa.....6.95
(Commission on order delivered).	(Refund on goods returned).
Miss Mary Haste, Pulaski, N. Y.....1.53	Mrs. Russell Seekins, Ellington, N. Y.....20.11
(Refund on goods not received).	(Refund on goods not received).
Samuel Crease, Budd Lake, N. J.....56.00	G. H. Phillips, East Greenbush, N. Y.....3.00
(Refund on returned merchandise).	(Refund on goods returned).
Leon J. White, Madrid, N. Y.....10.85	H. L. Hodnett, Fillmore, N. Y.....4.65
(Refund on goods not received).	(Refund on goods returned).
Mrs. Mertie Alexander, Towanda, Pa.....10.70	Mrs. H. Burdick, Troy, N. Y.....6.50
(Returns for goods shipped).	(Refund on goods returned).
William E. Wilson, Whitehall, N. Y.....3.78	Manley Murray, Grand Gorge, N. Y.....20.00
(Refund on goods not received).	(Adjustment on live stock).
Mrs. Hattie Starcher, Orma, Va.....2.60	Earl Gates, Gouverneur, N. Y.....27.76
(Returns for work performed).	(Adjustment on dog complaint).
H. G. DeKay, Ulster, Pa.....97.80	Floyd Brandon, Roxbury, N. Y.....2.50
(Returns for goods shipped).	(Adjustment on live stock).
M. Mix, Schoharie, N. Y.....3.50	
(Refund on unfilled order).	
Wilson Hallenbeck, Catskill, N. Y.....5.35	
(Refund on goods lost).	

\$ 292.18

General Claims Adjusted Where No Money is Involved

Mrs. Marie Parnell, Cassedagua, N. Y.	Oscar L. Haines, Woodbine, Md.
(Order filled).	(Premium received).
Miss Grace Bartlett, Randolph, N. Y.	Mrs. Julian Chase, Port Leyden, N. Y.
(Premium received).	(Order filled).
Alfred H. Mason, Norwich, N. Y.	Mrs. Ralph Casper, Howe Cave, N. Y.
(Order filled).	(Order filled).
Homer Van Syckle, Blairstown, N. J.	M. N. Wadsworth, Oswego, N. Y.
(Adjustment on unsatisfactory goods).	(Order filled).
Leo Lippold, Darien Center, N. Y.	Miles Francis, Charlottesville, N. Y.
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sponsible in case the truck is on the company's business. If, however, the driver has taken the truck or car out without the permission of the owner on his own pleasure or business, the company is not responsible and any action for damages must be taken against the driver of the car.

Another point of interest, although it does not apply to collection of damages, is that in New York State a law was recently enacted making it necessary for a driver responsible for an accident, to satisfy the state of his financial responsibility before his driver's license will be renewed. This law was enacted in place of a law requiring compulsory automobile accident insurance which was recommended by certain interests. Although this law does not prevent accidents, it seems probable that it will work out well and will keep the habitual reckless driver off the road.

The Plains of Abraham

(Continued from Page 22)

was her own domain—her flowers, her gardens of shrubs, her bird houses of chestnut bark, her box hedges among the thinned-out trees, with pretty paths edged with whitewashed stones winding in and out among them. Her daffodils and wild-flower plots were in bloom, and from this day until the white frosts there would be no end of flowering things. Most of all she loved her kit-run-about which Jeems called Johnny-jump-ups, and her sweet Williams and bouncing Bets, the last of which was the plumed ancestor of all the carnations. From Daffodil-time until the autumnal marigold there would be hollyhocks, celandine, roses, lewpins and candy-tuff, larkin-spur and sweet-scented pease, sunflowers and catchfly, pinks and Queen Margarets, and a score more of grasses and flowers in her gardens, until a stranger coming upon her wilderness home would scarcely have believed that it lay at the edge of a raw frontier.

Running up to the borders of these gardens were Henri's work fields, beginning first, because of Catherine's artistic eye, with the gentler growths of husbandry—carefully groomed and plotted soil for herbs and vegetables, lettuce, sorrel, parsley, mallows, chervil, burnet, thyme, sage, carrots, parsnips, beets, radishes, purslain, beans, cabbages, squashes, asparagus, musk melons, cucumbers, and pompions; and beyond these marked-out patches lay the broader fields for heavier grains and foods, ten acres of well-tilled land in all, ending up against the hard-maple wood out of which, in the preceding month of April, Henri had taken his year's supply of fifty gallons of maple syrup and four times as many pounds of sugar.

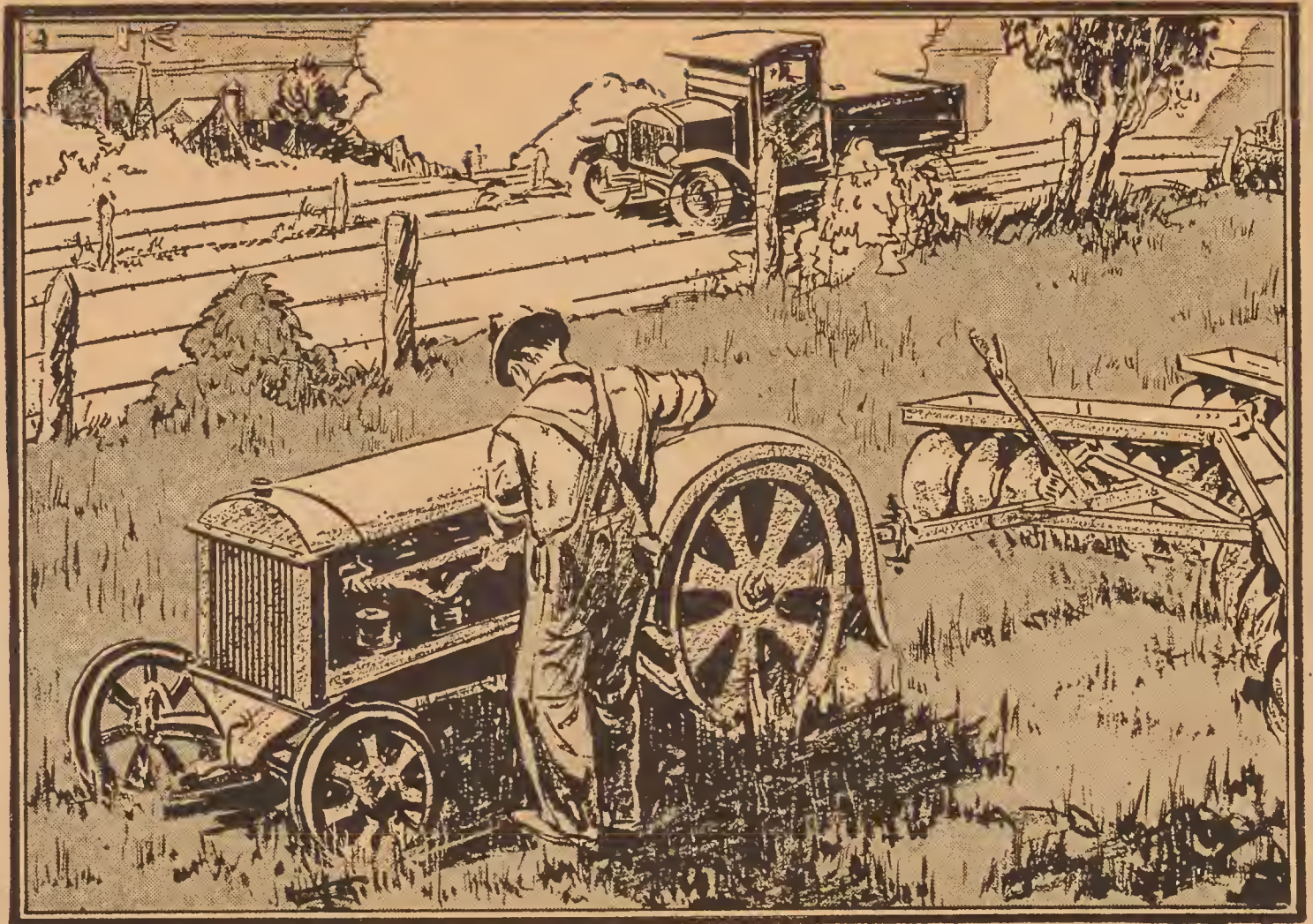
These precious possessions the four saw as they came down the green slope and not one half of them would Catherine have exchanged for all of Madame Tonteur's riches. Only a pallid glow of the sun was left, and the world was preparing itself for the close of day. Catherine's chickens were gathered about their shelter, and up from the fenced-in meadow, through which a creek ran to lose itself in the woods, their ox and cow had come to the log-barn gate.

Catherine was smiling at her husband, and in Henri's eyes was an answering light of happiness, when out of the peace and beauty which lay about their home rose a piercing and blood-curdling cry—a cry which seemed to stop every sound that was in the air, which reached the pigeons and swerved them affrightedly, which startled the phlegmatic ox at the gate, a cry of monstrous depth and vastness, and with that cry a wild figure came toward them from its hiding place in the greening shrubbery of Catherine's garden.

With a lurch of his shoulder, Henri sent the bag of corn to the ground, while ahead of him Jeems swung his long gun into the crook of his arm and Odd stiffened and let out a sullen growl. The scraggy and mysterious figure advanced up the slope, and Jeems had looked to his flint and priming and stood with a ready thumb on the hammer of his weapon when from behind her husband and her boy Catherine gave first a startled gasp, then a little scream, and sped past her protectors to meet the advancing stranger with open arms.

"It's Hepsibah!" she cried. "It's Hepsibah!"

(To be Continued Next Week)



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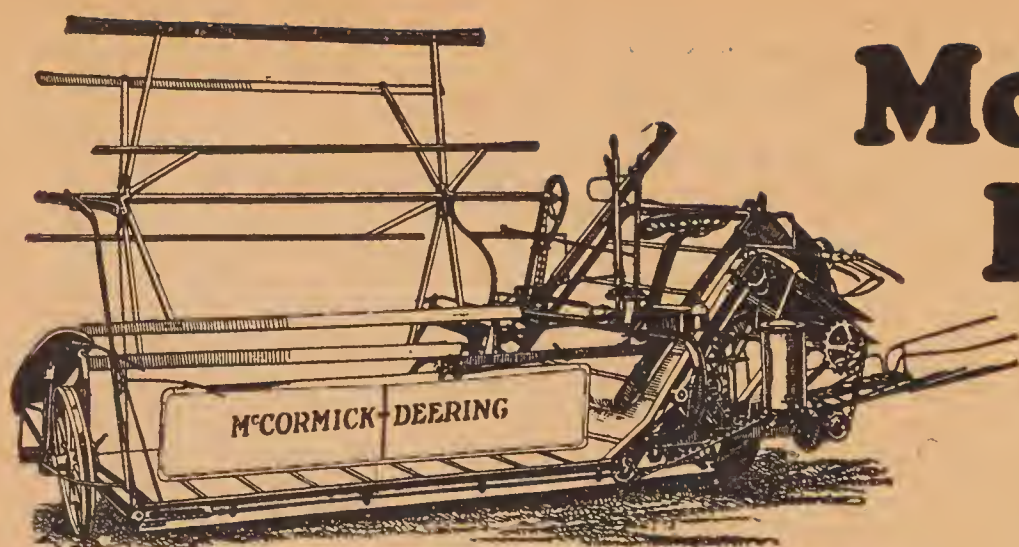
May 25, 1929

Published Weekly



Memories of Other Days Long Past—See Editorial

A. A. Farm Bureau -- State Fair Horseshoe Pitching Tournament Announced—Page 5



McCORMICK- DEERING Grain Binders

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IN order to build the one best binder it is possible to produce, the Harvester Company has combined the popular McCormick and Deering grain binders into one improved perfected machine. The McCormick's *great strength and ability to withstand severe abuse* and the Deering's *exceptional lightness of draft* have been brought together for you.

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There are many improvements on the new McCormick-Deering that your old machine does not have. They accomplish more in less time, with fewer stops in the field, have longer life, lighter draft, and are easier and more comfortable to operate. You will certainly want to get acquainted with these improvements. Check them against your old machine. Your local McCormick-Deering dealer will help you by showing you the new McCormick-Deering and pointing out the features your old machine does not have.

McCormick-Deering binders are built in 6, 7, and 8-foot horse-drawn sizes. Also, the 10-foot tractor binder for operation from the power take-off of the McCormick-Deering Tractor. See these modern binders at the local dealer's store.

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Answers to Questions on the New Laws on Schools and Roads

WE are getting a large number of questions from our readers about the new farm legislation recently passed by the New York State legislature and signed by Governor Roosevelt.

We are glad to note your interest in these very important laws, so feel free to write us about anything that is not clearly understood. Watch these columns from week to week for explanations.

Here are some answers to questions that have recently come in.

1. We notice that the new school law says that the local tax of four mills shall be levied on the TRUE valuation instead of the ASSESSED valuation of the property in the school district. What is the difference?

The true valuation is supposed to be the actual value of your real estate. It is obtained by dividing your assessed valuation by the town rate of assessment. The town rate of assessment is set by the State which sends out men into different localities to determine the actual sales value of property for that particular locality.

For example, suppose that the assessed value of the real estate in your district is \$60,000, and suppose that the town rate of assessment for your township is 75 per cent. Then if you divide your assessed valuation of \$60,000 by 75 per cent, you will find that your true valuation is \$80,000.

A four-mill tax on your \$80,000 would give you \$320, the amount which you would have to raise by local taxes to run your school. The State will pay all of the rest of the difference between what you actually spend for school expenses and the \$320. It is not necessary to spend the full \$1300 for school expenses.

2. Why was the TRUE valuation instead of the ASSESSED valuation taken for the basis of obtaining local school taxes?

Because the State wishes to apportion all of the school moneys on a uniform basis. The rate of assessing property varies greatly in different communities, but the true valuation ought to be nearly the same throughout the State.

3. Will districts with high valuations get any help under the new law?

Yes. The law provides that all one-room school districts, no matter how rich, will receive at least \$425 from the State.

4. What will the new gasoline tax be used for?

For building and maintaining roads, and nothing else. The gasoline tax is assessed on the principle that those who use the roads should pay for them.

5. If I use gasoline for other purposes, do I have to pay a tax?

Yes. You pay the tax when you buy the gasoline, but you can later get a refund from the State for tax paid on all the gasoline not used for vehicles on the highways.

6. How do I get these refunds?

This was explained last week in American Agriculturist. First, keep a record of every gallon of gasoline that you use on the farm for other than road purposes, and get receipts from the gasoline station when you purchase the gas. Second, write to the Department of Taxation and Finance at Albany, New York, for the proper forms on which to make application once a month for refunds.

State Buys Land for Reforestation

CONSERVATION Commissioner Alexander Macdonald has made a contract for the purchase of 507 acres of land for reforesting at a cost of a trifle less than \$3.50 an acre. The land contracted for is located in Cortland County, about ten miles north of the city of Cortland, and a short distance east of the village of Scott. This, when the title has been approved by the Department of Law, will be the first parcel of land purchased by the state under the new Hewitt reforesting law.

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For Heavy Yields of Potatoes You Must Spray!

In the Keystone 400-bushel Club in 1927, only two 400-bushel crops were grown without spraying. These were dusted (Copper sulphate and lime). Home-made Bordeaux Mixture was used (Copper sulphate and lime), three nozzles to the row and 200 lbs. pressure. An average of 11.3 applications was made by this whole group in the fight against late blight, which was exceptionally bad. The 600-bushel growers sprayed 14.5 times.

(Courtesy Stockman & Farmer)

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Nichols Copper Co.

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How to Lower Potato Growing Costs

Keen Competition Increases the Need for Close Figuring

By E. V. HARDENBURG
New York State College of Agriculture

MAY is the month when the upstate potato grower goes into action. Final plans as to fields to be planted, source of seed, kind of fertilizer, seed treatment, green-sprouting, seed cutting and spray or dust materials are made. These are items on which success and profits must depend. No amount of hard work during the growing season can make up for mistakes made up to planting time. While the New York grower has the advantages of nearness to market and good potato soil and climate, his potatoes are every year "up against" severe competition with potatoes from Maine, Michigan, Wisconsin and even far away Idaho. To meet this competition successfully, he must reduce his costs to a minimum and improve his market quality by practicing those methods which have "proven out" by experiment and experience of the better growers.

Consider the Cost

Cost of production records kept over a period of years by many growers show that potatoes cannot be grown properly and delivered at primary storage for less than approximately \$100 per acre. The more successful growers have a cost ranging from \$125 to \$175 an acre. With potatoes averaging less than 50 cents a bushel to the grower last year and an average acre cost of \$100 per acre, the grower who got no better than 114 bushels yield (this being the state average) paid 37 cents a bushel or \$43.00 an acre for the privilege of being a potato grower. A minimum yield per acre of 200 bushels was necessary last year for

the average grower to break even on costs. Therefore, the potato grower who cannot figure on fairly large yields because his soil is poorly adapted or because he believes he cannot afford the necessary investment in good seed, fertilizer and spray materials had better carefully consider whether he should grow potatoes at all. Even with the slight decrease in acreage predicted for 1929, the prospects for potato prices next fall are not bright enough to justify optimism on the part of him who usually harvests only 150 bushels or less per acre.



A weeder is an excellent tool with which to kill weeds but in order to be effective it must be used before the weeds get a start.

The most costly item in production is cultivation. Cost records prove it. The primary object of cultivation is weed control. Some way to reduce the number of row cultivations during the late growing season. It is in the late season when most damage is done to the surface roots by too close and too deep tillage. Some growers even cultivate during dry periods in August to conserve moisture regardless of the absence of weeds. Experiments indicate that this is not only wasteful of labor, but injurious to the plant. Early season tillage is most economical and effective. Broomsweep weeders, such as that illustrated, or a peg-tooth harrow are recommended for this purpose. They cover ground rapidly and may be used crosswise or diagonally of the rows soon after planting to level the ridges left by the planter and destroy the weed seedlings which develop before the potato plants show. In fact, no harm is done to plants up to 4 inches high where the seed is planted at a proper depth.

More and Better Seed

How often we have heard it said that good seed is fundamental to successful crop production. Experiments and field tests have consistently demonstrated that hill selected and certified seed potatoes outyield common seed by a wide margin. This is to be expected when one considers the continuous effort and training required of those growers who are now producing certified seed. The startling fact is that only a small

(Continued on Page 6)

Why Dairy Cows Fail to Breed

Contagious Abortion Not the Only Cause--How to Treat Other Cases

By J. W. BARTLETT
New Jersey State College of Agriculture

THE function of breeding dairy cattle is to give birth to a normal calf once each year. Therefore, the degree of fertility within a herd has a direct bearing upon the profits from that herd. No breeder, or milk producer only, can afford to keep unproductive animals. It is certain that fertility may and probably is governed by an hereditary force and some strains of cattle are, in general, better breeders than others. The problem which faces many of our dairy farmers today is not one of the degree of fertility of his cows, but the apparent lack of fertility or what we know as sterility. In other words, it is the absolute failure of many good animals to breed at all.

Sterility on the Increase

Beyond question sterility has been on the increase in recent years and it would sometimes appear that the better bred the stock, the more prevalent the inability to breed seemed to be. That purebreds should have more cases of sterility than grades is but natural for our purebreds are kept under more unnatural conditions than are our grades. Excessive condition and lack of exercise and also because of traffic in purebreds there is danger of resulting accidents and diseases. On the other hand, it cannot be stated that high class animals are more subject to breeding troubles than grades. The valuable animals attract more attention than ordinary grades.

As unfounded as the thoughts concerning grades and purebreds are statements that all sterility troubles can be blamed on contagious abortion or that breeding troubles and abortion go hand in hand. Abortion may be responsible for the failure of some cows to get with calf, but

breeding troubles may be caused by several things, both in the male and the female.

Every breeding female of course starts out in life as unfertile, rising to fertility and then increasing to a peak early in maturity, after which she gradually declines until she becomes sterile. The causes of sterility during her productive life may be of three kinds—*anatomical*, which are due to injury or deformity; *physiological*, or failure to produce eggs or ova; and *psychological*, or fear at the time of service. That type of breeding trouble which is due to injury or deformity in cows is rare and the dairyman usually sees such a cause of trouble and sends the unprofitable animal on to the butcher.

One Cause of Failure to Breed

It is the physiological cause of trouble which baffles the dairyman—he cannot see within the generative organs of the cow and neither does he know just what may be the cause of a failure in his calf crop. Heifers and mature cows alike sometimes fail to come in heat or show any signs of being ready to receive service. Sometimes cows which have bred regularly suddenly appear to stop coming in heat. Many times in the case of cows and very often with heifers the trouble is due to what is known as a "false Corpus Luteum", or "yellow body". This persists on the ovary after a normal expulsion of the egg which should occur each twenty-eight days unless the female becomes pregnant. The "yellow body" is scar tissue which forms on the ovary at the point where the normal egg is liberated for fertilization by the sperm of the male, in the tube leading from the ovary to the uterus. The function of

the yellow body is to prevent further action of the ovary after conception has taken place in the uterus. The false yellow body merely sets up a condition on the ovary which prevents any development of eggs for the time being and the cow appears settled when in reality she is not. This is a case for a veterinarian. It is not serious, but the layman should not attempt to expel the yellow body. The writer has seen a group of ten heifers treated in one day and noted six of them in heat on the second day following. This condition is of course not natural, but the exact cause of persistent yellow body is not known.

Pus in the uterus and cystic ovaries are more serious and more difficult to overcome. No doubt these conditions may be the aftermath of abortion or the presence of the abortion germ in the blood stream. Both are conquerable and if the cow is a good one, the services of a qualified veterinarian should be secured.

Cows May Be Too Fat

Fatty accumulation around the fallopian tubes which lead from the ovaries to the uterus and degeneration of the ovaries and tubes may cause no end of breeding troubles. The show cow which has received rations high in carbohydrates and has been kept in fine condition during a fair season often fails to get with calf. The whole system is probably sluggish and needs rebuilding. Nothing is better than a good flushing out by feeding a good green legume crop or, better yet, turning to pasture. Cows, like ourselves, get run down during the winter months, maybe because of being indoors or perhaps from lack of sunshine. At any rate we believe that summer sunshine and good green roughage is a tonic which will

(Continued on Page 8)

Editorial Page of the American Agriculturist

AMERICAN AGRICULTURIST

Founded 1842

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10 N. Cherry Street, Poughkeepsie, or
461 Fourth Avenue, New York, N. Y.

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Vol. 123 May 25, 1929 No. 21

Another Memorial Day

THE other day in the city of Poughkeepsie, Charles Woodin, eighty-seven, president of the 108th Regimental Association, arose at a meeting of the organization, attended by only three of the eight living members, and said:

"This association cannot be longer carried on. There are not enough members."

Thus rapidly passes the Order of the Grand Army of the Republic. Taps is sounding the close of a fateful and dramatic chapter of our history.

It seems only yesterday that we stood as a child in a crowded village street on Decoration Day and proudly watched Father go marching by with a large company of his Civil War comrades. It was only the day before that, as history measures time, when those same men were just boys and a part of a great host following the drums and the flag through Dixie. Where are they now? The ranks have closed up and up, until only a half dozen old men answered the roll call in any county, and each post is writing *Finis* to its chapter.

Was all the sacrifice and suffering of that conflict of sections worth while? Is the cost of any war ever justified? Who can say?

But imagine the feelings of an old soldier when he comes to think, as many of them do, that all he and his companions suffered and endured was in vain. Whatever their bitter thoughts, whatever their joys and sorrows, the Civil War veterans are nearly gone from the stage and other scenes and other actors have taken their places. May we do as well.

What Scouting is Doing for Boys

THE National Council of Boy Scouts of America has been holding its annual meeting in New York City, and it was our privilege to attend some of the sessions.

One of the most hopeful things for the future is the fact that many thousands of the leading business and professional men of the country are giving so much of their personal time and effort to the leadership of boys. No one can attend one of these sessions without being impressed with

the tremendous good that scouting is accomplishing for our young manhood.

In the same breath, mention ought to be made also of the work that is being done for boys and girls through the 4-H Clubs.

We pay far more attention to Young America than our fathers did. We need to. Dr. John H. Finley, one of the editors of the New York Times, in addressing the Boy Scout meeting, pointed out that more than half of the crimes in America at the present time are committed by boys under twenty-one. Hence the need of such organizations as the Boy Scouts and the 4-H Clubs. Very few scouts have ever been accused of crime.

Dr. Finley also said that scouting is something more than just keeping boys out of mischief. It teaches them how to work with their hands and gives them constructive work to do.

"The time is coming," said Dr. Finley, "when the work of America will be done in a four or five hour day. Then there will not be work enough to keep the men out of mischief, and certainly not to keep boys busy." No one can be a good citizen who has not learned to work."

One of the speakers at the meeting asked those present who lived on farms before they were twenty-one to stand up. Practically all of them are now city residents. Of those present, ninety-six had come originally from the farms, seventy-three from the cities, and twenty-one from the small towns. "There again you have evidence," stated the speaker, "that country bred people are running the cities and taking the lead in business and the professions."

There is no place in the world that teaches the habit of work and the habits of responsibility like the farm, and this is the main reason why farm bred boys and girls usually succeed. But in these later days, even farm boys have more leisure than they once had. Hence the need and opportunity for such fine organizations as the 4-H Clubs and the Boy Scouts, which has an especially organized division for country boys called the Lone Scouts.

Parents with boys of scouting age, or boys themselves who are interested in the fine and interesting work of scouting may write AMERICAN AGRICULTURIST for information on how to get started as a Lone Scout.

Advertisements A. A. Refuses

"Your letter of May 10th received and in reply will say you evidently appreciate your subscriber's yearly subscription price more than you do our advertising bill of several thousand dollars a year.

"We cannot see where or why you have any right to stop our advertisement. If we care to take this matter to higher authority on advice of our counsel we can compel you to continue on with our advertisement."—A. R. S.

THIS man is perfectly right in what he says in the first statement in the above letter.

We appreciate a reputable advertiser's business. No magazine could stay in business long today without advertising, but at the same time if we have to make money by accepting advertising that we cannot recommend to our subscribers, we will not attempt to stay in the publishing business. We turn down a great many thousand dollars' worth of advertising every year because we are not sure that our readers will get value received in dealing with some of the concerns.

You might be interested in knowing some of the kinds of advertising that AMERICAN AGRICULTURIST refuses to accept. Here they are:

1. Advertisements that ask for an advance listing fee for selling farm property.
2. Advertisements of livestock breeders who claim to "buy back" the offspring of animals sold.
3. Advertisements of dangerous or habit forming drugs.
4. Advertisements of patent medicines and of

free medical treatments that make absurd claims of cure.

5. Fortune telling, massage, or matrimonial offers.
6. Advertisements of home work, which are real schemes to sell samples of merchandise for more than it is worth.
7. Indecent, vulgar or offensive advertising.
8. Advertisements of questionable financial firms, commission merchants of bad repute, bucket shops, etc.
9. All advertisements offering something for nothing, or those that make exaggerated or false claims.
10. Any other advertising that may cause injury or loss to any man, woman or child in the great AMERICAN AGRICULTURIST family.

One of the most satisfactory jobs we have had in a long time was to read more than eight hundred letters in our recent advertising slogan contest, in which was stated in every letter the fact that AMERICAN AGRICULTURIST guarantees its advertising.

We mention these facts because good advertising of reputable business concerns is an important part of any magazine, from the standpoint of interest, information and real service to readers. Hence our determination to see to it that every advertisement in our columns is worthy of your attention and confidence.

For Better Egg Grades

ALL poultrymen will be much interested in the report given in our poultry columns this week of the facts brought out at the hearing at Albany the other day on the need of revising the New York State egg grades. There is such need without doubt, and the Department of Agriculture and Markets is to be congratulated for taking action in the matter.

We have maintained for a long time that the present egg grades were not working out to the satisfaction of the producers. We particularly want to emphasize the point also that many consumers are not getting high quality eggs under the present system of grading. The consumer pays the highest price for what he thinks are fresh eggs only to find that they have been kept in a small retail store window too long or that they have been slipped by the law in some way to be sold for other than what they really are. There are too many cold storage eggs being sold as "Grade A" eggs.

The result is sure to be a decrease in the consumption of eggs and it is up to the whole trade, including farmers, inspectors and dealers, to work out a more practical system of grading, and then to live up to its provisions.

Eastman's Chestnut

NO one appreciates a good story more than a Scotchman, so that perhaps is the reason so many stories are told on the Scotch. Here is a good one that I have heard recently:

A Scotchman went into a bank and wanted to know how much it would cost him to borrow \$50. The banker told him it would be \$3 a year at the rate of 6 per cent, provided he had the proper security. The Scotchman offered as security two one-thousand dollar bonds, which the banker accepted. The bonds were deposited in the vault of the institution.

The transaction was completed and the Scotchman went out with a friend.

"Now," said the friend, "will you please tell me why you borrowed the small sum of \$50 when you had two perfectly good thousand-dollar bonds in your possession?"

"That's easy," said the Scotchman. "You see, I needed a safe place to keep the bonds and if I hired a safe deposit box in that bank they would have charged me \$10 for it!"

Barnyard Golfers At It Again

Announcement of A.A.--Farm Bureau--State Fair 1929 Horseshoe Pitching Contest

AS soon as the first robin begins to chirp, for the last several years, the boys, old and young, throughout American Agriculturist country have been getting out the old horseshoes to practice up for the big State Fair tournament at Syracuse.

For five years now American Agriculturist, cooperating with the Farm Bureaus of New York and with the New York State Fair, has conducted a statewide tournament at Syracuse, and each year the contest has grown bigger and more interesting. The tournament this year will be the best yet. The Fair will be held August 26 to 31.

One of the surprising things about the tournaments is the increase in skill of the pitchers. For example, last year Walter Shackleton, who won the first cash prize of \$50, had a percentage of ringers to shoes pitched of .434. In other words, nearly every other shoe that he threw was a ringer.

A Contest for Amateurs

When you stop to think that these men are not professionals, that they have gained their skill by practicing on the home farms between spells, and that the games at Syracuse are pitched under nervous conditions with large crowds watching, you can get some idea of what it means to throw so many ringers. If you do not believe it, just try it.

But do not be discouraged. These men's percentages were very small when they began to practice back home.

Another surprising thing that came out of the tournaments is the fact that young boys in their teens often are able to defeat the older men.

The contest begins each year right back on your home farms and in your own neighborhoods. Then under the auspices of the County Farm Bureau Agents, county elimination contests are held in the different counties and the winners in these county contests go to the State Fair at Syracuse to take part in the American Agriculturist-Farm Bureau-State Fair contest.

All of the candidates, who go to Syracuse, will have their transportation paid to and from their home, the winners receive substantial cash prizes, and the champion gets a beautiful medal in addition.

American Agriculturist sponsors these games because we believe in more fun for farmers and because this game is one of the finest outdoor sports ever invented. In all of the contests there never has been any lack of good feeling or real sportsmanship.

So if you are interested in the fine old game of horseshoes, telephone or write your County Agricultural Agent and tell him that you want a try-out in the county elimination contest. This is usually held at the Farm Bureau picnic sometime during the summer or at a local fair. He will tell you all about it. Then study up the special and official rules given on this page, get out your horseshoes, and go to it. Practice is the secret of success.

A Book on the Game

If you are really interested and want to study more in detail about the game, send forty cents to the National Horseshoe Pitchers' Association of America at London, Ohio, and tell them to send you their little book entitled "Horseshoe Pitching".

There follow on this page the special rules which will govern our contest at Syracuse, and the official rules which will control in all cases where there are no special rules.

We call your particular attention to the fact that we are not asking an alternate to go to the Fair this year. Heretofore we have asked the counties to send their best man, and the second best man to go as alternate. The alternates have been supposed to help with the contest at Syracuse in keeping records, etc., but some of them have been rather careless in sticking to the job, so this year the State Fair is paying the expenses of only one man from each local contest. The players them-

selves will be asked to aid in keeping the records. The State Fair management has also been especially generous in assuming more of the burden of furnishing the cash prizes.

We suggest that you save the following rules very carefully. Watch the columns for future issues of American Agriculturist and your Farm Bureau News for more instructions and suggestions for the coming tournament.

Special Rules for the Contest

1. Tournament to be singles only.
2. Each county entering the State Fair tournament must send one man.
3. An entrance fee of two dollars will be required of all contestants, but this will be returned to the player unless he fails to finish. It is fair to everyone that those who start shall stay with the tournament until it is completed.
4. Counties must do their own eliminating and may decide their own rules for such eliminating. In order to avoid misunderstandings, no candidate will be accepted from any county without the approval or certification of the County Agent of that county.
5. All county Farm Bureaus must certify to American Agriculturist the names of those candidates who will enter. We should have an early report of the counties that will compete and then a report of the actual candidate as soon as his name is obtained by the county.
6. Contestants must report at the American Agriculturist headquarters at least one hour before the contest starts so that the schedule can be arranged. Contest will start at eleven A. M. on Tuesday of State Fair Week. Contestants must remain at the courts all of the time that the pitching is in progress unless excused by the tournament manager.
7. This contest is for amateurs only. An amateur for these tournaments is defined as one who has not won any prize money in any national or state tournament, and no entry will be received from the winner of the first prize money at the American Agriculturist state tournaments.
8. The games will consist of twenty-five points, but the tournament committee reserves the privilege of using some kind of an elimination contest if it becomes necessary on account of a too large number of entries.
9. The method of giving prizes has been arranged so every contestant will have a chance at the prize money. Seven cash prizes will be given by the State Fair management to the winners as follows: first, \$50; second, \$40; third, \$30; fourth, \$20; fifth, \$10; sixth,

\$5; and seventh, \$5. In addition, the winner of the first prize will also be given a beautiful and appropriate medal by the American Agriculturist.

Official Rules of the National Horseshoe Pitchers' Association

The following are the official rules of the National Horseshoe Pitchers' Association:

Grounds and Courts—Rule 1.—The grounds shall be as level as possible. Pitcher's box shall be filled with Pottery's clay or any substitute of a like nature; the clay must be kept moist and worked to a putty-like condition and to a depth of not less than six inches and at least 18 inches around the stake.

Pitcher's Box—Rule 2.—The pitcher's box shall extend three (3) feet on either side to the rear and front of the stake. Said box shall be constructed of material 2x4 and shall not extend more than one inch above the level of the ground. Where several courts are constructed a 2x4 shall be laid full length of such courts three feet in front of the stakes. In delivering the shoe into the opposite pitcher's box a contestant may stand anywhere inside the pitcher's box. For indoor pitching the boxes shall not exceed six inches in height above the adjoining grade.

Stakes—Rule 3.—The stakes shall be of iron, one (1) inch in diameter, perpendicular, inclined two (2) inches toward the opposite stake and extending ten (10) inches above the ground in the pitcher's box. On single courts the stakes shall be set in the center of the pitcher's box. Where several courts are constructed the stakes shall be not less than eight (8) feet apart, in a straight direct line where possible.

Horseshoes—Rule 4.—No horseshoe shall exceed the following regulations: seven and one-half (7½) inches in length, seven (7) inches in width, two and one-half (2½) pounds in weight. No toe or heel calk shall measure over three-quarters (¾) of an inch in length. Opening between the calks shall not exceed three and one-half (3½) inches, inside measurements. No horseshoe constructed in a freak design will be considered regulation.

Regulation Games—Rule 5.—A standard regulation game shall consist of 50 points and the contestant first scoring this number after all shoes have been pitched, shall be declared the winner. In all match and exhibition games between two contestants, eleven (11) games of 50 points each shall be an official series, the one winning six (6) games shall be declared the winner.—See modifications above.

Pitching Distance—Rule 6.—The standard regulation distance shall be

forty (40) feet from stake to stake, measuring where the stake enters the ground. For women in contests and tournaments the distance shall be thirty (30) feet.

Pitching Rules—Rule 7.—No contestant shall walk across to the opposite stake and examine the position of his opponent's shoes, before making his first or final pitch. All contestants shall pitch both shoes from the pitching box, into the opposite pitching box or forfeit the value of one (1) point to his opponent. All contestants shall, when having first pitch, after delivering both shoes, stand back of a line even with the stake and out of the pitcher's box. Any contestant failing to comply with this rule shall forfeit the value of such shoes pitched. Any contestant delivering his shoes landing outside of the opposite pitcher's box shall forfeit the value of his pitch. Wrapping the fingers with tape, or the wearing of gloves shall be permitted in any or all games. If at any time a shoe is broken, such as striking another shoe, the frame of the pitcher's box, the stake or other cause, such shoe shall be removed and the contestant entitled to another pitch.

Ringers—Rule 8.—Any shoe to be scored as a ringer shall encircle the stake far enough to permit a straight edge to touch both heel calks and clear the stake.

Foul Lines—Rule 9.—A foul line shall be established three (3) feet in front of the stake and any pitcher stepping over the foul line in delivering his shoe shall lose the value of his pitch and no score shall be credited to him.

Foul Shoe—Rule 10.—A shoe that does not remain within six (6) inches of the stake, in all National Tournaments and match contests, shall not be entitled to score. (This does not apply to informal pitching or games where the players decide otherwise.) If a shoe strikes the frame of the pitcher's box or other object such shoe shall be considered a foul shoe and shall not score.

Points—Rule 11.—The most points a contestant can score in a single game shall be fifty (50) points. A pitcher shall be credited with all ringers pitched. If a shoe when thrown moves another shoe, both shoes are counted in their new positions.

Ties—Rule 12.—All equals shall be counted as ties. If both contestants have one shoe each an equal distance from the stake, or against the stake or ringers they shall be counted tie and the next closest shoe shall score. In case of all four shoes being tie or equal distance from the stake, or four ringers, no score shall be recorded and the contestant who pitched last shall be awarded the lead.

Measurements—Rule 12.—All measurements shall be made by use of calipers and straight edge.

Coaching—Rule 14.—No contestant during the progress of a game, contest or tournament, shall coach, molest or in any way interfere with a pitcher in any manner, except that in four-handed games partners shall have the right to coach each other.

First Pitch—Rule 15.—At the beginning of a game the contestants shall agree who shall have the first pitch either in single, three or four-handed games, by the toss of a coin, the winner to have his choice of first pitch or follow. At the beginning of the second game the loser of the preceding game shall have the first pitch.

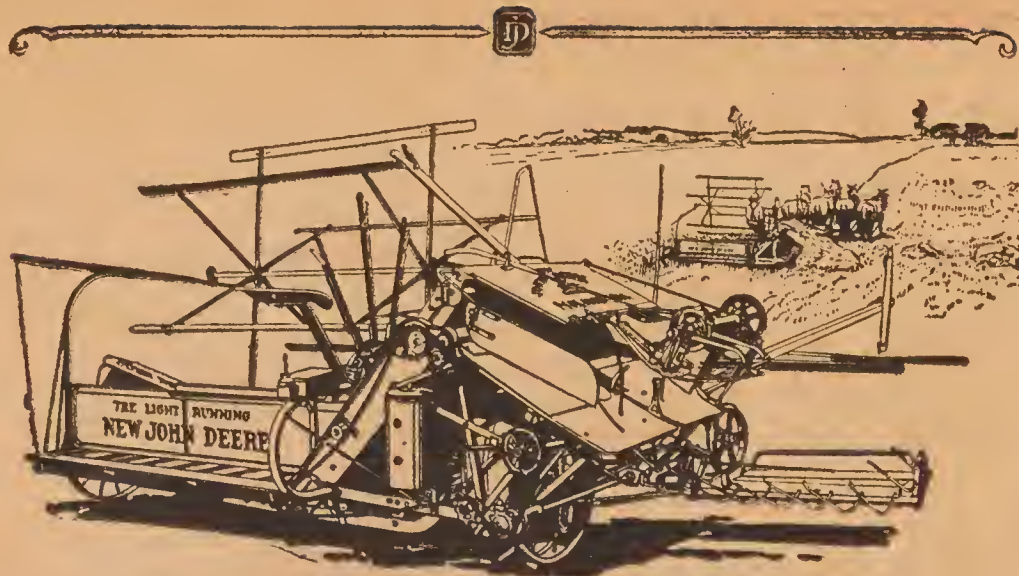
National and State Tournaments—Rule 16.—In all championship tournaments the Rotation Group method shall prevail. In each group each pitcher will pitch each other one game. Same procedure shall prevail in the finals. All tie games shall be pitched off. No championship shall be won or lost, only in a legal tournament.

Disputes and Final Jurisdiction—Rule 17.—In case of any dispute, or where the rules do not specifically cover a disputed point, the referee or

(Continued on Page 20)



Will it be a ringer? A tense moment in a former American Agriculturist-Farm Bureau-State Fair Horseshoe Pitching Tournament.



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IF your binder caused delays during last harvest—if it missed bundles, if it pulled too heavy, if it was continually breaking down—you can afford a new binder this year.

In fact, if your old binder caused delays, you can't afford to be without a new binder. Time is money in the harvest season. A troublesome binder wastes both time and grain.

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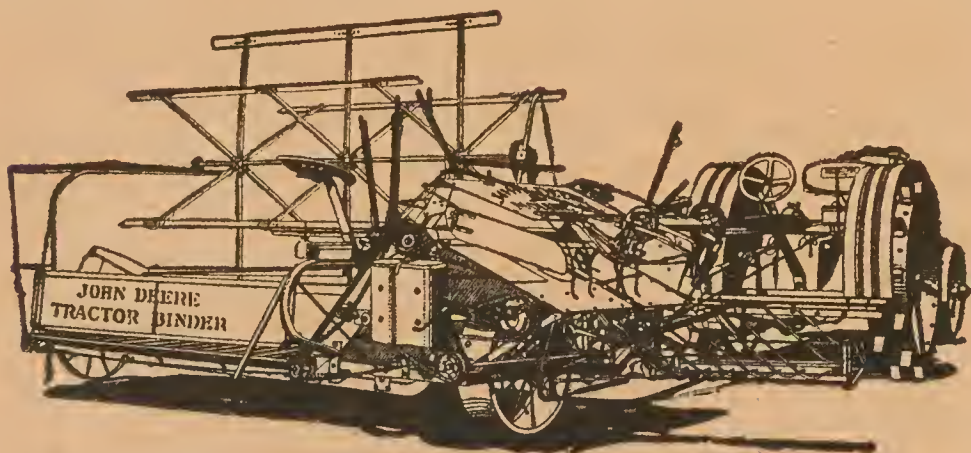
Wide bull wheel with wide, high lugs drives the binder. Durable steel drive chains are so arranged

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A.A.'s Western New York Farm and Home Talk

Warm Weather Needed for Pollination

AT last the heavy rains have ceased

and with a week of sunshine—more or less—we have been able to get on the land. This is a season when tile earn their cost and enable us to get on the



M. C. Burritt

by May 15th, the date of sowing in 1928. But it is late enough. It will be May 20th before all the spring grain is sown around here.

In bud and tree development we are actually ten days ahead of last year. This season we had finished the delayed dormant spray two days earlier than we began it in 1928 and the second or pre-pink application was finished on May 11, whereas it was not begun until May 14, last season. So perhaps we are not as bad off as we think we are. Many have neglected the first spray application altogether, partly on the excuse of being too busy, or the ground too wet, but probably really because of cost and uncertain return. Because of the continuous rainy periods these orchards are almost certain to be infected with scab.

Fruit Trees are Blooming

By May 18, apples will be in full bloom in Western New York, or perhaps earlier with real warm weather. Kieffer pears are now (May 12th) in full bloom and Bartletts are just coming in. Dutchess apples are just breaking open. In late varieties the blossom clusters are just separated. The bud development has been unusual this season. Warm weather in late March and early April stimulated development but this was checked by cold, wet weather in late April and early May. Partly as a result the center buds of the clusters have opened to show the pink prominently before the cluster has separated. Moreover, bud development has been very uneven in the region and even in the same orchard. Some trees have been several days ahead of others of the same variety. This may be the result of so much cold water in the soil. Higher, dryer, better drained soils have trees farthest developed. Water content of the soil has been a more important measure of bud development than distance from the lake or elevation or location.

In general, the fruit bloom will be heavy throughout western New York. There are some reports that Bartlett pears and Baldwin apples are blooming more lightly than others. There seems to be considerable variation in bloom in different orchards possibly due again to soil conditions. We are just beginning to realize that we have planted many acres of orchard in western New York on soils ill adapted to fruit because of their heaviness and poor drainage.

Kieffer pears are blooming full as are many orchards of Bartletts. The Japanese plums bloomed full but the European varieties did not. Both sweet and sour cherries produced nearly 100 per cent of bloom and as the weather was favorable for pollination they should yield a good crop. Frost injury was very slight here. Early apple varieties seem to be budded for a full crop except in the case of varieties or orchards which bore heavily last season. I have such a case with Hubbardson and Wealthy. The Hubbardsons I

By M. C. BURRITT

am grafting over to Greenings. The

Wealthys are beginning to show a tendency to annual bloom which I think is the result of heavy pruning and thinning. At least our bud promise in Wealthys is much better than usual in the off year. Twenty Ounce is budded exceptionally full. King bloom is scattering. Greenings bloom is fairly good. Spy is only fair. As a whole, apples will probably average to bloom above 75 per cent in this region.

The crop now depends on favorable weather for pollination during the coming week. This means sunshine and a temperature sufficiently high—above 65 degrees Fahr.—so that bees will work. What will the week bring forth? Last year it was disastrously cold, cloudy and rainy.—Hilton, N. Y., May 12, 1929.

How to Lower Potato Growing Costs

(Continued from Page 3)

percentage of potato growers in upstate New York used any but common seed last year. Good seed usually costs more than poor seed. Whether it pays depends on the increase in yield per acre and the improvement in market quality it will deliver. These are the factors on which both our profits and our reputation most depend. The value of good seed and the need for its more extensive use is well illustrated in the following table:

Quality of Seed Potatoes Used on 359 Farms in Western New York

Kind of Seed	Number of Farms	Per cent of Farms	Average of Seed per Acre	Total Yield (bushels)
Common	308	85.8	12.8	137.4
Both common and certified	24	6.7	14.2	169.0
Hill and tuber unit selected	13	3.6	14.7	202.8
Certified	14	3.6	13.7	217.5
Average and totals	359	100.0	13.0	144.9

The yields obtained by the growers who used good seed were far above the average of 145 bushels per acre for the 359 growers canvassed. The difference in yield from certified seed and from common seed was 80 bushels per acre. Some of this difference is of course probably due to the fact that the growers using certified seed also used other approved methods of production. Even the best certified seed can be bought at about \$1.00 a bushel f. o. b. this spring.

The average amount of seed per acre planted by a large group of Western New York growers last year was 13 bushels. This average is not enough. Averages seldom are enough. Rate of planting varied from 7 bushels to 25 bushels per acre, according to the following table.

Relation of Rate of Planting to Yield on 353 Farms in Western New York

Bushels of seed per acre	Number of farms	Per cent of farms	Average amount of seed per acre (bushels)	Average yield per acre (bushels)
7-9	27	7.6	8.5	130.4
10-12	161	45.6	11.2	123.5
13-15	116	32.9	14.4	156.0
16-19	36	10.2	17.0	181.7
20-25	13	3.7	21.4	225.2
Av. & Tot.	353	100.0	13.0	144.4

It is apparent that yields were not only greatly influenced by amount of seed, but that it paid to use it as generously as over 20 bushels per acre. It is safe to conclude that many of those planting less than 12 bushels per acre check-rowed the field and thereby reduced the number of hills. Profitable yields can not be obtained from poor stands of plants. Good stands are possible only when plenty of seed is planted. On soils in good tilth, well fertilized, and properly cultivated, it will pay to use at least 18 to 20 bushels of seed. It is false economy to reduce cost of production by using any but the best seed and plenty of it.



With the A. A.

Dairyman



Milk Differentials in the Southern District

AMERICAN AGRICULTURIST has had several letters asking why the Dairyman's League Cooperative Association pays more per hundred pounds of milk in that part of the milk shed in southeastern New York bordering on New England, known as the Harlem section, and also for milk produced in Orange County and in New Jersey. Naturally, dairymen not living in these sections wonder why their association should pay higher prices in one part of the milk shed than it does in another.

In order to be sure of our facts and to give you the right information, we asked the League to answer this question, giving the reasons for Harlem and Orange-Jersey differentials.

Mr. George R. Fitts very kindly replied, setting forth in the following letter very clearly why the League found it good policy to put on these differentials. Here is Mr. Fitts' letter:

"The Harlem differential is the result of somewhat different conditions than in the Orange-Jersey territory which made it practical and necessary to place a differential on that territory.

"The territory east of the Hudson furnishes milk for markets in Westchester County and suburban New York towns that, can only be reached by the Harlem Railroad. This milk or territory is in

competition with the Connecticut markets. These Connecticut markets use direct delivery from the country to their city plants in towns like Bridgeport, New Hartford, Stamford, etc., thereby giving that dealer a competitive advantage over dealers who are forced to use a country receiving plant. In other words, he can pay more money for his milk in the country if he has direct deliveries, due to the fact that he has no cost in country operations.

"The only way milk can be supplied to this part of the Harlem territory is through the Harlem Railroad and the territory in Dutchess and Columbia counties does not produce enough milk to take care of those markets, so it is necessary to ship milk from northern New York over the Rutland Railroad which connects with the New York Central Harlem Division, to furnish a sufficient volume for the Westchester markets.

Twenty Five Cents More Per Hundred

"In order to meet the competition of the Connecticut markets and in order to increase production in the Harlem territory, a differential of 25c was placed on that territory a year ago the first of February. This was an economical thing for the Association to do, due to the fact that if milk is not produced in that territory it would be necessary and is necessary for us to ship milk in there, for it is a policy of our Association that a dealer purchasing a supply from us should have that supply to serve a market that he is already serving.

"If we allowed Connecticut markets to take away this milk east of the Hudson, the New York State producer would be forced to give up that availa-

ble consuming area, as dealers would of necessity go into New England and develop supplies that would come into that market over the Rutland Railroad.

"The Orange-Jersey differential is a locational differential which is applied to all of Jersey, all of Orange County, a small portion of Pennsylvania and two points in Ulster County. In other words, the Shawangunk Mountains are the dividing line in regard to this differential, as all milk that lies inside of these mountains can be trucked direct to Jersey markets.

"During the past few years Jersey dealers have been gradually going out into Jersey and Orange county taking

milk direct from the farmers into those markets, thereby eliminating the cost of a receiving plant in the country. This allowed them, of course, to pay a higher price than a dealer could pay who had the expense of operating a country plant.

"Due to a change in methods of handling milk, in territories lying the same as Orange county or Jersey, within seventy-five miles of New York, savings to a considerable extent can be made by trucking from the country plant to the city by tank.

"It is necessary to have country bottling plants in the Orange territory due to the fact that there are

over 100 towns or cities in Jersey that are supplied from Orange county and many of these have individual Boards of Health who are very zealous of their inspection and there are hardly any that are large enough consuming centers to warrant large distributing plants located in the city. So, it is impossible as yet to do away with country receiving and bottling plants in that territory.

Dealers to Pay All Differential Eventually

"However, to meet that condition and give the producers in that territory advantages they are entitled to, due to their location to the market, which advantage has already been established by independent dealers, we have arranged with our buyers that commencing April 1st, we would pay a 25c premium on milk produced in that area. This premium to be paid out of the savings derived from using tank trucks from plants to the market rather than using the railroad; savings that can be established in the country plant due to the elimination of handling and washing cans which also applies to the city plant. We feel that this saving will be at least 25c due to the change of operation.

"However, as these savings are only theoretical as yet, in order to get the dealers to go along and put them into effect, we have agreed, until these savings are shown, that the dealer will pay 12½c of the differential and the Association will pay 12½c. However, our agreement with our dealers is to the effect that as soon as these savings are shown to be more than 12½c they will be absorbed by the dealer."

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that have ever been lined up for sale in America.

The Cattle Are There

The Breeders consigning to this sale have given the selection committee the run of their herds and the animals selected are splendid representatives of what shorthorns should be. Only animals of correct form with proper shaped udders were considered and the sale contains chiefly good cows that will be fresh or close up on sale day. A few choice two year olds and yearling heifers together with a select few real herd heading bulls make a line-up worth going far to see. With the sale of Imported Milking Shorthorns June 8th at Springfield, W. J. Brew sale, June 11th, this sale makes an opportunity to see more cattle on the same trip and offers a selection hard to equal.

The Right Kind

Is the only kind that pay the rent and we absolutely guarantee these cattle to fill this bill. They may be seen at the sale barns from May 10th until after the sale and you are cordially invited to inspect and see for yourselves that they are **THE REAL GOODS**.

For particulars or catalog write Sale Committee

E. L. BUTTON, Donald Woodward Farms, LeRoy, N. Y.
W. J. HARDY, Alsa Farms, Alton, N. Y.

For Sale

Two earloads, fresh and close-up
springers, 3 to 6 years old, all
Federal tested.

Prices from \$135 to \$165. Delivered by truck.
E. CLAUDE JONES, Phone 6F5, Craryville, N. Y.

Hereford Cattle For Sale

Steers, calves, yearlings and two-year-olds. Uniform in size. Choice quality. Tested cows and heifers. Many cars.
JOHN CARROW, Box 193, OTTUMWA, IOWA

FEDERAL SUPERVISION COWS

FOR SALE

I can supply your wants, one or one hundred, all
dairy breeds. Call me up.
ANGUS J. BEATON, R.F.D., DANVILLE, VERMONT
TELEPHONE DANVILLE-61

2 Guernsey Bulls Service Age
from Imported T. B. and Abortion tested Herd, A. R.
Records, Several calves. Wm. A. Derstine, Sellersville, Pa.

TWO REGISTERED HOLSTEIN BULL CALVES

Seven months old. Sire exceptionally well bred. Dams
now on test. Two real bargains for someone.

R. A. DAVIS, R. No. 2, Ballston Spa, N. Y.

100 DAIRY COWS

for sale at all times. Tuberculin tested. Holsteins and
Guernseys, real milk producers. Carload lots or less.
Priced to sell. Jacob Zlotkin, Phone 330, Freehold, N. J.

HEREFORDS For Sale

4 loads weaned calves; 3 loads short yearlings; 2 loads
long yearlings; 4 loads heifer calves; 3 loads springers.
Well bred, the good kind. Can sort, other cattle, pas-
ture flesh. Write or wire.

FLOYD JOHNSTON, STOCKPORT, IOWA

Pure Bred and High grade T. B. tested
Canadian Holstein cows and heifers,
fresh and near fresh. Car lots or less.
HUTCHINS & LEGGETT, MALONE, N. Y.

Why Dairy Cows Fail To Breed

(Continued from Page 3)

overcome many breeding troubles in our herds.

Closure of the cervix leading into the uterus and through which the male sperm enters the uterus may cause sterility. This condition, of course, prevents the union of the male and female gametes, as they are called, and no embryo is possible of formation. A simple dilation of the cervix may overcome all difficulty. Here again we had better invite the services of the veterinarian for he knows better than we what should be done.

Hyperacidity or high acid condition in the uterus of the female may make the activity of the male sperm impossible for after the cow is bred, the sperm must find its way to the fallopian tube and some time must elapse between service and union of egg and sperm. How many have heard of the average farmer's remedy of washing or douching the cow with water and salt or soda before breeding? The acid condition is made alkaline and the medium in which the sperm must exist is improved.

Straining after service may expel the male sperm. The owner may well watch his cows to determine if such is not the case and all cows which do strain should be led or kept moving for a time after service. It is not well to truck a cow for any distance right after service.

The Herd Sire May Be at Fault

Too much blame for inability to breed should not be placed with the cow. Many bulls may be found to be the cause and where trouble exists, the use of a microscope may disclose that the sperms are inactive—that when looked at under the lens they appear shriveled and lifeless and without the tails which make them motile. If such is the case, these minute germs of reproduction fail to ever reach the egg or even if by chance one should its life-giving property is too weak for further development.

There may be several causes of inactive sperm. If the bull is too fat, or has been fat, there seems to be a resulting lifelessness on the part of male germs. Sexual overwork sometimes causes sterility in the male. Allowing the bull to run with the cows is very bad practice and is, of course, dangerous to the public. Lack of exercise and a general run-down condition as well as a too fat condition may cause a bull to become a poor breeder. This seldom occurs in the young bull, but is often discovered in the more mature bull and especially the bull that has been on the show circuit. Sterility in the male is more often but temporary, and the farmer whose cows are not getting with calf should check up on his herd sire. A reasonable amount of exercise, sunlight and plenty of green feed in season with a ration of ground oats will tend to keep a bull in active service. Silage is not to be recommended as a bull's roughage, as it makes him slow in service and an unsure breeder.

When a Veterinarian is Needed

In general, common sense methods of management will keep a herd of cattle in regular breeding condition. By such management is meant first to feed a good legume roughage and a ration with at least five different grains in it. While we know little as yet about minerals, every dairyman can and probably should mix a mineral ration of his own. His grain ration must not be too high in protein. With good clover or alfalfa hay many dairymen are getting best results from an 18% to 20% grain mixture. Sunlight is essential. It is expected nearly all cows go to pasture yet many of our bulls do not get out of a dark stall from one month to the next.

A six weeks dry period with plenty of good hay and a liberal feeding of a 12 per cent ration puts the cow in condition to milk and breed regularly. These rules of management and freedom from abortion should keep a herd producing and reproducing. If it does not do both, there is cause to call a veterinarian.



UNADILLA SILOS

Bought by
the Wisest Dairymen
in the East

Hundreds of dairy farmers who measure every farm purchase for value, quality, endurance, convenience and appearance—insist on a Unadilla. The fact that more Unadillas are sold than any other make *proves* that these farmers choose wisely and profitably.

If you are interested in a silo this year, see the Unadilla. Send for Free Catalog, prices, terms, etc. Discount for cash and early orders.

Tubs, tanks and vats

UNADILLA SILO COMPANY
Box B, Unadilla, N. Y.

FARMERS BUY FROM FARMERS

Let us suggest to you as breeders the best kind of a pig to start to raise is a good one. You save time and money. We sell all pigs with a trial of two weeks, and then if dissatisfied, return pigs and we will return your money.

6-8 wks. old, \$5.25 ea.; 8-9 wks. old, \$5.50 ea.
Breeds—Chester and Yorkshire cross, and Berkshire and Chester cross. Crating free. These prices F.O.B. our depot. Will ship any number C.O.D. or send check or money order.

MISHAWUN STOCK FARM,
MISHAWUN ROAD, WOBURN, MASS.
P. S. No pigs sold at the farm; only by appointment.

SPRING PIGS FOR SALE

Buy where quality is never sacrificed for quantity. We sell only high grade stock from large type Boars and Sows, thrifty and rugged, having size and breeding. Will ship any amount C.O.D.

Chester & Yorkshire — Berkshire & Chester
7 TO 8 WEEKS OLD \$5.00
8 TO 10 WEEKS OLD \$5.50

Also a few Chester barrows 8 wks. old, \$6.50 each
Satisfaction guaranteed or money refunded. 10 days trial allowed. Crates supplied free. A. M. LUX, 206 Washington St., Woburn, Mass. Tel. Wob. 1415.

FEEDING PIGS FOR SALE

Chester and Yorkshire, 7 weeks old \$5.00

Berkshire and Chester, 7 weeks old \$5.00

8 to 9 weeks old, \$5.50

Also few Chester Whites 6 to 7 weeks old \$6.00, and some Jersey Red Durocs 7 weeks old \$6.00. Sold C.O.D. Keep them 10 days, if not satisfied, return them and your money will be refunded. No charge for crating.

MICHAEL LUX, WOBURN, MASS.

PIGS FOR SALE OLD RELIABLE STOCK

Heavy-legged, square-backed Berkshire and Chester crossed, and Yorkshire and Poland China crossed. Barrows, boars and sows—8-10 weeks old, \$5.50 each. Also, Chester Whites and Poland China and Durocs from registered Boars—7-8 weeks old, \$7.00 each. We ship sows and unrelated boars for breeding. They are the kind that make large hogs. Shipped C.O.D. No charge for crates. If dissatisfied, return pigs and I will return your money. Yours for quality hogs.

ED. COLLINS, 35 Waltham Street, Tel. 0839-R LEXINGTON, MASS.

FEEDING PIGS FOR SALE!

Chester-Berkshire Crossed—Yorkshire-Chester Crossed
6 to 7 Weeks Old - \$5.00 each
8 to 9 Weeks Old - \$5.50 each

All pigs have the size, quality and breeding. Will ship pigs C.O.D., ten days trial, if not satisfied return at my expense. No charge for crates.
J. W. GARRITY, 7 Lynn St., Woburn, Mass. Tel. 1503-W

Registered Poland China Pigs

sired by the great Indiana boar Jumbo.
PAUL O. CLYDE, Windham Depot, N. H.

GREENFIELD FARMS

The place to buy REAL Poland - China Hogs. Now offering big, growthy fall gilts, bred and ready to breed for early fall farrow. Also spring boars ready to wean. Prices right.
GREENFIELD FARMS, Tiffin, Ohio

HORSES

Bellmont Farm PERCHERONS

2 gray mares heavy in foal, age 4 and 6, 1800 lbs. each. 2 black mares one heavy in foal, aged 5 and 7, 1700 lbs. each. High class brood mares, gentle good workers. Also black Grand Champion stallion, weight 2200, well broken to work.
H. H. BELL & SONS, MT. EPHRAIM, N. J.

SHEEP

DORSET YEARLING RAM

and Dorset ewe for sale. DONALD F. HILL, FREEVILLE, N. Y., c/o Millcroft Farm

Danger of Infection Among Baby Chicks

Success in raising baby chicks is dependent upon proper care and management. Readers are warned to exercise every sanitary precaution and beware of contaminated drinking water. Baby chicks must have a generous supply of pure water. Drinking vessels harbour germs and ordinary drinking water often becomes contaminated and may spread disease through your entire flock and cause the loss of half or two thirds your hatch before you are aware. Don't wait until you lose half your chicks. Take the "stitch in time that saves nine." Remember that in every hatch there is the danger of some infected chicks—danger of diarrhea in some form and other loose bowel and intestinal troubles. Don't let a few chicks infect your entire flock. Give Walko Tablets in all drinking water for the first two weeks and you won't lose one chick where you lost dozens before. These letters prove it:

Mrs. Bradshaw's Remarkable Success in Raising Baby Chicks

"Dear Sir: I see reports of so many losing their little chicks, so thought I would tell my experience. I used to lose a great many of the little downy fellows from bowel troubles, tried many remedies and was about discouraged. As a last resort I sent to the Walker Remedy Co. Dept. 427, Waterloo, Iowa, for their Walko Tablets for use in the drinking water of baby chicks. I used two 50c packages, raised 300 White Wyandottes and never lost one or had one sick after using the Tablets and my chickens are larger and healthier than ever before. I have found this Company thoroughly reliable and always get the remedy by return mail."—Mrs. C. M. Bradshaw, Beaconfield, Iowa.

Never Lost a Single Chick

Mrs. L. L. Tam, Burnettsville, Ind., writes: "I have lost my share of little chicks from the usual baby chick troubles. Finally I sent for two 50c packages of Walko Tablets, used it in all drinking water, raised over 500 chicks and I never lost a single chick. Walko Tablets not only tend to prevent baby chick troubles, but also tend to give chicks increased strength and vigor. They develop quicker and feather earlier."

Never Lost One After First Dose

Mrs. Ethel Rhoades, Shenandoah, Iowa, writes: "My first incubator chicks, when but a few days old, began to die by the dozens. I tried different remedies and was about discouraged with the chicken business. Finally I sent to the Walker Remedy Co., Waterloo, Iowa, for a box of their Walko Tablets to be used in the drinking water for baby chicks. It's just the only thing to keep the chicks free from disease. We raised 700 thrifty, healthy chicks and never lost a single chick after the first dose."

You Run No Risk

We will send Walko Tablets entirely at our risk—postage prepaid—so you can see for yourself what a wonder-working remedy it is when used in the drinking water for baby chicks. So you can prove—as thousands have proven—that it will stop your losses and double, treble, even quadruple your profits. Send 50c for a package of Walko Tablets (or \$1.00 for extra large box)—give it in all drinking water and watch results. You'll find you won't lose one chick where you lost dozens before. It's a positive fact. You run no risk. We guarantee to refund your money promptly if you don't find it the greatest little chick saver you ever used. The Pioneer National Bank, the oldest and strongest bank in Waterloo, Iowa, stands back of our guarantee.

WALKER REMEDY CO., Dept. 427, Waterloo, Iowa.

Send me the [] 50c regular size (or [] \$1 economical large size) package of Walko Tablets to try at your risk. Send it on your positive guarantee to promptly refund my money if not satisfied in every way. I am enclosing 50c (or \$1.00). (P. O. money order, check or currency acceptable.)

Name _____
Town _____
State _____ R. F. D. _____

Mark (X) in square indicating size package wanted. Large package contains about two and one-third times as much as small.

With the A. A.
POULTRY
FARMER.



Eliminating Unclassified Grade Should Help Egg Marketing

IN last week's issue we gave a brief account of the hearing on the proposed changes in the New York State Retail Egg Grades. This week we plan to tell you a little more about the effect which we believe the proposed changes will have if they should go into effect.

It seemed evident to an observer at the hearing that the marketing end was more largely represented than the producers. It might be argued from this that dealers are more keenly alive to the importance of the changes and feel the necessity of presenting their ideas on the matter in order to work against any regulations which may damage their end of the business. Many of those present, of course, represented organizations such as Retail Grocers' Associations, the New York Mercantile Exchange and various chain stores. On the other hand, a number of producers were present and presented their side of the case in a fair and logical manner. Farmers' organizations were also represented. A number of poultry associations either sent representatives or sent word to the hearing concerning their views on the various changes and representatives of the State Farm Bureau Federation were also present at the hearing.

Consumers Avoid Grade C Eggs

Previous to the hearing we were frankly skeptical as to the value of eliminating the unclassified grade. We felt that it would merely result in selling many New York State eggs as C grade instead of marking them unclassified, as has been done in the past. The arguments of the dealers present convinced us that dropping the unclassified grade will be of real help to New York State producers if they will do their part in taking advantage of the change. It was repeatedly brought out by the middlemen and retailers that the public has a feeling against grade C eggs that they do not have against the unclassified grade. Doubtless this is largely a result of the practice of selling good eggs under the unclassified grade. Consumers have, in the past, bought grade A eggs under the assumption that they were good eggs and that grade B eggs were scarcely fit for eating. If the price of grade A eggs became unduly high, they were advised to try unclassified and finding that they were excellent eggs, they continued to buy them. In the mind of the consumer, grade C eggs are the poorest grade and as such have been largely avoided in making purchases.

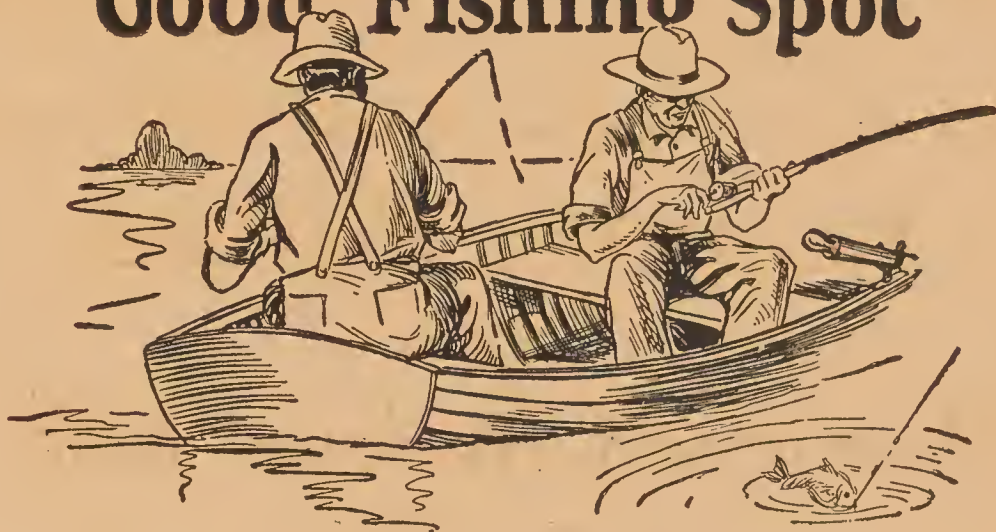
The result, therefore, of cutting out unclassified eggs is that grocers will probably grade more closely and put all eggs into the proper grade. There will be no incentive to sell eggs under a C grade label that will meet the qualifications of grade A. The original intent of the law was that the consumer should be able to buy by grade and know what he was getting. Under conditions during the past year, it has not worked out this way because unclassified eggs were frequently better than grade B and sometimes fully as good as grade A eggs.

Retailers Can Improve Handling of Eggs

Another thought brought out at the hearing was rather amusing. We have, in the past, heard and read volumes about the lack of business ability of farmers in failing to grade and care for their eggs in a way that would put them on the market in first-class condition. It developed at the hearing that it is equally as difficult to educate the retailer to properly care for the eggs after they are in his possession. Eggs are a perishable product and as such should be handled with the same care as butter or milk. When this was sug-

(Continued on Page 12)

When You Find a Good Fishing Spot



YOU would not deliberately go away from a good fishing spot to experiment with one that you only thought was good—not if you really wanted to get some fish. It is the same way about buying the things you need—you should go direct to a place that you know will give you the utmost in quality and service. For hardware you can be sure that a "Farm Service" Hardware Store will be the right spot. At our stores you can "see before you buy," and you are sure of full value for your money because it is necessary for us to give you the best in values so that we may hold your trade, for, being strictly "home town" stores, we must keep your business as we are each restricted to our local selling territory. You will like to trade at our friendly-service stores!

Look for this tag in their window.



Your Farm Service HARDWARE STORES

Where prices are lower because you get personal help in the selection and maintenance of your purchases.

"Pullets Lay at 4 months and 12 days"



says Uncle Charlie

How soon will your chicks be making profits?

If you are feeding Bull Brand Chick Starter Ration and B-B Growing Ration—the answer is: 4 months and 10 to 12 days.

What Poultrymen Say

Paul A. White of Horseheads, N.Y., writes: "We fed B-B Chick Feeds this season. Had pullets laying in 4 months and 11 days."

E. R. Stiles of Portland, Maine, had White Wyandottes laying at a little over 4 months—on B-B Feeds.

The Moyerdale Farm of Liverpool, N. Y., fed their chicks on B-B. They started laying at 4 months and 10 days.

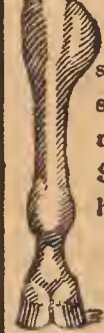
Bull Brand Never Fails

Complete satisfaction with B-B Starter, Growing and Laying Mash is guaranteed to you or your money back. Maritime Milling Co., Inc. Buffalo, N. Y.



BULL BRAND FEEDS
DAIRY AND POULTRY

for Sprains and Bruises



ABSORBINE reduces thickened, swollen tissues, soft curbs, filled tendons, soreness from bruises or strains. Does not blister, remove hair or lay up horse. \$2.50 at druggists, or postpaid. Horse book 1-B free. Write for it today.

Read this: "Horse had large swelling just below knee. Now gone; has not reappeared. Horse good as ever. Have used Absorbine for years with great success."

ABSORBINE
TRADE MARK REG. U. S. PAT. OFF.
W. F. YOUNG, Inc. 579 Lyman St., Springfield, Mass.

When Writing Advertisers, Be Sure to Mention American Agriculturist

For Profit's Sake Give Your Poultry PEARL GRIT!

Keep your springers growing, your layers producing. Provide PEARL GRIT to give them the lime they need. They can't get enough on range. Give them access to PEARL GRIT constantly. They will eat what they require. That may be only a little, but it's vital to their health and productivity.

Get PEARL GRIT from your feed dealer. If he doesn't have it, we'll ship direct. And be sure to ask for the PEARL GRIT book if you haven't read it.

Mail the coupon today

FREE • MAIL COUPON

Pearl Grit Corp., Wayne St., Piqua, Ohio. Send me your free book, "The Poultry Raiser's Pay Envelope," and give me the names of dealers who handle PEARL GRIT.

Name _____
Address _____
P. O. _____ State _____

Reviewing the Latest Eastern Markets

Milk Prices

The following are the May prices for milk in the basic zone of 201-210 miles from New York City.

Dairymen's League prices are based on milk testing 3.5%. Sheffield on the basis of 3%.

Class	Dairymen's League	Sheffield Producers
1 Fluid Milk...	3.37	3.17
2A Fluid Cream		2.05
2B Cond. Milk...	2.26	
Soft Cheese...		
3 Evap. Cond. Milk Powder	2.51	2.05
Hard Cheese		
	2.25	

4 Butter and American cheese. Based on New York City Market quotations on butter and American cheese.

The Class I League price for May 1928 was \$2.90 for 3.5% milk and Sheffield's \$2.80 for 3%.

The above prices in each class are not the final prices the farmer receives. The final price received from the dealer is the result of the weighted average.

April Prices Announced

The Dairymen's League announces the following pool prices for April for 3.5% milk.

Gross\$2.67

Expenses06
Net Pool..... 2.61
Certificates of Indebtedness..... .15
Net Cash Price to Farmers.....\$2.46

Apr. 1928, Net CASH Price, 3.5% milk.....	\$2.15
Apr. 1928, Net POOL Price, 3.5% milk.....	\$2.25
Apr. 1927, Net CASH Price, 3.5% milk.....	\$2.34
Apr. 1927, Net POOL Price, 3.5% milk.....	\$2.44
Apr. 1926, Net CASH Price, 3.5% milk.....	\$2.01
Apr. 1926, Net POOL Price, 3.5% milk.....	\$2.11
Apr. 1925, Net CASH Price, 3.5% milk.....	\$2.03
Apr. 1925, Net POOL Price, 3.5% milk.....	\$2.13

The Sheffield Producers announce the cash price to producers for 3% milk in the 201-210 mile zone, as \$2.60 per hundred, (\$2.80 for 3.5% milk).

Apr. 1928 price to producer, 3% milk, \$2.18; 3.5%, \$2.38

Apr. 1927 price to producer, 3% milk, \$2.39; 3.5%, \$2.59

Apr. 1926 price to producer, 3% milk, \$2.34; 3.5%, \$2.54

Apr. 1925 price to producer, 3% milk, \$2.37; 3.5%, \$2.57

Heavier Supplies Ease Butter Prices

CREAMERY SALTED	May 15, 1929	May 8, 1929	Last Year
Higher than extra.....	43 1/2-44	44 -44 1/2	47 -47 1/2
Extra (92sc).....	-43	43 1/2-	-46 1/2
84-91 score.....	38 1/2-42 1/2	40 3/4-43 1/4	43 1/2-46 1/4
Lower Grades.....	37 -38	40 -40 1/2	42 1/2-43

A 10% increase in the receipts of the week ending May 11 and the near approach of added supplies caused the market to drop off a fraction. Receivers have been following a free selling policy in view of the reported increase in receipts. At this time of year accumulations are dangerous to the trade; as a consequence every effort is made to keep stock moving into distributing channels. The retail trade, especially the chain stores, are doing their part to keep the ball rolling by holding down retail price to a figure that is proving attractive to the housewife. In spite of that, our cold storage holdings are heavy compared with those of a year ago. On May 1, according to the Bureau of Agricultural Economics of the U. S. Department of Agriculture, the stocks of creamery butter in storage in the U. S. were reported to be 5,860,000 pounds, compared with 5,109,000 pounds on the same date in 1928. The five year average on May 1 is given as 7,745,000 pounds. The Price Current, on the other hand, shows that in the four largest cities the cold storage holdings totaled 2,737,607 pounds on May 10. On the same day a year ago the same cities reported 1,632,411 pounds. From May 3 to May 10 the into storage movement in the four largest cities totaled 521,628 pounds of butter, compared with 56,327 pounds during the same period a year ago. All these figures indicate that our storage holdings of this year are going to exceed those of last year, which may be taken as a further indication that prices may not equal last year's level. Of course there are many factors that can change the situation in a very few days.

The greatest demand is for butter of fancy quality. Heavy colored goods and lower grades have not moved readily. In fact there has been some accumulations in those descriptions. As a consequence there has been a marked widening of value.

At this writing, May 15, the market is in a steady position and there is no indication of an upward or downward movement. The demand is holding up well, for the more desirable quality. The only fly in the ointment is found in the lower grades. If the accumulation continues, there will doubtless be a reduction in the price of lower grade goods which may react on the higher grades, due to a swing of certain elements in the trade to cheaper butter.

Demand Good for Fancy Cured State Cheese

STATE FLATS	May 15, 1929	May 8, 1929	Last Year
Fresh, Fancy.....	22 -	22 -	22 1/4-22 1/4
Fresh Average.....			
Held Fancy.....	27 1/2-29 1/2	27 1/2-29 1/2	29 1/2-31
Held Average.....			

The demand continues very satisfactory for fancy lines of well cured New York State whole milk flats. Cured Daisies, on the other hand, are very irregular. Fresh State cheese is meet-

ing a rather slow market, fancy fresh marks bringing 22c. There are several lots being offered for less.

The U. S. Department of Agriculture reports that the U. S. storage stocks of American cheese in public warehouses on May 1 totaled 42,079,000 pounds of cheese, compared with 30,207,000 pounds on May 1, 1928. The Department also reports on April 1, 1929, our holdings of American cheese totaled 45,105,000 pounds compared with 31,887,000 pounds on April 1, 1928. It can be seen, therefore, that during the month of April, our holdings were reduced over 3,000,000 pounds. Whereas, during the same period a year ago the reduction was only about half as much. Furthermore, the surplus on May 1 is under that of a year ago. The figures would indicate therefore that although we are carrying considerable cheese nevertheless the situation is better than it was last year at this time.

Egg Market Unchanged

NEARBY WHITE	May 15, 1929	May 8, 1929	Last Year
Hen'y Sel. Extras.....	35 -36 1/2	35 -36 1/2	34 1/2-36
Hen'y Av'ge Extras.....	33 1/2-34	33 1/2-34	33 -34
Extra Firsts.....	33 -	32 1/2-33	32 -32 1/2
Firsts.....	32 -32 1/2	31 1/2-32	30 1/2-31 1/2
Undergrades.....	31 -	29 -32	29 -30
Pullets.....			
Pewees.....			
NEARBY BROWNS			
Hennery.....	35 -36 1/2	34 1/2-36 1/2	34 -36
Gathered.....	31 -34	30 -34 1/4	29 -33 1/2

There has been no material change in the egg market since last week with the possible exception of brown eggs which are selling fully up to the white egg market. Trade, however, is not at all brisk and we would not be greatly surprised to hear of some minor shift-ings in the local situation before next week's report is written. When buying gets sluggish there is a general disposition for the trade to show apprehension. Although nothing has taken place as yet, nevertheless there is just enough undercurrent there to warrant the egg shipper to be cautious about his selections.

The U. S. Department of Agriculture reports that on May 1, the holdings of eggs in the U. S. warehouses totaled 4,023,000 cases, compared with 4,515,000 cases on May 1, 1928, showing that we are 492,000 cases behind a year ago. The into storage movement from April 1 to May 1 was heavier this year than last year. On April 1, 1929, the Department reports our holdings at 559,000 cases; while on April 1, 1928, the report states we had 1,087,000 cases. Unless there is a marked increase in the lay, the situation looks very encouraging for the egg producer. At this writing Chicago is ahead of New York prices which is one factor that will tend to react against any change in local values. When the May 1 storage report was published the reaction of the trade was quite bullish, although some of the gains were lost before the market closed.

Limited Supplies Hold Live Poultry Prices Up

FOWLS	May 15, 1929	May 8, 1929	Last Year
Colored.....	-37	33-35	27-28
Leghorn.....	-37	33-35	-22
CHICKENS			
Colored.....			
Leghorn.....			
BROILERS			
Colored.....	30-48		25-50
Leghorn.....	20-40	35-50	20-37
CAPONS.....		25-40	
TURKEYS.....	25-35	30-35	
DUCKS, Nearby.....	23-28	23-28	18-24
GESE.....	16-17	16-17	

Limited supplies of desirable live poultry have held prices to fairly satisfactory levels. Fancy broilers are selling promptly as are the better grades of light fowls. Heavy fowls have been selling fairly well but only the short supplies have been responsible for the maintenance of price. If we were to have full supplies there would be a marked revision in the price scheduled. Most of the freight broilers have been of mediocre quality so that express stock that shows class moves very readily. Rock broilers are about the only ones that can feel at all safe. The situation is such that almost anything can happen. Certainly a sudden bulge in receipts would have a very

marked effect. To guard against this, shippers should show extreme caution in the selection of their bird as to size and finish as well as breed.

Feeds and Grains

FUTURES	May 15, 1929	May 8, 1929	Year
(At Chicago)			
Wheat, (May).....	1.05 3/4	1.06 3/4	1.49 1/2
Corn (Mar.).....	.85 1/4	.86 1/2	1.02 1/4
Oats (Mar.).....	.47 1/4	.47 3/4	.63 3/4
CASH GRAINS			
(At New York)			
Wheat, No. 2 Red.....	1.30	1.32 1/4	2.15 1/2
Corn, No. 2 Yel.....	1.02 3/4	1.29 3/4	1.24
Oats, No. 2.....	.58 1/2	.81 1/2	.81
FEEDS			
(At Buffalo)			
Grade Oats.....	33.00	33.50	44.50
Spring Bran.....	26.50	26.50	40.50
Hard Bran.....	28.00	28.50	41.00
Standard Mids.....	26.00	26.00	42.00
Soft W. Mids.....	33.00	34.00	
Flour Mids.....	32.00	33.00	44.00
Red Dog.....	36.00	36.00	45.00
Wh. Hominy.....	37.00	37.00	45.50
Yel. Hominy.....	37.00	37.00	
Corn Meal.....	36.00	38.00	
Gluten Feed.....	39.75	39.75	44.75
Gluten Meal.....	47.25	47.50	59.00
36% C. S. Meal.....	40.00	41.00	60.00
41% C. S. Meal.....	43.00	44.00	67.00
43% C. S. Meal.....	46.00	47.50	69.00
34% O. P. Linseed			
Meal.....	50.50	51.50	54.00

The above quotations are those of the local Buffalo market and are F.O.B. They are reported in the weekly letter of the N. Y. State Department of Agriculture and Markets.

SHIP YOUR EGGS

WHITE AND BROWN

To R. BRENNER & SONS

Bonded Commission Merchants

358 Greenwich St., New York City

Live Broilers and Poultry Wanted

HIGHEST PRICES CHECKS SENT DAILY

Oldest Live Poultry house in New York City. Established 1883, offers you an unlimited outlet for your live poultry. Write for shipping tags and free holiday calendar folder K 27.

Krakaur Poultry Co. Inc. Bonded Commission Merchant
West Washington Market, N. Y. City

Now is the Time to Ship

LIVE BROILERS, CALVES, EGGS

We remit daily at top market. Write for coops, tags, information on market prices, etc. Our Mr. Berman has satisfied thousands of shippers for 25 years.

Compare our sales with others
Joseph C. Berman, Inc., West Washington Market, N. Y.

EGG CASES

Wholesale dealer and shipper of second hand egg cases. Car lots a specialty.

LOUIS OLOFSKY, 685 Greene Av., BROOKLYN, N. Y.

NOTICE TO CREDITORS OF WELLS J. AGEN TO PRESENT CLAIMS

Any person having a claim against Wells J. Agen for milk and cream of his own production sold to said Wells J. Agen, is hereby required to file with the undersigned Commissioner at 122 State Street, Albany, N. Y., a verified statement of such claim on or before June 15, 1929.

Dated: Albany, N. Y., April 22, 1929.

BERNE A. PYRKE,
Commissioner of Agriculture and Markets

NOTICE TO CREDITORS OF THE FRONTIER DAIRY CO., INC., TO PRESENT CLAIMS

Any person having a claim against the FRONTIER DAIRY CO., INC., for milk or cream of his own production sold to said Frontier Dairy Co., Inc., is hereby required to file with the undersigned commissioner at 122 State Street, Albany, N. Y., a verified statement of such claim on or before July 1, 1929.

Dated: Albany, N. Y., May 4, 1929.

BERNE A. PYRKE,
Commissioner of Agriculture and Markets

SWINE

228 PIGS FOR SALE

87 Handsome Yorkshire and Chester crossed; 100 Berkshire and O.I.C's; 41 Big heavy Poland China crossed with Yorkshire—Two months old. Price \$6.00 each. Express prepaid on 25 or more. These pigs have had the best of care and breeding and certainly show it. Jim Short hog-breeder from Iowa, on a visit here, remarks: "Mr. McCadden your hogs look fine." Terms: Check, money order or draft or C.O.D. on approval. Ship in lots to suit—1 or 50. Inquiries gladly answered. Orders promptly filled. McCADDEN BROS., Cambridge, Mass. Office: 16 Seven Pines Avenue.

FARMS FOR SALE

\$700 Gets 35 Acres Crops

Estimated, on 90 acre farm, also furniture, horses, 7 cattle, poultry, dogs, implements, hay, potatoes, oats, buckwheat, corn, vegetables; borders stream, all kinds fruit, valuable wood, good 10-room house, farm bldgs., on near city markets. Only \$2000 for all, \$700 down. On pg. 52 Strouts catalog. Write today for your Free copy this big catalog with 553 pictures. STROUT AGENCY, 255-R Fourth Ave., at 20th St., N. Y. City.

an EXTRA truckload of POTATOES from one acre sprayed with Pyrox



Mr. C. S. Newcomer, of Chambersburg, Pa., got an extra truckload of potatoes (seventy bushels) from one acre sprayed with PYROX. This seventy bushel EXTRA YIELD amounted to a 22% increase over his yield from potatoes sprayed with a home-made mixture. PYROX, the scientifically prepared plant spray does three things at once. That is why it is so economical, and helps produce bigger and better crops. PYROX kills bugs, prevents the development of blight and disease, and stimulates plant growth. Does away with the costly labor of home-made spray mixtures, and eliminates the danger of improperly mixed chemicals. Safe and easy to use. Will not wash off. Does not clog sprayer nozzle. Use PYROX this year for BIGGER PROFITS. Now priced lowest in 30 years' successful use. Write us or ask your dealer for the new Spray Guide—free. Bowker Chemical Company, 419 Fourth Avenue, New York.



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NEVER before a recipe book just like this—especially a free one! A book devoted entirely to sea food dishes—unusual, original ones, too! Dishes you've never seen before! Dishes so appetizing and delicious that they make everyone trying them like to eat fish! And dishes that are so easy to make! For they are made from the Gorton Sea Foods—which bring you fine fish ready-to-use, easy-to-use, pleasant-to-use, and furthermore economical! This book shows and describes all kinds of hot and cold fish dishes. Baked fish dishes. Creamed fish dishes. Fish loaf. Fish hash. Fish rarebit. Fish omelette. Etc., etc. Dishes for breakfasts, for luncheons, dinners, suppers—and every meal, in fact. New taste ideas for every occasion. You'll revel in them. Edition is limited, so send for your copy today. Use the coupon.

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Please send me my copy of your Free Recipe Book "Delicious Fish Dishes."

Name

Address

Farm News from New York

President Hoover Orders Tariff Increase on Milk and Cream

FOLLOWING a consultation with leaders in Congress and on the advice of the Federal Tariff Commission, President Hoover on May 14, ordered sharp increases in the tariff on milk and cream, to become effective in thirty days. Under the tariff bill passed in 1922, the President is given the power, when the need becomes evident, of increasing tariff duties not to exceed fifty per cent of the rates in force. Although the tariff bill now before Congress provides for rates still higher, this bill has not yet been passed and the immediate benefits of the increases will be welcomed by all eastern dairymen.

The increases are from the present rate of 2½¢ a gal. to 3¼¢ a gallon on milk and from 20¢ a gal. to 30¢ a gal. on cream.

a debenture certificate for 12½ cents for every bushel he exported. He would then be able to pay \$1.12½ for the corn instead of \$1.00. This has been labeled as a direct subsidy. It is evident that the government receipts from imports would be less, since these debentures which would be used to pay the tariff on imports, are valueless to the government. On the other hand, those who favor the plan state that it is no more a subsidy than is the protective tariff.

Few of those who have been following the situation closely feel that there is any chance that the debenture plan will be passed by the House and that if by any stretch of imagination it should be passed, that President Hoover will surely veto it.

Bordens Acquires New Properties

ON May 7, the Borden Company announced that they had acquired eight companies which have been operating in five different states. The companies acquired are: Sharpless-Hendler Ice Cream Company of Wilmington, Del.; the Dairy Dale Company and its subsidiaries, operating in San Francisco, Fresno and Sacramento; the Springfield Dairy Products Company and the Purity Ice Cream and Dairy Company of Springfield, Ohio; the Terre Haute Pure Milk and Ice Cream Company of Terre Haute, Ind.; A. H. Barber & Company and the Grunert Cheese Company, both of Chicago, and the Hammond Dairy Company of Hammond, Ind.

In a statement notifying the Borden Company stockholders of these acquisitions Arthur W. Milburn, president, says:

"With the exception of the Hammond Dairy Company, which will be merged with existing Chicago units, these businesses will continue to be conducted under their present names and the individuals largely responsible for their successful development, together with their respective efficient staffs, will continue actively with the organization."

Another Fruit Report Next Week

IN a recent issue we gave some first-hand reports on the New York State fruit situation. Since that time further frosts have been reported in certain sections. Watch for next week's issue for another up-to-the-minute report right from producers in important fruit sections.

Most of the milk imported comes from Canada and 37% of the imports go to New York City, 3% to Boston and the remaining 60% to plants near the Canadian border. President Hoover is quoted as saying that were he given the authority, he would increase the rates still more.

Increases were also granted on flaxseed, which is increased from 40¢ to 56¢ a bushel, and on window glass where the increases vary according to the size of the glass.

Farm Organizations Present Objections to Tariff Bill

In last week's issue we explained in detail the proposed increases in the tariff on farm products provided for in the tariff bill now before Congress. Objections to these increases have been made by a group of twelve farm organizations, including the National Grange, American Farm Bureau Federation and others. The statement made by this group maintains that whereas increases are granted on some farm products, that the bill does not provide adequate duties on a number of important farm products. Among the particular items mentioned are: dairy products, dried eggs, beans, onions, live cattle, potatoes and canned tomatoes.

Dissatisfaction is also expressed with the failure of the bill to protect United States producers against products imported from the Philippine Islands and with the failure to increase the duties on products which can be easily substituted for farm products produced in this country.

The need for a higher tariff on potatoes has already been presented to the House during a debate on the bill. A statement is made that imports have practically tripled from 1922 to 1927 and that in spite of the fact that the crop of 1928 left a surplus of sixty million bushels, imports of potatoes continue to come into this country.

Senate Passes Farm Bill

The Senate, on May 14, passed the federal farm relief bill which proposes a Federal Farm Board and a revolving fund of \$500,000,000. The bill is similar to the one recently passed by the House of Representatives except that it includes the much discussed debenture plan which has been consistently advocated by the National Grange. The bill as passed by the Senate, would give the proposed Federal Farm Board, the power to use the debenture plan if it believes it advisable. In other words, the Federal Farm Board is to decide whether or not it shall use the debenture plan.

The debenture plan in brief is that exporters of surplus farm products will be given what are called debenture certificates to the value of one-half the tariff on that particular product and these debentures which will be mere paper certificates, could in turn be sold to importers to be used to pay the duty on any product on which a tariff is imposed. For example, if corn is selling in this country for a dollar a bushel and the tariff on corn is 25 cents a bushel, an exporter would get

Bankers Plan Farm Tour

THE New York State Bankers Association and the New York State College of Agriculture are cooperating in a two-day Bankers Agricultural Conference and Tour on June 6th and 7th.

The tour will include visits to successful farms, some abandoned farm areas and some 4-H Calf Club members. Plans are also under way for a dairy cow judging contest and a milking contest for the bankers.

Long Island Potato Tour Dates Announced

THE dates for the annual Long Island Potato Tour have been set for June 26, 27, and 28. This event has grown from year to year until now it is attended by producers from many eastern states. Last year at one time there were upward of one hundred cars in line.

New York County Notes

Cattaraugus County—The second week in May was wet and no oats were sown. Pastures and meadows are excellent. The program is complete for the summer session of Pomona Grange in Cattaraugus, June 7 and 8. On Friday evening, June 7, there will be a big community meeting and program in the high school auditorium, featuring the best artists in the county and an address by Edward Fitzgerald, president of the Chamber of Commerce, Olean. Mr. Fitzgerald will address the gathering on "Our Community." "The Present is a Good Time to Buy a Farm in New York State" will be debated by members of East Otto Grange. C. C. Ackley, farmer, George Straight, publisher, and J. J. McCarthy, banker, are to act as judges. There will be a question box answered by groups Friday morning and the regular Memorial Services Saturday afternoon in charge of Mrs. Millie Lorch, Mrs. Blanche Leach, Mrs. Hattie Mason, for deceased Pomona members. Fred S. Johnson will give a picture of California. These are just a few of the good things Pomona has in store to entertain her guests on June 7 and 8.—M. M. S.

Genesee County—The clear but cold weather has set farmers busily to work to make up for lost time. New seeding looks fine, but most of the wheat fields look poor. So much rain caused it to drown out in spots after it wintered

through. Potatoes are higher and scarce in this vicinity now. Truckers have them pretty well picked up. Seed potatoes are 50¢ a bushel. Eating potatoes 60¢ to 65¢. A good share of idle farms are being worked this year. A number of farmers have their cattle turned out to pasture.—Mrs. R. E. G.

Wyoming County—The weather is cold and wet. Scarcely any crops have been planted. Grass and pastures do not look as good as they did in April. Dirt roads are in bad shape and are in need of good ditches and gravel. Cows are not milking very well, and feed is very high. The sugar season was very short this spring.—Mrs. W. J. Y.

Yates County—There was a bad freeze in the Middlesex Valley May 10. The temperature was 26 degrees above. Not much grain has been planted yet. It rained 24 days in April and the wheat was injured by the wet weather. Animals are in good shape. Fruit of all kinds is blossoming well. Hundreds of chicks are being hatched by the Minagle and Williams hatcheries. Not more than 25 out of a thousand die.—L. C. W.

Tioga County—The sportsmen now have a new scheme to get their game free. They are proposing to give three prizes, \$25, \$15, and \$10, to the three boys or girls raising and liberating the largest number of "healthy" pheasants, from one setting of pheasant eggs, which will be given to the applicant. Applicants are supposed to be under 18 years of age. The eggs come from the game farm. It requires a whole lot of labor to hatch and care for even one setting of eggs and the cost of feed is not light. If the sportsmen want game raised why not pay each one for doing the work. Some people think the time of a boy or girl does not amount to much but let anyone want a job done and the price will be high enough. Not so long ago, a young man charged me 75¢ for 44 minutes labor pil-

Agricultural Programs From WGY

12:00 Noon—Eastern Standard Time, daily except Saturday and Sunday—weather report, farm produce report, farm talks.

6:10 P. M.—Eastern Standard Time, daily except Saturday and Sunday—farm produce report, farm talk.

7:00 P. M.—Eastern Standard Time, (8:00 P. M. Daylight Saving Time). Thursday—Half-hour agricultural program.

ing stovewood. I was ill and unable to do it myself, and it had to be moved to give place to other wood to be put in. He piled 1½ cords.—Mrs. C. A. B.

Delaware County—Weather continues cold and backward with several frosts last week. Farmers are busy with spring work, fence fixing, plowing, spreading lime, etc. Eggs are low in the local stores, being only 23¢. Herrick Peterson of Little Delaware Poultry Farm, has installed electric incubators and is having some splendid hatches.—Mrs. E. M. N.

The New York State Crop reports issued on May 13, indicate that the winter wheat crop is about 17% better than last year; that the condition of hay is 16% above last year and that pastures are in 15% better condition than in 1928.

"I am STILL using the Burrell Milker I purchased from you 21 YEARS AGO"

"It may interest you to learn that I am still using the Burrell Milker that I purchased from you 21 years ago, and the machine is still doing excellent work today, regardless of the fact that I use it winter and summer. Of course, I put on the late style cups and mouthpieces, and I honestly believe that I can beat any of those new type rubber-lined teat cup machines with my old Burrell Milker today."



Double Unit



Single Unit

—Henry B. Smith, Chateaugay, N. Y.

"It Milks the Cows Clean"

Send for Catalog

Cherry-Burrell Corporation 27 Albany St., Little Falls, N. Y.

BURRELL
MILKING MACHINES AND CREAM SEPARATORS

150 GALS. MORE MILK PER COW!

The result of numerous Exp. Sta. tests in Ohio, Penna., Minn. and other States show that silage users get yearly 150 gallons more milk per cow. Figuring ALL costs, these tests showed \$443. average profit on 12 cows. A



Rib-Stone Concrete Silo
"The Best Silo Ever Built"
"GLOBE" Wood Silo



good silo soon pays for itself. No up-keep. Air and water tight; fire and acid proof. Rib gives added strength, a continuous door, permanent ladder all round. Erected complete by us and guaranteed unconditionally. Globe Wood Silos, with 13 years tested results are now a Rib Stone product. Permit home construction. Hence lower initial financing. Exclusive features. Send for booklet "Silos and Silage" by F. R. Fricke, B. S., also prices on these remarkable silos.

RIB STONE CONCRETE CORP.,
BOX 402 LE ROY, N. Y.

Buy now. Pay later

Make Money

With a Ross SILO

A Ross user writes, "Silo paid for itself in 1½ years and made a profit \$144.00 besides."

Ross Silos are money makers. Convincing booklet free, "Users' Own Words"—Write for it and our special offer.

ROSS CUTLER & CO., Springfield, Ohio
(Established 1850) 739 Warder St.

Check items wanted.

Silos	■	Mills	■
Cutters	■	Cribs	■
Hog Houses	■	Brooder Houses	■

YOUNG MEN

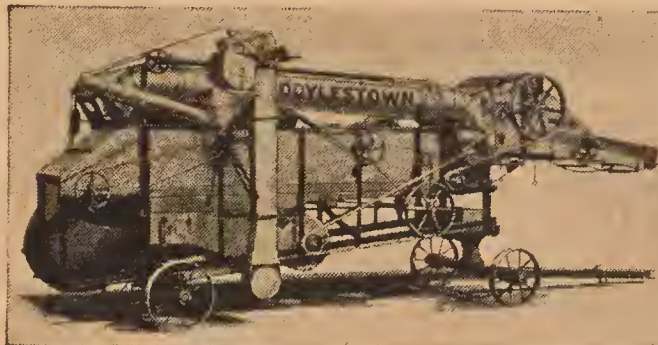
Learn Tree Surgery, a well-paying profession, where ability wins early recognition. If you are between 18 and 30, love nature and outdoor work, like to travel, have well-formed habits, we will train you and pay you while learning. Write TO-DAY.

THE BARTLETT SCHOOL OF TREE SURGERY
Under direction of The F. A. Bartlett Tree Expert Co.
Dept. 110 Stamford, Connecticut

BINDER TWINE

as low as 10¢ per pound in quantities. Best quality guaranteed. Farmer Agents Wanted. Write for circular and sample.

THEO. BURT & SONS, Box 85, Melrose, Ohio



The Thresher

you can afford to buy. Complete with all latest improvements for Grain or Beans. Send coupon below for new catalog.

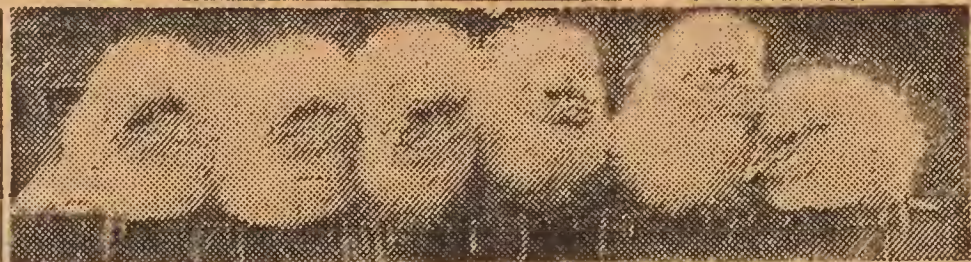
DOYLESTOWN AGRICULTURAL CO.,

DOYLESTOWN, PA.

Name..... R. F. D..... City..... State.....

My tractor or engine is H.P. If you have a thresher State size & make

BABY



CHICKS

Hall's Chicks

Leghorns-Reds-Rocks-Wyandottes

"WELL BRED FROM WELL BREEDERS"

New England Accredited stock. All breeders 100% White Diarrhea free

Special low prices for our early-maturing stock.

	S. C. W. LEGHORNS	S. C. R. I. REDS	BARRED ROCKS	WHITE WYANDOTTE
Grade A.....	\$12.00	\$15.00	\$16.00	\$18.00
Special Matings.....	14.00	17.00	18.00	20.00

Prices are per hundred. For orders of 25 chicks add 75c. For orders of 50 chicks add \$1.00.

We ship Prepaid and guarantee safe delivery

Everyone answering this advertisement will receive FREE our suggestions for brooding, feeding and rearing chicks.

Hall Bros.

POPLAR HILL FARM
BOX 59 WALLINGFORD CONN.



Fairport Quality Chicks

are bred to make money for you. Strong, healthy, vigorous from the world's best and heaviest laying strains such as—Tancred, Ferris, Owen Farms, Daniels, Thompson, Martin, Shepard, Fishel and others. Free range flocks, scientifically culled and supervised. Smith Hatched. 100% live delivery guaranteed. 16 breeds 9c and up. Postpaid. Members International Baby Chick Association. Send now for free poultry book and prices. Buy Hatchery Chicks for Greater Profits.

FAIRPORT HATCHERIES Box 44 Fairport, N. Y.



Here: Nearly Everyone Raises Full Blooded "AMERICAN" Quality Chicks

Write now for our new low prices. Your opportunity to get our special flock mating chicks at utility prices. Chicks shipped C. O. D. Catalogue and prices on request. 100% live arrival guaranteed. 15 breeds. Write now.

American Chickeries, Box 214, Grampian, Pa.



National "Superbred" Chicks 100,000 CHICKS FOR DELIVERY IN JUNE

S. C. White, Brown, Buff Leghorns.....	50	100	500	1000
Barred and White Rocks, Reds.....	\$5.75	\$11.00	\$25.50	\$100.00
	6.75	13.00	62.50	120.00

Light Mixed—\$9.00 per 100. Heavy Mixed—\$10.00 per 100. Also White Wyandottes, Black and White Minorcas, Anconas and Blue Andalusians. Send for our Catalog and price list. We guarantee 100% live delivery. Member International Baby Chick Association.

NATIONAL CHICK FARMS, BOX 408, MIFFLINTOWN, PENNA.

Buy C.M.L. Chicks

chicks cost no more than ordinary chicks from the average hatchery, but our Quality is far superior. For many years we have specialized in Barrons. We import direct from England. 100% Live Delivery Guaranteed. Prepaid. Barron S.C. Wh. Leghorns.....\$3.00 \$5.00 \$10.00 \$47.50 \$100.00 Barred & Wh. Rocks; Wh. Wyandottes & R. I. Reds.....3.25 6.25 12.00 57.50 110.00 All stock carefully selected for size and health. C. M. L. chicks mature early and are sure to please you. Better chicks cannot be had at these low prices. Write for Free Catalog or order direct from this ad. C. M. LONGENECKER, BOX 40, ELIZABETHTOWN, N. Y.

BABY CHICKS

White Leghorns.....	25	50	100	500
Barred Rocks.....	\$2.75	\$5.25	\$10.00	\$47.50
Rhode Island Reds.....	3.25	6.25	12.00	57.50
Heavy Mixed.....	3.25	6.25	12.00	57.50
Light Mixed.....	2.75	5.25	10.00	47.50
Peking Ducklings.....	2.50	4.75	9.00	42.50
Mixed Ducklings.....	7.50	14.50	28.00	
	6.50	13.00	25.00	

John Shadel Hatchery McAllisterville, Pa. Route 2.

BABY CHIX

Cash or C. O. D.....	100	500	1000
Barred Rocks.....	\$12.00	\$57.50	\$110.00
Tancred Strain S.C.W. Leghorns.....	10.00	47.50	90.00
Heavy Mixed.....	9.00	42.50	80.00
Light Mixed.....	8.00	37.50	70.00

These chicks are from free range and heavy egg producing flock. 100% live delivery guaranteed to your door. Write for Special Mating prices.

FRANK NACE, Cocolamus, Pa., Box No. 120



\$12 to \$25 per 100

Barred and White Rocks, White and Columbian Wyandottes, R. I. Reds, Jersey Black Giants, Black Minorcas, White and Brown Leghorns, Mottled Anconas, 20,000 Weekly. Finest purebred, heavy producing, free range stock, under State inspection. 100% safe delivery guaranteed. Catalog free.

ULSTER POULTRY FARMS, Box 40, WALDEN, N. Y.

Pennsylvania Co-Operative Leghorn Farms

Breeding COCKERELS with RECORDS to 303 EGGS. PURE TANCRED-HOLLYWOOD-BARRON STRAINS. White Leghorns—Brown and Buff Leghorns—QUALITY EXTRAORDINARY—PRICE WAY DOWN—SHIP C. O. D. Get our prices quick.

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BARRED ROCK CHICKS

A large modern Breeding Farm and Hatchery devoted exclusively to the production of BARRED PLYMOUTH ROCKS.

MARVEL POULTRY FARM, GEORGETOWN, DEL.

200,000 CHICKS 1929

Goodling's Super Quality. Healthy, Strong and Vigorous

Single Comb, White Leghorns.....	50	100	500	1000
Barred Plymouth Rocks.....	\$6.50	\$12.00	\$57.50	\$110
S.C. Rhode Island Reds.....	7.00	13.00	62.50	120
Broiler Chicks, Heavy Breed.....	8.00	15.00	75.00	
Broiler Chicks, Light Breed.....	5.50	11.00	52.50	100
Order direct. Prepaid 100% live delivery guaranteed.	5.00	10.00	47.50	90

Circular Free. THE VALLEY HATCHERY Box A, R. No. 1, RICHFIELD, PA.

(Continued from Page 9)

gested, the only comeback was that most retail grocery stores do not have sufficient refrigerating space to do this. It would, of course, cost money to provide this space, but it seems evident to us that there is little use of the farmer grading and caring for his eggs properly, only to have them set in a sunny store window for a week or two before they are sold to the consumer. At any rate, it would appear that the producer is no slower to adopt different practices than any other class of men connected with the business. In fact, it is our private opinion that he has responded to good suggestions fully as rapidly as other classes.

Producer Should Be Paid for Quality

Nothing is more discouraging than to produce eggs of excellent quality and then to find that no better returns are secured than one's neighbor gets for eggs of questionable quality. The inclusion of the unclassified grade in retail egg grades has undoubtedly tended to get this result. It is our opinion that the unclassified grade will be dropped and it will then be up to the producer to take advantage of the situation in every possible way.

Unfortunately, the reputation of New York State eggs on the New York market is not good and a New York State producer must continue to buck against this prejudice. We have frequently heard it said that it does not pay to grade eggs. Of course, it will not pay to try grading once and to abandon the practice if better returns are not secured. In order to get better prices for quality eggs, it is necessary to select a responsible dealer and to work up a reputation so the buyer knows that he can depend upon the quality of eggs which he secures from you. This takes time but it can be done.

How to Market Good Eggs

A few suggestions which are continually being made to producers who wish to improve the quality of their pack will bear repeating. Probably no one factor has so great an influence during the summer as the production of infertile eggs. The next point in importance is the care of the eggs from the time they are gathered until they are marketed. Eggs should be marketed twice a week during the hot weather and they should be gathered frequently and kept in the coolest possible place.

Pacific Coast eggs have a good reputation in New York because they are graded carefully as to size and color and are packed in new cases. It was brought out at the hearing in Albany that the retailer can buy a case of eggs from the Pacific Coast and be assured that they will be uniform, that the quality will be good and that there will be few or no broken eggs in the case. Whereas he may also buy such eggs from the East, he is not SURE that he will get them. It is common practice among New York producers to use second-hand egg cases. Although this lowers the first cost of marketing, it does detract from appearance. It is probable that from a practical point of view it would have little effect upon breakage, providing that new fillers and cup flats are used in packing and providing enough excelsior pads are used in the crates.

Producer Should Know What He Buys

One point which has particularly impressed us as we have studied this problem of egg grades, is the fact that it is exceedingly difficult to make any regulations which can be reasonably

(Continued on Opposite Page)

SIEB'S GUARANTEED CHICKS
from CERTIFIED HOGAN TESTED
HEAVY LAYING FLOCKS
SEE OUR LOW PRICES WHY PAY MORE?
Sieb's OVERSIZE CHICKS all Pure Bred from World's Famous Bloodlines. Will grow larger, mature quicker, lay better, pay higher profits. 100% live delivery. Immediate shipment. Catalog Free.

PRICES PREPAID	25	50	100	500
Wh. Bf. Br. Leg. Anconas	\$3.00	\$5.75	\$11.00	\$52.50
R. C. Reds. Wh. & SL. Wym.	3.75	7.25	14.00	67.50
Br. Wh. & Buff Rocks	3.50	6.75	13.00	62.50
Wh. Min. S. C. Reds.	3.50	6.75	13.00	62.50
Wh. Orps.	3.75	7.25	14.00	67.50
Bf. Orps.	3.75	7.25	14.00	67.50
Black Min.	3.25	6.25	12.00	61.50
Hvy. Asst'd.	3.00	5.75	11.00	62.50
H. & L. Asst'd.	2.75	5.25	10.00	47.50
Lt. Asst'd.	2.50	4.75	9.00	42.50

SIEB'S HATCHERY.
Box 225 Lincoln, Ill.
Members I.B.C.A.

QUALITY BABY CHICKS Five extra given of one hundred ordered. June and July hatched chicks. Leghorns, White, Brown, Buff, Black—\$10.00 per 100; Barred Rocks, Reds, Minorcas, Anconas, \$12.00 per 100; White Rocks, Wyandottes, Buff Orpingtons, \$14.00 per 100. May \$2 more. Aug. \$2 more. Sept., \$4 more. Custom hatching. Eggs for hatching. Odds and Ends, Left Overs, Mixed broiler chicks, Light, 10c; Light and Heavy, 12c; All Heavy, 14c; Better order now. Will send C.O.D. Thousands hatching daily all year around. Active, husky, chicks hatched from healthy free range breeders that will live, grow and lay. Prompt shipments. Postage prepaid. Live delivery. Send for folder. SCHOENBORN'S HATCHERY, 335 Main St., Hackensack, N. J. Phone 1603 or 1604.

BABY CHICKS

From Heavy Laying Free Range Flocks

S.C.W. & Br. Leghorns.....	25	50	100	500	1000
S.C.B. & Wh. Rocks.....	\$3.00	\$5.50	\$10	\$47.50	\$90
Buff Orpingtons & Reds.....	3.50	6.50	12	57.50	110
White Wyandottes.....	3.50	6.50	12	57.50	110
Assorted Chicks.....	2.75	4.50	8	37.50	70

100% prepaid safe delivery guaranteed. Order from this ad. or write for circular Box 161 J. N. Nace Poultry Farm RICHFIELD, Pa.

BABY CHICKS ORDER DIRECT from this ad. and save time.

Free Range Bred	25	50	100	500	1000
Wh. & Brown Leghorns.....	\$2.75	\$5.25	\$10.00	\$47.50	\$90
Anconas & Black Leghorns.....	2.75	5.25	10.00	47.50	90
White & Barred Rocks.....	3.25	6.25	12.00	57.50	110
Col. Wyan. & R. I. Reds.....	3.25	6.25	12.00	57.50	
Heavy Mixed Broilers.....	3.00	5.75	11.00	52.50	
Light Mixed Broilers.....	2.25	4.25	8.00	38.75	75

Full count and quality guaranteed. Catalogue free. Hatchery Chicks ULSH POULTRY FARM & HATCHERY For Greater Profit Port Trevorton, Penna. Box A

BABY CHICKS

PROMPT DELIVERY—WILL SHIP C.O.D.

White and Bd. Rocks.....	50	100	500	1000
S. C. R. I. Reds.....	\$6.50	\$12.00	\$57.50	\$110.00
S. C. White Leghorns.....	6.50	12.00	57.50	110.00
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PINECREST POULTRY FARM & HATCHERY Herbert Miller, Prop. Box 12, Richfield, Pa.

TAKE NOTICE 75,000 CHICKS for MAY DELIVERY

S. C. White Leghorns.....	25	50	100	500	1000
Barred Rocks or Reds.....	\$3.00	\$5.50	\$10.00	\$47.50	\$90
Silver Laced Wyandottes.....	3.50	6.50	12.00	57.50	110
Light Mixed.....	4.00	7.50	14.00	65.00	
Heavy Mixed.....	2.50	4.50	8.00	37.50	70
	2.75	5.00	9.50	45.00	85

From carefully selected free range flocks. 100% arrival Postpaid. Write for illustrated catalogue.

The Richfield Hatchery, Box 80, Richfield, Pa.

FERRIS STRAIN WHITE LEGHORN CHICKS

Our breeders are large birds; long, deep, rectangular bodies. Selected for size, type and egg production. \$10 Per 100; \$47.50, 500; \$90, 1000 Juniata Poultry Farm, Box T, Richfield, Pa.

CHICKS 8 1/2 c

CLASS A CHICKS at low prices, also pullets. Special discounts. Several varieties. No money down. 100% live arrival; postpaid. Catalog free.

BOS HATCHERY, R 2A, ZEELAND, MICH.

BRED TO LAY BABY CHICKS

Barred Rocks; White Leghorns \$10.00 per hundred for May and June deliveries. 25 chicks \$2.75; 50 chicks \$5.25. Scarborough Poultry Farm, Box A, Milford, Del.

SINGLE COMB RHODE ISLAND REDS Vt. Certified: Tested free from B.W.D. Males from 200-300 egg hens. Pullets: Started Chicks: 3000 Baby Chicks weekly: Circular. ASCUTNEY FARMS, A10, HARTLAND, VT.

DUCKLINGS \$33; EGGS \$14.00

"Duck News" Free. ROY PARDEE, Islip, L. I., N. Y. SPECIAL FALL prices for breeding Turkeys, Geese, Ducks, and Guinea. Write your wants and for mailing list. PIONEER STOCK FARM, TELFORD, PA.

BABY



CHICKS

(Continued from Opposite Page)

well enforced and which will be fair to everyone concerned. We do believe that the changes recommended will help and we earnestly suggest that all producers get back of them and do their part.

Some criticism has been directed toward the State Department of Agriculture and Markets. It is our impression that the Department is doing its utmost, under handicaps, to be fair to the producer, the dealer and the consumer. Producers should realize that any regulation which imposes undue hardships on the retailers, will eventually react to harm the industry. Producers commonly feel that the dealer is robbing them by returning less than the eggs are worth, and on the other hand, dealers are likely to feel that producers are attempting to put in all the bad eggs possible in order to profit thereby. As a matter of fact, human nature is very much the same wherever you find it. If everyone concerned were absolutely honest, perhaps we would

not need any grading law. Under conditions as they are, we believe that it will help the industry when consumers can buy eggs and know that they will get what they are buying and we believe that the changes proposed by the Department will go a long way toward making this possible.

Keep the Chicks Healthy

WHILE no one has much patience with the man who is always looking for trouble, it is a good thing to prevent trouble. One such time in the poultryman's calendar surely is the period after chicks are weaned from the heat. The care and interest which marked the start of the season's brooding operations are dulled by the pressure of daily routine. There is a tendency to "let things slide", and the poultryman may come to realize too late that his birds do not look as good as they should and that it would be money in his pocket to have taken care of some matters a little earlier in the season.

Some of the details which always require attention are the following:

Clean Up

Most summer ailments are caused by birds eating something they should not. Mash boxes, water fountains, houses, and range must be kept clean in order to remove sources of infection—probably no poultryman ever kept his place too clean.

Prevent Contacts With Older Stock

Grown birds, apparently healthy, often are infested with parasites which can play havoc with young birds. Infection may be carried in many ways—on shoes, clothing, crates, grain-bags as well as on dirty land. Keep young birds out of hen yards.

Cull the "Cripples"

It costs enough to raise good stock without nursing culs. The poultryman cannot afford to run a convalescent pen for stunted, unthrifty chicks; too many times it has been tried and resulted in failure. Culled are a poor investment; they are predisposed to and spread disease; they never get better. The best time to weed them out is NOW.

Prevent Crowding

Crowding may not directly cause disease but certainly fosters it. The equipment that was ample to start four hundred chicks is far too little to carry 150 pullets. There must be plenty of range, plenty of roost room (use as many roosts as can be put in the house), provide hopper space so that any chicks may have a chance to eat at any time. Chicks cannot grow properly if they crowd on the floor and have too little mash feeding space.

Be on the Job

Take immediate notice of ailing or dead birds; try to find just what is the cause in each case and use dependable methods to treat and prevent spread of disease. Promptness in detecting trouble and preventing its spread is probably more important than any treatment.—Locke James.

Cause of Crippled Chicks

Could you tell me what makes cripples in young chickens. One party near here had a good hatch but lots of cripples while another party with a poor hatch ran the incubator with too low a temperature and chickens came out two days late but with no cripples.—W.L.M., New York.

It is believed that cripples in young chicks are caused by a temperature that is too high during the first five days of the incubation period. The exact reason for this is not fully understood. Apparently, high temperature later in the hatch does little harm unless it goes high enough to cause death and low temperature results only in a slow hatch and probably the lessening of the vigor of the chicks.



HUBER'S RELIABLE CHICKS

CHICKS 8c AND UP Make extra profits with Huber's Reliable Chicks. At these prices your profit is assured. Nineteen years careful development. Order from this ad. 20% down. Rest C.O.D. if you wish.

Bd. & Wh. Rocks, R.C. & S.C.R.I. Reds	\$12.00
Buff Orpingtons	\$13.00
Columbia Wyandottes, White Minorcas	\$14.00
Special White Leghorns, Bl. Minorcas	\$12.00
White & Brown Leghorns, Anconas	\$10.00

Heavy Assorted \$10.00 per 100. Light Assorted \$8.50 per 100.
50c per 100 less on orders of 400 or more.

HUBER'S RELIABLE HATCHERY, NO. HIGH ST., FOSTORIA, OHIO

Big Chicks From High Record Matings

300 to 325 Eggs S. C. White Leghorns. Our long experience in Breeding will prove a satisfaction to our customers at the following prices:

White, Brown, Buff Leghorns & Heavy Mixed	\$5.50	\$10.00	\$17.50	\$30.00
Blk. Minorcas; Barred & White Rocks; Orpingtons	6.50	12.00	27.50	115.00
S. C. Reds; Wh. Wyandottes; Barron Leghorns	7.00	13.00	32.50	129.00
Giants	9.00	17.00	80.00	
Light Mixed	4.00	8.00	40.00	80.00
Special Tanerred White Leghorns	8.50	16.00	75.00	145.00

Your order will receive my special attention. Satisfaction Guaranteed.

UHL PIONEER HATCHERY & EGG FARMS, DEPT. A, New Washington, Ohio. Albert Studer, Prop. Ref.: Farmers State Bank



WOLF SELECTED CHICKS

CHICKS C. O. D.

Send only \$1.00 and pay Postman the balance. Special pen mated and extra bred chicks at slightly higher prices. Shipments made any time you wish.

S.C. Wh., Br. & Buff Leghorns, S.C.M. Anconas	\$3.00	\$5.50	\$10	\$46.00	\$90
Bd. & Wh. Rocks, S.C. & R.C.R.I. Reds, Bl. Min.	3.50	6.50	12	55.00	110
White Wyandottes, Buff Orpingtons	3.75	6.75	13	57.00	115
Jersey Black Giants	5.00	9.50	18	37.50	170
Assorted Odds and Ends, Mixed Chicks	2.50	4.50	8	38.00	75
Assorted Heavy Mixed Chicks	3.25	6.00	11	50.00	97

WOLF HATCHING & BREEDING COMPANY, Box 1 Gibsonburg, Ohio



IMMEDIATE DELIVERY

FINGER LAKE REGION BABY CHICKS



with an official record. Ask for our Baby Chick Book describing our Pedigreed Cornell Chicks from stock that has laid from 200 to 312 eggs in their pullet year and mated to breeders that have averaged over 200 eggs in their pullet year. Also describes our 144,000 egg hatchery with 22 years' experience in hatching Baby Chicks. Leghorns, Reds, Rocks, Wyandottes, Minorcas, and Giants. The home of better Chicks at lower cost.

THE DERROY TAYLOR CO.,
NEWARK, NEW YORK

WEEK OLD 8 WHITE LEGHORN PULLETS

\$1 EACH—F. O. B. RED BANK, N. J.

ORDER NOW for July Delivery
10% DEPOSIT BOOKS YOUR ORDER
EIGENRAUCH FARMS
RED BANK NEW JERSEY

Chix from Large Breeders

Summer Prices

Ferris Strain White Leghorns	100	500	1000
Everlay Brown Leghorns	10	47.50	90
Basom's Barred Rocks	12	57.50	110
Owens' R. I. Reds	12	57.50	110
Mixed Chicks	8	37.50	70

Our breeders are selected for size, type and egg production. The kind that lay and pay. Send for literature. It's free. Tells all about our great egg machines.

JUNIATA POULTRY FARM,
BOX 1 RICHFIELD, PA.

BABY CHICKS

From heavy laying strains of Barred Rocks and Reds—\$9.00. White and Brown Leghorns—\$7.50. Mixed \$7.50. Prepaid.

Member I. B. C. A.

Sunnyside Hatchery, Liverpool, Pa.

PENNA. "State Supervised" CHICKS



Flocks inspected by officials from the Penna. Dept. of Agriculture. Our 19th year. Get our low prices on Reds, Rocks, Leghorns and Minorcas. Member I.B.C.A.

Catalogue free.

THE KEYSTONE HATCHERY,
(The old reliable plant) RICHFIELD, PA.

BABY CHICKS

100% live delivery guaranteed. Order from this ad. or write for free circular.

C. P. Leister, McAlisterville, Pa.

Before BUYING LEGHORN CHICKS

Get our circular of a Tancred Strain Single Comb White Leghorns. Every chick hatched from our own breeders. We guarantee satisfaction.

ADRIAN DeNEEF, Sodas, N.Y.

WYCKOFF and BARRON STRAIN. White Leghorn Chicks for May 9c each; \$80 per 1000. Prepaid and safe delivery guaranteed. Our 19th year. Circular free. \$1.00 books order. **THE PENNSYLVANIA HATCHERY,** Box W, Liverpool, Pa.

BABY CHICKS

hatched by the best system of incubators from high class bred-to-lay stock. White, Brown, Buff Leghorns, Anconas \$14.00 per 100; Barred, White Rocks, Minorcas, Reds \$16.00 per 100; White Wyandottes, Buff Orpingtons \$17.00 per 100; Giants \$20.00 per 100; Heavy Broilers \$12.00 per 100; Light Broilers \$10.00 per 100; Pekin Ducklings \$30.00 per 100. Add 25c on orders for less than 100. Safe delivery guaranteed by parcel post.

Nunda Poultry Farm, Desk H, Nunda, N.Y.
Member of the International Baby Chick Ass'n. and the N. Y. State Co-Operative Chick Producers Ass'n.

Reduced Chick Prices

In effect June to October

Large Type Wh. Leghorns	25	50	100	500	1000
Bd. & Wh. Rocks, Reds	3.00	6.00	12	57.50	110
Wyandottes, Orpingtons	3.25	6.50	13	62.50	120

Light Assorted 9c. Heavy Assorted 10c.
Live Delivery Guaranteed. Catalog Free.

LANTZ HATCHERY, Tiffin, Ohio

No Bluff Chicks Just Real

Thousands of customers know. Order year after year. A satisfied customer my best advertisement. Join the old reliable plant. 16 years satisfactory service cuts down expensive advertising. My customer reaps the benefit by ordering from this small advertisement.

S. C. White and Brown Leghorn SPECIALIST. 200 to 250 Egg Strain CHICKS \$13.00 per 100; 500 or more, \$11.00 per 100. Assorted chicks, \$8.00 per 100. FREE & 100% LIVE DELIVERY GUARANTEED.

HOUSEWORTH'S LEGHORN FARMS,
Port Trevorton, Penna.

MAY PRICES

S. C. White Leghorns	100	500	1000
Barron & Wyckoff Leghorns	\$9.00	\$42.50	\$80.00
Barred Rocks & R. I. Reds	10.00	47.50	90.00
Light Mixed \$8. Heavy Mixed \$10. Our chicks are properly hatched, strong and vigorous. 100% live delivery. Postpaid. Circular free giving full details of all breeds.			

CLEAR SPRING HATCHERY, McAlisterville, Pa. R. D. No. 2. F. B. Leister, Prop.

Klines Barred Rocks

Tested stock, Penna. State College males. Strong chicks guaranteed. Prompt delivery. C.O.D. \$12.00-100. \$110.00-1,000. \$500.00-5,000. Write or wire.

S. W. Kline, Box 40, Middlecreek, Pa.

CHICKS

Purebred blood tested free range breeders. Leghorns, Anconas, 8c; Rocks, Reds, 10c; Wyandottes, Orpingtons, Minorcas, 11c; Black Giants, 16c. 100% live delivery. Valuable Chick Manual Free.

Seidelson Farms, Washingtonville, Pa.

WENE CHICKS Blood-Tested Quality Chicks Priced Low

Our prices are as low as those asked by others for untested stock. Yet every WENE chick comes from a blood-tested mating. All our Leghorn matings are State-Supervised, consisting of 11en breeders weighing 4 lbs. or more.

Immediate Delivery	50	100	500
White Leghorns			
Select Matings	\$7.50	\$14.00	\$65.00
White Leghorns			
Wene-Ells Matings	9.00	17.00	80.00
Rock-Wyandotte			
Broiler-Roaster Cross	7.00	13.00	60.00
Straight Rocks, Reds			
Wyandottes	8.50	16.00	77.50
Wene-Ells flocks headed by pedigreed 200-egg cockerels			
All Chick Shipments Sent Postage Prepaid—100% live delivery guaranteed.			
S. C. White Leghorn Pullets—State-Supervised, 8-10 weeks. June and July deliveries.			

FREE FOLDER and Mating List.
WENE CHICK FARMS, Dept. D, Vineland, N. J.

CHICKS with vim and vigor

Hatched by men with 19 years experience, from culled flocks. 100 per cent live delivery guaranteed by Prepaid Parcel Post at the following prices:

PRICES FOR MAY

S. C. White Leghorns	9c each—\$	80.00 per 1000
S. C. Brown Leghorns	9c	80.00 " 1000
Barred Rocks	10c	90.00 " 1000
S. C. R. I. Reds	12c	110.00 " 1000
S. C. Black Minorcas	12c	110.00 " 1000
B. B. Mixed	9c	80.00 " 1000
L. B. Mixed	8c	70.00 " 1000

\$1.00 will book your order. Catalogue free.

THE PENNSYLVANIA HATCHERY
LIVERPOOL, PA.

STOP! LOOK! LISTEN!

Cash or C.O.D.	25	50	100	500	1000
Wh. Wyandottes	\$4.00	\$7.50	\$14.00	\$67.50	\$130
Rocks or Reds	3.50	6.50	12.00	57.50	110
Wh. Leghorns	3.00	5.50	10.00	47.50	90
Heavy Mixed	3.00	5.50	10.00	47.50	90
Light Mixed	2.50	4.50	8.00	37.50	70

From carefully selected free-range flocks. 100% arrival. Postpaid. Valuable illustrated 96-page booklet FREE. Telling all about poultry.

The Commercial Hatchery,
Box 75-A (The dependable plant) Richfield, Penna.

CHERRY HILL CHICKS

S. C. W. Leghorns—Wyckoff Strain	100
S. C. Everlay Brown Leghorns	\$10.00
Barred Rocks and R. I. Reds	11.00
Heavy Mixed	10.00
Light Mixed	9.00
1/2c less per chick in 500 lots. 1c less in 1000 lots. For less than 100 chicks add 2c. 100% live arrival guaranteed. Parcel post prepaid. Bank reference. Order direct from this adv. or write for free circular.	7.00

CHERRY HILL POULTRY FARM,
Wm. Nace, Prop., Box A, McAlisterville, Pa.

BABY CHICKS

FROM A HEAVY LAYING STRAIN. Three years blood tested for white diarrhea and under State supervision. Barred Rocks, White Wyandottes, Reds, White Leghorns. Moderately priced. Write for Catalogue and Prices.

BYRON PEPPER & SONS
BOX 11, GEORGETOWN, DEL.



WANTED AT ONCE! 300 More Good Men

In New York and New England

to help introduce and retail Rawleigh's Good Health Products. You will be supplied from our new branch house just opened at Albany. Sell in town or country. Wonderful opportunity. Nothing new—no experimenting. On the market since 1889. Nearly 200 necessities needed daily in every home. Annual Sales over 37 million packages. Largest Company—over 15 million dollars capital—16 great factories and branches. Practically no capital, no experience needed. Quick, easy sales, repeat every 30-60 days. Big pay right from start. Stone, Vt., sold \$212.20; Reagan, N. Y., \$184.40 first week. Profits increase monthly. Thousands make more than they ever could before. You should do as well. Simply follow the same old time-tested Rawleigh Methods which have given consumers best values and satisfaction for 40 years. We supply everything—products, outfit, sales and service methods which secure the most business everywhere. Steady year round—no lay-off—no boss—you are sole owner and manager. For particulars write

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OF ITS KIND IN THE WORLD



Kill Rats Without Poison

A New Exterminator that
Won't Kill Livestock, Poultry,
Dogs, Cats, or even Baby Chicks

K-R-O can be used about the home, barn or poultry yard with absolute safety as it contains **no deadly poison**. K-R-O is made of Squill, as recommended by U. S. Dept. of Agriculture, under the Connable process which insures maximum strength. Two cans killed 578 rats at Arkansas State Farm. Hundreds of other testimonials.

Sold on a Money-Back Guarantee. Insist upon K-R-O, the original, Squill exterminator. All druggists, 75c. Large size (four times as much) \$2.00. Direct if dealer cannot supply you. K-R-O Co., Springfield, O.

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The Abner Pit Generator installed outside the house in the ground requires attention only a few times a year. It is simple and fully guaranteed. It is used for lighting and ironing also.

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Get it today with our latest catalogue.

ABNER MFG. CO. Wapakoneta, Ohio

Trees Out of Place Are Weeds

Specialist Says Early Flowering Shrubs Need Immediate Pruning

PROFESSOR J. P. PORTER of the New York State College of Agriculture, gave a very helpful radio talk recently over WHAM, about plantings around the home. If your house looks bare and uninviting, plant trees, he says.

All trees are shade trees, so plant them where you need shade. Any place where the family is apt to play or to sit during the summer night might well be shaded.

Heavy rows of trees across the front lawn spoil completely the picture effect of the house. If your home is imprisoned back of tree-trunk bars, probably the most valuable landscape work you can do is to remove some of these trees. A lot of silly sentiment is sometimes attached to trees, he says. Trees in the wrong place are weeds and should be cut down just as certainly as you would pluck out of the garden bed an offending dandelion or dock.

Trees are beautiful and useful; if property lacks them they should be the first growths to be planted. They give the greatest return for the least invested but should be placed at the sides and in the rear, not spotted on the front lawn nor across the front of the house to hide it from view. Use low shrubs around the basement to tie the house to the lawn but do not let bushes grow up in front of the windows.

Ornamental shrubs require somewhat different pruning methods than do fruit trees, says Professor Porter. Shrubs fall into two classes. Those which blossom early set their flower buds during the preceding year. If they are pruned during the following winter or early spring all blossom is destroyed. They should be pruned immediately after they blossom. In this group are Spirea, Japanese quince, Japanese snowball. If these are not pruned until late summer young growth will develop before winter and such tender stems are frequently winter killed. All plants which blossom from the middle of the summer on, may be pruned either in the fall, winter or early in the spring. In this group are roses, hydrangea, rose of Sharon.

For the most part limit pruning to the removal of injured, dead, or ungainly branches. Never give them a typical "barber's haircut", Professor Porter says, for this destroys their natural symmetry and grace. Clipped hedges should be pruned twice during the year, once during June and again during winter or early spring. All plants profit from an occasional and intelligent pruning.

Spring Salads

In the late winter and early spring our appetites are often very capricious. Nature is telling us that we need a tonic. Salads are good tonic, and as a rule we do not serve them often enough.

Only a few apples left! Let us make them go farther by using measure for measure of apples and canned peaches, both cut up fine. Add a few walnut or

pecan meats, or raisins. Drain and place on salad plate and top with whipped cream, with a whole meat in center. Use the juices by diluting with water and serve for a drink; serve either hot or cold.

For most of us cabbage and lettuce is too expensive, and is served only on special days. Plain vegetable salads can be made with canned goods. A general favorite with us is made as follows: chop beets rather fine, and add a few tiny bits of onion cut fine. If balls of cottage cheese are arranged around the outside of the dish, with beets in center it is a very attractive

lettuce and place in individual plate. Place a tomato upon it. Cut each tomato in quarters, being careful not to cut it at bottom. Place a section of grape fruit between each tomato quarter. Top with mayonnaise to which whipped cream has been added.—ROBERTA SYMMES.

This is somewhat more unusual than the Daisy salad and has the advantage of providing the tartness and crispness of fruits. Our diet is apt to be deficient in the crisp, fresh foods, leaning more to the heavy solid kind. Wherever such salads as this can be used, they are not only appetizing but health giving.

Greetings from Betty

DEAR Little Cooks: First of all I want to thank you all for the nice letters you have written me, and specially those who sent birthday greeting cards. It was lots of fun to have so many remember my birthday.

Then I want to thank the little cooks who sent me recipes. I guess some of you who are older know how to cook some things I haven't tried yet. I am going to try all the recipes I can and whenever there is room I will send a good one to be printed. But please be very careful, won't you, to copy the recipes just right because so often in the recipes, the little cooks who sent them left out some very important part and then I couldn't use those recipes.

So many of you ask what grade I am in and I will tell you. I am in the second grade. Maybe some of you are higher at my age, but we have a rule in our school that no one can start till he or she is six years old so you see that keeps me back a little with a birthday in the spring. I had to wait till the September after to start school.

* * *

BETTY.

The third group of Little Recipes came out in May 18th American Agriculturist. We hope you remembered to clip them out for your Betty Scrapbook. If you haven't already sent for one, send 10 cents now. It has the first two lessons printed in it, but the rest will have to be clipped out of the American Agriculturist as they appear, once a month. Address Betty, care American Agriculturist, 461 Fourth Avenue, New York City.

Useful Pamphlets

The following booklets can be secured by addressing Household Department, AMERICAN AGRICULTURIST, 461 Fourth Ave., New York City.

How to Make Crepe Paper Costumes—10c.

How to Make Crepe Paper Flowers—10c.
How to Decorate Halls, Booths and Automobiles—10c.

Weaving with Paper Rope—10c.

Sealing Wax Craft—10c.

Betty's Scrapbook of Recipes for Little Cooks—10c.

Fashion Catalogue—12c.

Art of Embroidery, teaching all the important stitches used in embroidery—25c.

Yarncraft—directions for making many kinds of sweaters, caps, afghans, and coolie coats, both knitted and crocheted—25c plus 5c for mailing.

The following can be secured by sending 2c postage:

Old-fashioned recipes.

Reviving in case of drowning or gas poisoning.

Learning to crochet and knit.

Knitting the new sweaters.

Free pamphlets:

Health Pamphlets for Mothers and Young Children.

Talks on sex to older children.

salad as well as good to eat. Use a boiled dressing.

The hens are now filling the egg baskets to overflowing. Let us use some at home. Hard cook six eggs, cool, peel and chop coarsely. Moisten with boiled dressing and sprinkle with finely chopped cucumber pickles or celery. This is very pretty when served on lettuce or cabbage leaves.

One may serve cabbage in hot or cold salads, with mayonnaise dressing or with salt, sugar and vinegar, adding a little sweet cream just before serving. Or it may be mixed with chopped apples, sliced cucumbers, diced celery, or perfection salad. This calls for gelatine and I use the method of making given on the booklet—enclosed in their package—always a perfect salad.

By being careful with our combinations of vegetables a number of salads may be made, attractive to the eye, and then more greatly relished.—M. F. M.

Daisy Salad

5 hard cooked eggs	Mayonnaise
French dressing	Salt
Shredded lettuce	Pepper

Remove eggs from shell when cold, cut lengthwise. Mash yolks through ricer or sieve. Cut whites in long narrow strips, arranging on a nest of lettuce leaves on individual plates. The strips are laid like daisy petals, radiating from the center. A spoon of iced yolk is placed in center of each, slightly mashed down; sprinkle lightly with salt and pepper. Serve with mayonnaise or French dressing.—ROBERTA SYMMES.

This makes a very attractive dish and is especially good for light Sunday night suppers when the heavy meal has been eaten at noon.

Chrysanthemum Salad (Six Servings)

Six large tomatoes, ripe. Peel and separate sections of grape fruit, allowing four sections to each tomato. Shred



scarf 18x45 inches the set is 65c; set with scarf 18x54 inches \$1.00 postpaid. Send order to Embroidery Department, American Agriculturist, 461 Fourth Av., N. Y. City.

Buffet or dresser set NO. 606 has a very unusual and attractive design stamped on excellent quality material ready for working. These hem-stitched sets consist of scarf and two dolies and come in two sizes: with

Aunt Janet's Counsel Corner

You May Know the Solution of This Reader's Problem

Dear Aunt Janet:

My husband and I, with three small children, ages 1 year, 2½ years and 4½ years, live on a small farm 1½ miles from town and 10 minutes from the country school. We are Americans and Christians and go to church regularly.

I am coming to you with my problem, wondering if you can help me as you have helped others. I would like to find a young girl, twelve or fourteen years of age, to help me take care of the children and do some other easy work around the house. In return, I would give her a good Christian home, clothes, and what she really needs. I would teach her to sew and cook and make a real home maker of her. There would be times when she could pick berries, pick apples and perhaps some other work for which we would pay her the same as anyone we might hire.

I would expect her to be as one of the family and be obedient as I would expect a daughter to be. I want a healthy girl as we are a healthy happy family.

I don't want one of the latest (so-called) flappers who expects to go out every night. The right kind of a girl would be very happy with us. Perhaps I expect too much but it seems to me as if there ought to be just the kind of

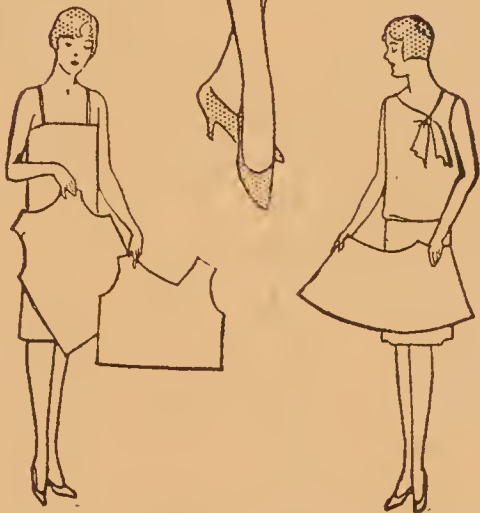
girl somewhere who wants a good home. I would try her a month and if we liked each other would keep her two years, perhaps, and maybe longer. I can give references and would expect the same. I want her to come right away if possible.

If you know of anyone or could print my letter I would be glad to correspond with someone. Please help me if

Sunburst Neckline



2801



PATTERN 2801 with its attractive sunburst effect at point of neckline has a truly distinctive air. Made up in the lovely printed silk crepes, this design would be suited for almost any kind of wear. The necessary snug hip line is achieved by means of a hip yoke. The pattern cuts in sizes 16, 18 years, 36, 38, 40 and 42 inches bust measure. Size 36 requires 3 yards of 40-inch material with ¼ yard of 27-inch contrasting. PRICE 13c.

you possibly can and I will be so grateful to you. I read the American Agriculturist every week and enjoy it so much.—"Happy Home."

This letter comes from a home in Wayne County, New York. If any of our readers know such a girl and can furnish necessary references for her, the Corner will give you "Happy Home's" address.—Aunt Janet.

Where Would You Live

If you were absolutely free to choose, what place would you select to live in? Would it be city or would it be country? Would it be east or would it be west, north or south? We often hear people say "If I only lived in the city" or "if there weren't so much cold weather," or "if I just had different neighbors"—things would be all right.

Considering that human nature is practically the same every where and that the antithesis of a lot of cold weather is a lot of hot and that average people do not live in both country and city at the same time, just where

would you settle down? This contest offers a fine opportunity to weigh the matter and decide what location really presents the most opportunities for you to be happy in the truest sense of the term.

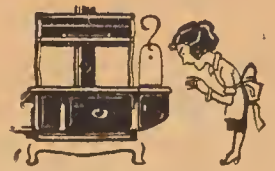
Write a letter to Aunt Janet and give the reasons for your choice, not over 250 to 300 words in length. The writer of the best letter setting forth the reasons for selecting a place to live will get a first prize of \$3.00, the next best gets \$2.00 and all others which are printed will receive \$1.00. Before June 15 send your contest letter to Aunt Janet, American Agriculturist, 461 Fourth Avenue, New York City.

Buddy Poppies Remind Us

DURING the week of Memorial Day, Buddy poppies will be on sale throughout the entire country to raise funds for the relief activities of the Veterans of Foreign Wars. Each Buddy poppy has a copyright green label which proves it was made by a disabled or needy ex-service man. Most of the poppies are made in government hospitals through an arrangement with the United States Veterans Bureau.

The sale proceeds are devoted to the relief activities of the Veterans, one being the maintenance and expansion of the Veterans' national home for widows and orphans of ex-service men. Leading ministers have endorsed the sale of these poppies and it is little enough for all of us to buy the poppies and to help their sale in every way possible.

Our men who served in the war continue to break down and the peak of disabilities has not yet been reached. We would indeed be thoughtless if we failed to respond to this annual call of the Veterans.



"The hot water's gone!" Never mind—Fels-Naptha also washes beautifully in cool or lukewarm water! For Fels-Naptha is good golden soap, blended, by our exclusive process, with plenty of naptha. The naptha and soapy suds working together loosen even stubborn dirt and wash it away, giving you clean, sweet home-washed clothes without hard rubbing. Whether you've oceans of hot water or only enough to take the chill off, remember that...

Nothing can take the place of

FELS-NAPTHA

ORDER FROM YOUR GROCER TODAY

WOOL BLANKETS, and Colonial Coverlets, BATTING, Also sold direct from the ROBES, Made from your own wool. Mill if you have no wool. Beautiful goods that gives satisfaction and long wear. Write for catalog and samples. Prices reasonable. WEST UNITY WOOLEN MILLS, DEPT. G., WEST UNITY, OHIO.

Have a Debate in Your Grange

Send 2 cents to cover postage for an outline on the subject:

Should farmers adopt an 8 hour day?

American Agriculturist
461-4th Ave. New York City

For Tiny Maids



2788



PATTERN 2788 with its fashionable fullness falling from the shoulder is a charming design for tiny maids of 1, 2, 4, and 6 years. The scallops on chemisette, Peter Pan collar and cuffs are smart and becoming. Printed dimity, dotted swiss, tub silk or cotton broadcloth would make up charmingly in this design. PATTERN PRICE 13c.

TO ORDER: Write name, address, pattern sizes and numbers clearly and correctly and enclose with correct remittance in stamps or coin (although coin is sent at own risk. Add 12c for one of the new summer catalogues and send to Pattern Department, American Agriculturist, 461 Fourth Avenue, New York City.

Have You Investigated This Remarkable All-Purpose Pump?



Easy To Install... Costs Less than City Supply!

Auto-Prime Engineers Develop Remarkable Pump With Only One Moving Part. Instantly Provides Fresh Running Water For Every Need At Surprising Low Cost. Easy To Install And Requires No Servicing. Saves Hundreds Of Users Thousands Of Dollars.

NOW every rural dweller can enjoy the comforts, conveniences and savings of a fresh water supply for only a few cents a day, as the result of an astonishing different kind of pump produced by Auto-Prime Engineers after years of research.

Surprisingly Simple

Think of it—all but one of the moving, wearing parts hitherto considered essential in pump design have been eliminated in this advanced unit, making it the most trouble-free pump on the market. The Auto-Prime is quickly and easily installed by anyone—requires no special wiring, floor bolts, lag screws, etc. Once set up should give many years of reliable service, providing enough volume for house, barn, irrigation, fire protection and every other need.

The AUTO-PRIME PUMP

Auto-Prime Pump Dept. E-50 E. 72nd St. Cleveland, Ohio

And that isn't all! Auto-Prime is automatic and self-priming. No large capacity tank required. Has 25% greater capacity, up to 650 gals. per hour depending on the suction lift. Also 28 feet suction lift at 1000 feet altitude.

Valuable Book FREE

It will pay you to investigate the Auto-Prime—you'll be amazed at its sheer simplicity and unmatched efficiency! Coupon brings free illustrated book and full details. Mail it NOW—no obligation.

AUTO-PRIME PUMP CO., Dept. E-50, 805 E. 72nd St., Cleveland, Ohio. Send me without obligation free copy of your illustrated book. Also full details about the Auto-Prime Pump.

Name _____ Address _____ City _____ State _____

The Plains of Abraham—By James Oliver Curwood

CHAPTER III

THE stirring words had scarcely fallen from his mother's lips when Jeems laid his gun on the ground and ran after her, but with all his haste she was in her brother's arms before he could overtake her, while his father, carrying the turkey cock but without the corn, came hurriedly out of his amazement and down to meet them. When he arrived, Hepsibah Adams was holding Catherine with one arm and with the other had hoisted Jeems halfway to his shoulder. In a moment he freed himself enough to hold out a hand as rough and knotted as the old oak tree which sheltered the cabin from the afternoon sun.

If ever a man bore an affinity to an oak, with its cheer and strength and rugged growth, that man was Hepsibah Adams, the Indian trader. There was also something about him which made one think of Odds-and-Ends. With all this he was as cheerful a creature to look upon as friend or enemy could want to meet. He was not as tall as Henri by half a head, nor did he have his leanness. His shoulders were wide and his body thick, and his face was as round as an apple and almost as red, with marks and mars of stress and battle set upon it, but in such a way that its vivacity and the good humour of its twinkling eyes were enhanced rather than spoiled by the vicissitudes of fortune. He wore no hat, and on the top of his head was a saucer-like space as bald as an egg, but under this beauty spot, as Hepsibah called it, his reddish blond hair grew thick and rampant, with its ends curling up, so that with a small effort of imagination he might have been taken for a shaven friar who had been at hard grips with the disciples of Satan.

When the excitement of first greetings was over, Catherine stood back from her jolly rogue of a brother and viewed him with a pair of eyes bright with affection, but which glowed at the same time with an appraising and speculative questioning which her lips at once put into words.

"Hepsibah, I am so happy to see you that it makes my heart choke, and yet I observe that you have not kept your promise to stop fighting, for one of your ears is nicked and your nose is crooked and there is a mark over your eye which was not there when I saw you two years ago!"

Hepsibah's weather-stained face broke into a smile.

"I can't say as much for your nose, Catherine, for it grows prettier each year," he said. "But if a Dutchman's ham should happen to come against it, as one hit mine in a little joust in Albany Town, why, I'll say there would be a bend in it, or no nose at all. And as for the ear with a nick in it, what can you expect from a Frenchman—excepting your sweet-tempered husband here—when he gets a chance to use his teeth instead of the hands which God gave him to fight with? The slit in the face is only a crease left by an Oneida's knife when he misled himself with the thought that I had got the best of a bargain, which I never do get, or I'm a sinner! But is that all? Do you keep no better account of me than that?"

"The bald spot is larger, Hepsibah, and so even and round it amazes me."

"That is because I gave a Seneca hairdresser a good hatchet and holder to pluck out the hairs in the Indian way and make it so, Sister. I hated that bald patch, which was as uneven as a candle-dripping on the top of my head, but now that it is round I like it."

"And I saw a tooth gone when you laughed."

"Only a second dose from the Dutch-

man's knuckles. God love me, but you should have seen that Albany Dutchman fight!"

"And your clothes," said Catherine, coming to the main point in her mind at last. "You look as though a bear had played with you. Hepsibah, has anything happened—near here?"

"A mere trifle, Sister. A few miles back I ran into a bunch of Frenchies who said this was a long way from New England and had it in their minds to turn me t'other way. But that was nothing, nothing at all. I am a bit ashamed of you, Catherine, for you have missed the important thing!"

Bringing the Story Up to Date

JEEMS BULAIN with his French father and his English mother lived in colonial times near the border between Canada and the English colonies. Their neighbor, Tonteur, is their friend but Madam Tonteur hates Catherine Bulain because of her beauty and her English blood and tries in every possible way to teach her daughter Toinette to hate Jeems Bulain.

Jeems admires Toinette and is deeply hurt by her disdain. He hates Paul Tasche, Toinette's cousin from Quebec, because Paul assumes a superior air and because he is in the good graces of Toinette.

Catherine Bulain sees and understands the situation to which her husband is blind. Jeems is brooding over the situation as he, his mother and father and Odd, his dog, walk home from a visit to Tonteur Manor. Jeems walks ahead and sees a strutting turkey cock whose actions remind him of Paul Tasche. A well directed arrow brings the cock to earth, not only providing an excellent dinner for the next day, but giving Jeems a comfortable feeling that he had struck the first blow against his enemy.

As the four of them descend the slope to the Bulain home, they hear a blood-curdling cry. Almost immediately their alarm is changed to joy by the discovery that the cry comes from Hepsibah.

"What is that?"

"My stomach," declared Hepsibah, holding his ample paunch with both knotted hands. "It is sunk and shrunk-en, as you may clearly observe. It has fallen in on itself until it hurts my backbone, and has withered and wasted itself to the dimensions of a lady's. It is dwarfed, shortened, circumscribed, and reduced—fairly warped and strangled from lack of food! And if I do not eat very soon—"

The rest was smothered in Catherine's arms and laughter.

"Dear old Heppy—Hungry—always hungry, and you never will be any other way. So we shall have supper almost as soon as smoke can be made to come out of the chimney. I am so happy you have come!"

"And I," added Henri, getting in a word at last.

Jeems was tugging at the hand of his roving vagabond of an uncle, who was his greatest hero in all the world, and dragged him back to get his gun.

As they went, the happiness in Catherine's face was clouded for an instant.

"Best keep good eyes on our Jeems for a time, Henri," she warned. "Hepsibah, you know very well, is a singularly improvident and thoughtless man, overfilled with foolish tricks and contrivances most alluring to boyish minds, and of which, because of Jeems, I am a bit afraid."

But Henri only chuckled, for the thought was in his mind that it was a fattening of one's good fortune to be taught tricks by a man like Hepsibah Adams.

Then Catherine saw that a film of smoke was rising from the top of the big stone chimney.

"Hepsibah has already started a fire," she said.

When they came through the wide double door of the kitchen, Henri drew a deep breath of satisfaction and Catherine gave a pleased cry of surprise. It was a great kitchen, thirty feet from end to end and twenty in width, with the last light of day coming through its western windows. To this fading illumination was added the rosier glow of a flaming back log and a huge mass of hard-maple coals which faced them as they entered. Henri had spent a

month in the building of their fireplace, and the proudest seigneurie along the Richelieu could not boast a finer one. He had housed Catherine and Jeems with an aunt in Three Rivers while constructing their home, and when Catherine first saw the fireplace she walked straight into it without bending her head, and so wide was it, as well as high, that Henri had built seats within the chimney-place on either side, and over these were hooks on which to hang firearms, and even small drawers set into the stone for his pipes and tobacco; and farther back, never in the way of smoke or soot, were

quently that there was not an inch of dry surface upon it, was evident from its richly brown and savoury appearance as it swung slowly before the fire as if unseen hands were attending it.

Housewifely instinct made Catherine give the hempen string a twist before she took off her cape and hood and patted her hair more properly into place before a mirror hanging on the wall. Then she glanced down the long table which Hepsibah had laid with her pewter in preparedness for the roast. Henri knew how fast her heart was tripping as he took her hands and held them for a moment and saw a mist of tears behind her lashes. It had been two years since she had seen Hepsibah, two years of yearning and praying and hoping for this irresponsible brother, the last of her close blood ties, who came and went with the inconstancy of the winds and yet had never succeeded in spoiling her dream of having him some day as a permanent member of her little family. Each time he came to them, Hepsibah was full of promise, swearing upon his soul that he had made up his mind to remain with them forever, as Catherine pleaded with him to do; and then, some day or night, he would disappear with all his belongings, and no one would see or hear him go, and it might be six months, or a year, or, as in this instance, even longer before he returned, ready to promise and swear upon his soul all over again but sure to steal away in the end as before. Once he had confided to Henri, "I can't say good-bye, not even to an Indian, and I surely can't say it to Catherine. I'd rather leave her smiling and laughing than crying."

Each time that he came, he bore a huge pack on his shoulders, as if partly in penance, and the opening of this pack and the distributing of its contents had come to be the biggest event in Jeems's life, and also in his mother's in a slightly less degree. But Jeems had no trespassing thought of the never-failing bundle as he went back for his gun in the company of his beloved Uncle Hep. At the most providential of moments, his hero of all heroes was at his side, and securing this mighty personage's pledge of secrecy he lost no time in telling him about the boy he hated. Marking the grip of Jeems's hand, and catching the telltale tremble in his voice, Hepsibah sat down upon the bag of ground corn and did not leave it until by shrewd questioning and sympathetic interest he had drawn from Jeems's heart a large part of what it had withheld from his parents that afternoon. At a second loud blowing of Henri's dinner horn they rose to their feet, and as Hepsibah shouldered the corn, his round red face was like a full moon of promise and cheer.

"It doesn't take size to win a fight, Jeemsy," he said, speaking in a confidential way. "Barring this Dutchman at Albany, I've never been rib-roasted by a big man yet, and I'm only tolerable sized, you observe. I've always had a reasonable preference for the big ones, come as come can, for they are slower to move and fall harder, and nine out of ten of them carry fat. This Paul Tache, now—I know by your telling of him that you can cob and comb him until he begs for mercy, which is the proper time, if he's down, to give him a few whops for good measure and memory. It's all what you've got your mind made up to, Jeemsy—nothing more and nothing less. And you've got your mind made up to warm him, so go and do it, I say."

Catherine came around the corner of the cabin to meet the plotters, and Hepsibah discreetly held back further words as he winked broadly at Jeems.

(Continued on Page 20)

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AMERICAN AGRICULTURIST

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AUCTION SALE May 30, 1929. Tilbury's White Collies, Cow dogs, Watch dogs, pets. Here is an opportunity of a life time, as our dogs must go. Write for full particulars. Bids must reach us by May 30. **TILBURY'S WHITE COLLIE KENNELS**, Owego, N. Y.

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RABBITS—SELECTED PEDIGREED Stock, lists and circular 10c. **SMALL STOCK EXCHANGE**, R-2, Auburn, N. Y.

DOGS—Cow, farm, rat, mixed breed, smart, intelligent \$3.00. Hounds \$10 up. Beautiful Scotch Collie \$15. English Sheep dog \$15. First orders gets. **DAWSON**, Tuckertown, N. J.

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THOMPSON STRAIN BARRED Rock Chicks: From healthy free range stock April—\$12 per 100. May and June \$10 per 100 postpaid. 100% live delivery guaranteed. Hatching eggs \$6 per 100. Order direct from this add. **WEST DENTON HATCHERY**, Denton, Md.

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ROOFING PAPER, 3-ply, \$1.35 per roll, 100 sq-ft. Prepaid. Asphalt shingles, roofing, paint. Send for price list. **WINIKER BROS.**, Mills, Mass.

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FREE GLADIOLUS BOOK—36 pages, 45 illustrations. Describes 171 exquisite varieties, many new. Tells how to grow. It's free! The famous beautiful Rainbow Collection of thirty bulbs, all different, \$1. postpaid. **HOWARD GILLET**, Gladiolus Specialist, Box J, New Lebanon, N. Y.

COOK'S CERTIFIED POTATOES. Cobblers and Russets. Better than ever. Attractive prices. We pay freight. **IRVING E. COOK**, Munsville, N. Y.

FINE FROSTPROOF CABBAGE and Onion Plants—Copenhagen Market, Ballhead, Wakefields, etc. 300, \$1.00; 500, \$1.50; 1000, \$2.50; Prepaid, 10,000, \$10.00. Express. Tomato Plants—300, \$1.50; 500, \$2.00; 1000, \$3.50. Prepaid, 10,000, \$15.00. Express. Pepper & Sweet Potato Plants—500, \$2.50; 1000, \$4.00. Prepaid, 10,000, \$25.00. Express. Transplanted Tomato and Pepper Plants 100, \$1.50; 500, \$5.00; 1000, \$8.00; 5000, \$35.00. Good delivery guaranteed or money refunded. **J. P. COUNCILL COMPANY**, Franklin, Va.

SEEDS—NURSERY STOCK

STRAWBERRY PLANTS: Senator Dunlap, 100, 90c; 300, \$2.25; 500, \$3; 1000, \$5. Premier—Gibson—Big Joe —Cooper—Stevens Late Champion, 100, \$1; 300, \$2.50; 500, \$3.50; 1000, \$6. Everbearing, Champion, 25, 75c; 50, \$1; 100, \$1.50; 500, \$5; 1000, \$10. Mastadon, Everbearing, 25, \$1; 50, \$1.75; 100, \$3; 200, \$5; 500, \$8; 1000, \$16. Figure each variety separate. Write for prices on Black, Purple and Red raspberry plants. Our plants are strictly fresh dug, from new fields. **F. G. MANGUS**, Maple View, N. Y.

SEND \$1 for 12 Labeled Dahlias, flowers of marvelous beauty, all colors, regular value \$3.50. **BOLTS DAHLIA FARM**, Stepney Depot, Conn.

CAULIFLOWER PLANTS, 100-60c; 1,000-\$4.00; 5,000-\$18.00. Cabbage plants, 100-40c; 1,000-\$2.50; 5,000-\$10.00 prepaid. **E. PETER**, Lewisburg, Pa.

SEED CORN—West Branch Sweepstakes for sale. Greatest ensilage corn grown. Germination 98% when tested. \$3.00 per bushel. **A. L. WINTER & SON**, Montoursville, Pa.

4,000,000 SWEET POTATO PLANTS Yellow Jersey, Big Leaf, Up River, \$1.50 per 1000. Gold Skin, Red Nansmond, Nancy Hall, and Southern Queen. \$1.75 per 1000. **C. E. BROWN**, Bridgeville, Del.

FINE OUTDOOR GROWN Cabbage Plants—300, 75c; 500, \$1.00; 1000, \$1.50 prepaid. 5,000, \$5.00 expressed. Tomato and Onion Plants \$1.50 thousand. Pepper and Sweet Potato Plants \$2.50 expressed. All now ready. Prompt shipments, good delivery guaranteed. **OLD DOMINION PLANT COMPANY**, Franklin, Va.

LORDS GOLDEN AGE extra early yellow sweet corn. Good size, productive, tender, deliciously sweet. The originator has grown it ready for the table 57 days from planting. \$1. quart; \$1.70, 2 quarts; \$2.50, 4 quarts; \$4.50, peck; \$6.50 half bushel; \$12.00 bushel. **JAMES E. LORD**, Stonington, Conn.

DAHLIAS. ASSORTED not labeled. \$1. a dozen prepaid. **ANNE L. SMITH**, Sodus, N. Y.

FINE PLANTS ready, open field grown, well rooted, selected, 50 to bunch, varieties labeled separate, packed careful to arrive safely. Cabbage: Early Jersey, Charleston, Wakefield Copenhagen and Flat Dutch postpaid 50, 25c, 100, 35c; 300, 80c; 500, \$1.00; 1000, \$1.75. Express collect, 70c, 1000. Tomato plants: Earliana, Juno Pink, John Baer, New Stone, Greater Baltimore and Redfield Beauty. Postpaid 50, 30c; 100, 40c; 500, \$1.25; 1000, \$2.25. Express collect \$1.25, 1000. Con- uine Marglobe, tomato 5c hundred higher. Peppers: Ruby King, Pimento, and hot Cayenne. Postpaid 50, 30c; 100, 50c; 500, \$1.50; 1000, \$2.50. Express \$2.00 thousand. Cauliflower plants postpaid: 50, 40c; 100, 75c; 500, \$3.00. **E. A. GODWIN**, Lenox, Ga.

100 ACRES VEGETABLE PLANTS, Cabbage, \$1.00 thousand; Onion, \$1.50; Pepper, \$2.00; Sweet Potato, \$2.50; 10,000, \$20.00. Tomato, \$1.25; 10,000, \$10.00. Prompt shipments. Good plant guaranteed. **FARMERS SUPPLY COMPANY**, Franklin, Va.

GRAPE VINES, Concord, 2 years, \$6.00 per hundred; 1 year, \$4.00 per hundred; Niagara, white and Wordens, black, 2 year, \$8.00 per hundred; 1 year, \$6.00 per hundred. Plum Farmer, black raspberry plants, \$3.00 per hundred. **F. G. STODEN NURSERY**, Fredonia, N. Y.

FROSTPROOF CABBAGE PLANTS 75c, 1000; Bermuda Onion \$1.00; Collards 75c; Tomatoes \$1.00; Ruby King Pepper \$2.00; Porto Rico Potato Plants \$1.50. **QUITMAN PLANT CO.**, Quitman, Ga.

Additional Classified Advertising On Page 18

HANDY ANDY Says "Here's How"

To Prevent Hogs Rooting Under Fences

By Ray Inman

You can prevent hogs rooting under a wire fence.

WHAT'S BECOME OF RUDY TOOTOOT — HE WAS ALWAYS SUCH AN EXCELLENT ROOTER — HE COULD ROOT HIS WAY OUT OF ANYTHING

YEAH — HE WAS GOOD — BUT NOT GOOD ENOUGH TO ROOT HIS WAY OUT OF THAT SAUSAGE MACHINE THEY PUT HIM IN LAST WEEK

Get a roll of woven fence wire about 26 inches high.

HEY, LOOKA THERE IRMA! — AN' YOU ALLUS SAYIN' MY ROOTIN' WOULD NEVER GET ME NOTHIN'

BASE BALL SATURDAY 2 P.M. PARSONVILLE VS ALFAPOLIS

WE WILL GIVE \$100. TO THE BEST ROOTER IN TOWN

EVERBODY COME

Stretch it along inside of fence so that half of it is flat on ground and other half on fence.

IT'S A NEW IDEA, ED. YOU STRETCH HALF FLAT ON THE GROUND, AND HALF UP AGAINST THE FENCE —

NEW IDEA ME EYE! — MY HIRED MAN'S BEEN USIN' THAT IDEA FER YEARS!

The hog will thus be standing on the wire he is trying to root up.

MPH — GEE THIS ROLL O' WIRE IS AWFUL HEAVY FER TH' SIZE OF IT!

YEAH — THIS IS THE IDEA ALL RIGHT — BUT YOU'RE S'POSED TO WORK IT ON THE HOG!



HUNTING & FISHING

is a 52-page monthly magazine crammed full of hunting, fishing, camping and trapping stories and pictures, valuable information about guns, revolvers, fishing tackle, game law changes, best places to get fish and game, etc.

Only \$1.00

for two whole years 24 big issues. Subscribe now and we will send you

FREE

of charge this Remington Sheath Knife, with 4½ in. blade of finest steel and big handle shaped to fit hand together with leathersheath. This knife is just what you need for hunting, fishing and camping trips. Clip this adv. and enclose with \$1.00 bill. Mail your order to-day to

HUNTING & FISHING

294 Transit Bldg., Boston, Mass.



Heaves, Coughs, Conditioner, Worms. Most for cost. Two cans satisfactory for Heaves or money back, \$1.25 per can. Dealers or by mail. The Newton Remedy Co. Toledo, Ohio.

Additional Classified Advertising

SEEDS—NURSERY STOCK

20 MILLION TOMATO PLANTS—Large, stalky, well rooted, open field grown, packed with damp moss to roots. Greater Baltimore, Stone, Earliana, Ponderosa. By mail postpaid; 500-\$1.25; 1,000-\$2.25. Express prepaid; 5,000-\$8.00; 10,000-\$15.00. Late Cabbage plants same price. Prompt shipment, safe arrival guaranteed or money refunded. KENTUCKY PLANT CO., Hawesville, Ky.

CERTIFIED LATHAM AND HERBERT RASPBERRIES, Howard 17 and Mastodon Strawberries, Washington Asparagus. Other leading varieties Raspberries, Strawberries, Blackberries, Fruit trees, Shrubs, Evergreens, etc. Prices low. Everything guaranteed. Send for price list. BERT BAKER, Hoosick Falls, N. Y.

CABBAGE—Quaker Hill Danish is one of the leaders in college and farm bureau tests. Outfields imported seed 2 to 8 tons per acre. Write for full description and yield records. K. C. LIVERMORE, Box A, Honeoye Falls, N. Y.

SEED CORN—Genuine West Branch Sweepstakes, Cornell No. 11, and early maturing 8-row flints. Grown from tested disease-free ears. Thoroughly cleaned and graded. Passed corn borer inspection. \$3 per bushel, 10 bushels, \$2.80, bags free. Ninety per cent or better germination and satisfactory condition guaranteed. K. C. LIVERMORE, Box A, Honeoye Falls, N. Y.

TOMATO AND CABBAGE Plants, Baltimore, Stone, Matchless, \$1.00 thousand; 500, 65c; 5,000, \$4.50. Roots moss packed. BURGESS PLANT FARMS, Pembroke, Ga.

SEED POTATOES. Certified Green Mountain from Prince Edward Island, finest obtainable. Michigan and New York Certified Russets, none better. Write for closing out prices. QUAKER HILL FARM, Box A, Honeoye Falls, N. Y.

FIELD PEAS with oats, cut for green feed will keep up the summer milk flow, but be sure to use disease free peas. Write for explanation and prices of our tested seed. QUAKER HILL FARM, Box A, Honeoye Falls, N. Y.

GENUINE HOWARD 17. Just the money maker you should grow this season. Freshly dug, well rooted. Northern grown strawberry plants, carefully packed in moss, reaching you in growing condition. 5000, \$32.50; 1000, \$7.25; 500, \$3.75; 100, \$1.00. JAS M. BRITTON, Box 29, Chepachet, R. I.

SEEDS—NURSERY STOCK

PLANTS POSTPAID. All varieties; Beet, Cauliflower, Mangle, Lettuce, 3 dozen., 25c; 100, 50c; 1,000, \$3; 5,000, \$10. Cabbage, 3 doz., 25c; 8 doz., 40c; 400, \$1; 1,000, \$2. Sweet Potato, Asters, 3 doz., 25c; 100, 65c. Celery, Tomato, Pepper, Zinnia, 3 doz., 40c; 100, 85c; 1,000, \$8.75. Egg Plant, Coleus, Coreopsis, English and Shasta Daisies, Pansies, Dianthus, Snapdragons, Salvia, Verbenia, doz., 40c; 3 doz., \$1; 100, \$2. ROHRER'S PLANT FARM, Smoketown, Pa.

DAHILIAS—12 TUBERS, Mixed varieties, labeled, no two alike \$1.25. We grow 500 varieties. Ask for free price list. MOOSE DAHLIA FARM, Wayland, N. Y. Route 3.

MILLIONS CABBAGE PLANTS, Copenhagen, Wakefield, Succession, Flatdutch, Danish Ballhead, 300, \$1.00; 500, \$1.25; 1000, \$2.00 postpaid. Express \$1.25 1000. Tomato plants—Baltimore, Matchless Stone, same price. Sweet Potato and Pepper, 500, \$2.00; 1000, \$3.50 postpaid. Satisfaction guaranteed or money refunded. IDEAL PLANT COMPANY, Franklin, Va.

MILLIONS CABBAGE PLANTS—Copenhagen, Wakefield, Danish Ballhead, Succession, Flatdutch, 300, \$1.00; 500, \$1.25; 1000, \$2.25 postpaid. Express \$1.25 1000. Tomato Plants—Baltimore, Stone, Matchless, Bonny Best, same price as Cabbage. Sweet Potato and Pepper plants, 500, \$2.00; 1000, \$3.25 postpaid. Quick and good service. GUARANTEED SERVICE PLANT COMPANY, Franklin, Va.

SEND NO MONEY: Frost proof Cabbage plants including Copenhagen and Golden Acre, Bermuda Onion plants, 500, 65c; 1000, \$1.00 plus postage. EUREKA FARMS, Tifton, Ga.

CABBAGE PLANTS, best kinds \$1.25 per 1000. Lettuce, Onion, Beets \$1.00, 1000. Peppers all kinds \$3.00, 1000. Cauliflower \$3.50, 1000. Egg Plants \$4.00, 1000. Tomato all varieties \$2.00, 1000. All ready for field. Send for list. J. C. SCHMIDT, Bristol, Pa.

MILLIONS OF OPEN field tomato plants, Baltimore, Stone, Marglobe, Bonnie Best, \$1.00-1000; 5000, \$4.50. Ruby King Pepper plants \$1.50-1000. Porto Rican potato plants \$1.50-1000. Cabbage plants 75c-1000 roots mossed, safe arrival guaranteed. SIMS POTATO PLANT CO., Pembroke, Ga.

TOMATO PLANTS: Six varieties. By express \$1.50 thousand. By prepaid mail 500, \$1.50; 1000, \$2.50. Sweet Peppers by prepaid mail 100, 75c; 200, \$1.25; 500, \$2.50; 1000, \$4.50. By express \$3.00 thousand. Also Cabbage plants: All varieties, including Copenhagen and Golden Acre, \$1.00 thousand and charges. COLEMAN PLANT FARMS, Tifton, Ga.

CAULIFLOWER PLANTS. Ready. Finest strains of seed. We grow only first grade plants. Catskill Mountain, Snowball, Extra Early Erbert, \$4.50 per 1000; 500, \$2.50; 300, \$2.00. Cabbage plants. Ready. Copenhagen Market, Early Jersey Wakefield, Golden Acre, Eukhuizen Glory, Succession, Danish Ballhead, \$2.00 per 1000; 500, \$1.50. 31 years selecting strains of seed. F. W. ROCHELLE & SONS, Chester, New Jersey.

VEGETABLE PLANTS—Ready now—Potted Plants. Earliana, Marglobe, Jewel, Bonny Best, John Baer, Stone and Matchless Tomatoes. Ruby King, World-beater, Chinese Giant and Bull Nose Peppers. Black Beauty Egg plants \$3.50 per 100; \$30 per 1000. Transplanted Tomato and Pepper plants \$8. per 1000. Potted Salvia, Zinnias, Asters, Ageratum and Petunias \$4. per 100. Field Grown Cabbage plants (ready June 1st) all varieties \$2. per 1000; 5000, \$9. Cauliflower, Re-rooted (ready June 1st) Early and Late Snowball \$4.50 per 1000; 5000, \$20. Send for free list of all plants. PAUL F. ROCHELLE, Morristown, N. J.

CORN HARVESTER

RICH MAN'S Corn Harvester, poor man's price—only \$25.00 with bundle tying attachment. Free catalog showing pictures of harvester. PROCESS CO., Salina, Kans.

SITUATIONS WANTED

DO YOU NEED FARM HELP? We have Jewish young men, able-bodied, some with, but mostly without experience, who want farm work. If you need a good, steady man, write for an order blank. Ours is not a commercial agency. We make no charge. THE JEWISH AGRICULTURAL SOCIETY, Inc., Box A, 301 E. 14th Street, New York City.

HELP WANTED

WANTED PARTNER, on poultry, and registered milk goat farm, with or without services. A comfortable home and pleasant surroundings for one interested. money secured. BOX M. S., American Agriculturist.

WANTED. A first class unencumbered woman cook capable of cooking and familiar with plain country cooking for boarding house with accommodations for fifty guests in the mountains. Length of employment about six months. Salary commensurate with ability. State qualifications and references in first letter. CHARLES P. CARROLL, Indian Lake, N. Y.

MILKING MACHINES

SHARPLES MILKER USERS ATTENTION—For the benefit of our users we still carry a complete stock of repairs at Syracuse. Also repairing sent us. For cost of service, repairs and repairing, write CHAS. J. K. LIDDLE, 324 Fellows Ave., Sprague, N. Y.

AGENTS WANTED

AGENTS MAKE \$25.00—\$100.00 weekly, selling Comet Sprayers and Autowashers to farmers and Autoists. All brass, Throws continuous stream. Established 25 years. Particulars free. RUSLER CO., Johnstown, Ohio, Box C12.

PRINTING—STATIONERY

EVERYTHING PRINTED! FRANKLINPRESS, Milford, N. H.

FARMS FOR SALE

VILLAGE FARM 100 acres, 14 milk cows, horses, 40 hens, equipment, \$6500, \$1000 down, \$250 yearly. Write MR. DOUGLAS, Herkimer, N. Y.

FOR SALE—120 acre farm situated on improved road. Near school, 2½ miles from town. Good house and chicken house, extra good barn. Plenty of water. Timber for fuel. Will carry 25 head of stock. Easy terms. Will discount for cash. A money maker for the right man. Write or phone L. GLOVER, E. Randolph, N. Y.

FOR SALE—Ideal Dairy Farm in Excellent old dairy section near Greene, Chenango County, N. Y., 150 acres some equipment, price low to quick buyer to settle estate. Address MISS BERTHA CARTER, care Postoffice, Greene, N. Y.

500 ACRE FARM Adirondack Mountains near Lake Placid, N. Y. 15 room house, 2 baths, stone fireplace, 2 barns, ice house, 2 poultry houses; trout stream large enough for hydro-electric plant; one-fifth in woods; maple sugar grove; 10 cows, 18 sheep, 2 horses, implements; milk sells at 9 cents per quart wholesale in Lake Placid; big opportunity for subdivision; all game; joins thousands of acres of state forest; 10 minutes from golf course. Agents protected. B. H. CUNNINGHAM, North Elba, Essex Co., N. Y.

DEL-MAR-VA—6,000 SQUARE MILES FINEST AGRICULTURAL OPPORTUNITIES. Within three to ten hours by motor truck over splendid concrete highways to New York, Philadelphia, Baltimore and Washington markets. Pennsylvania Railroad System permeates entire Peninsula. Mild, equable climate. Very little snow and freezing. Farms, town and waterfront homes, low-priced. Good schools, low taxes. Handsome descriptive booklet, FREE. Address 164 Del-Mar-Va Building, Salisbury, Md.

MISCELLANEOUS

WANTED USED BAGS any quantity and grade. Highest prices and freight paid. HOFFMAN BROS. BAG CO., 39 Gorham St., Rochester, N. Y.

USED CIVIL WAR ENVELOPES with flags, designs, etc., \$1 to \$15 paid. Other stamps on envelopes before 1871 bought. Three-face lamps and old glassware bought. W. RICHMOND, Cold Spring, N. Y.

AVIATION—Earn while learning aviation, \$18 to \$35 per week while under instruction in our factory and shops. Call or write for information without obligation. AERO CORPORATION OF AMERICA, Department DA, Plankinton Building, Milwaukee, Wis.

COTTON DISCS for your milk strainer, 300 sterilized 6 inch discs at \$1.30, postage prepaid. HOWARD SUPPLY CO., Box 30, Canton, Maine.

RUBBER TUBING for all makes of milkers. Attractive prices. Cotton strainer discs (sterilized) 300 in package 6 inch \$1.40, 6½ inch \$1.60 Postpaid prepaid. Tubing and cotton discs very highest quality obtainable anywhere. ANDERSON MILKER CO., Jamestown, N. Y.

BOXWOOD TREES, 200 years old. C. T. SMITH, Croxton, Virginia.

FOR SALE: One No. 7 1440 capacity Buffalo Electric incubator, new this spring \$175 crated. WALTER RICH, Hobart, N. Y.

FOR SALE, Sharples Motor-Milker used less than 1 month. In excellent condition. Price \$125.00. DANIEL WILBOUR, Little Compton, Rhode Island.

3 BRAND NEW Newton Dandy Coal Brooder stoves with 52 inch canopy. Never been uncared \$12.75 each. JOHN GRASS, High Bridge, N. J.

INSURE YOUR KEYS, Suit Case, or Trunk against loss with metal check; your own address stamped on it. Sent by mail anywhere for 25c. Agents wanted. E. B. PARSLOW, Richmondville, N. Y.

KODAK FILMS DEVELOPED 5c roll. Prints 3c each. Trial offer. Beautifully mounted 8x10 enlargement 40c. Overnight service. YOUNG PHOTO SERVICE, 400 Bertha St., Albany, N. Y.

KEOUGH'S—Foul remedy. For fowls or hoof rot. Used by farmers for over 25 years. Satisfaction or money back. Get a bottle at your druggist or feed dealer or send one dollar for a bottle. KEOUGH PHARMACAL COMPANY, Box A, New Berlin, N. Y.

WANTED TO BUY

WANTED—HAY, GRAIN, Potatoes, Apples, Cabbage, Carloads. Pay highest market prices. THE HAMILTON CO., New Castle, Pa.

WANTED TO BUY old bags. We pay excellent prices. Write for prices. We pay freight. OWASCO BAG CO., Rochester, N. Y.

POULTRY SUPPLIES

POULTRY DRESSERS! Send for our new catalog of Equipment and Supplies for Fattening and Dressing Poultry. H. G. HAGER, Dept. 22, Gossville, N. H.

WOMEN'S WANTS

SPECIAL VALUE, while they last, 6 Piece Ruffled Cottage Sets Neatly made of good quality White Muslin. Size of Lower Curtain 33x30. Size of Upper Curtain 44x31, 3 inch Ruffle. Tiebacks. Hemmed and headed per set 50c. 6 Turkish Towels size 20x36 splendid Quality Double Loop Pure White muslin. Paid postman \$1.00 plus postage. Silks or velvets, large package 25c postpaid. NATIONAL TEXTILE CO., 95 B Street, South Boston, Mass.

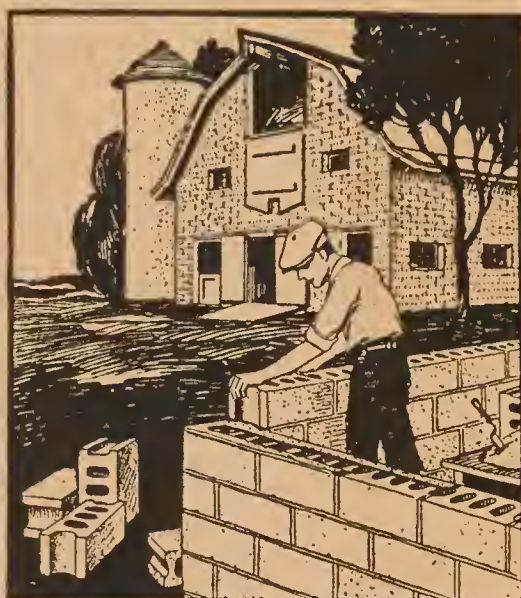
LADIES' FINE LISLE STOCKINGS 3 pair \$1.00. Black, gunmetal, grey, beige, nude, French nude; sizes 8½-10. Good openings for agents. A. H. TALBOT SALES COMPANY, Norwood, Mass.

CLIPPINGS FOR PATCHWORK quilts, 6 lbs., \$1.00. Send no money, pay postman \$1.00 plus postage. Satisfaction or money refunded. Silks 3 lbs., \$1.00. Silk bedspread cuts, 6 lbs., \$1.00. SARTLER, MFG. CO., Dept. 85, Whitman, Mass.

TOBACCO

LEAF TOBACCO—Good sweet chewing, 3 lbs., 20c; 5, \$1.25; 10, \$2.00. Smoking, 3 lbs., 60c; 5, \$1.00; 10, \$1.50. UNITED FARMERS, Mayfield, Ky.

Eight Reasons for Using Concrete Block and Tile



When planning your new farm building, remember Concrete Block and Concrete Building Tile. They are:

Attractive—Permanent—Fire-safe
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Mail this coupon to office nearest you

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Please send me free booklet containing Plans for Concrete Farm Buildings.

Name

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City

State

To benefit by our guarantee of ads, say

"I saw your ad in American Agriculturist"



The Service Bureau

A Department Devoted to the Interests, Welfare and Protection of A. A. Readers



A "Wild Goose Chase"

"My daughter recently answered a puzzle. We also sent them \$3 and now they write us and want us to get \$4 worth of subscriptions to their magazine before they will send us a prize. Will you please send the enclosed letter back to us. We need the money for my husband has not worked steady all winter."

THE letter enclosed by our subscriber was from the W. D. Boyce Company of Chicago. The letter leads off as follows:

"How can I send you this wire—Congratulations! You win the beautiful new Buick Sedan and in addition, \$580 cash

A "Thank You" Is Our Pay

I AM writing you these few lines in regards to a great favor you did for me. I received my enamelware the other day from the Company, and I feel that if it had not been for your assistance, I would have never gotten it. I can not express in words what a great favor you have done for me, and hope if I have any more trouble that you will be able to help me.

I thank the American Agriculturist Service Bureau many, many times for the great favor they have done me.

extra for promptness in sending your free Buick certificate. Tell me whether you want the Buick Sedan and \$580 or \$1900. in cash.—unless you do send me your Free Buick Certificate on or before the date stamped on it?"

It is pitiful that these puzzle schemes are answered by so many of our readers. The puzzles are always so simple that anyone can get the correct answer and when an answer is sent in the writer discovers that a subscription-getting scheme or some other plan is involved and that an immense amount of work must be done before there is even a chance of winning a prize. These letters received by our subscribers are mimeographed and if they could see the thousands of them that are sent out, they would realize what a very small chance they have of winning any worthwhile prize.

A Stolen Car

OUR subscriber, Benjamin E. Byrne, R. F. D. 1, Poultney, Vt., reports the theft of his Ford touring car. The car is black, the curtains open with the doors and there is an oblong glass in rear curtain. The car is a 1926 model, registration number 13868-Vt., motor number 13992689. Anyone who locates this car will be doing us and our subscriber a great service by communicating with the police immediately and by sending us the details of its discovery.

Help Wanted—Not

"We have had some correspondence with the Menhennit Company of Toronto, Canada and I am writing to know whether they are a reliable firm and whether I could expect to get employment after taking their course in showcard writing."

THE Menhennit Company has been in business in Toronto for a number of years. So far as we have been able to learn, anyone who wishes to take a correspondence course in showcard writing will get a good course from this company. There are two points which we wish to mention, however. In the first place, this company advertises under "help wanted" where as a matter of fact, they are interested in selling a correspondence course and not in hiring help. The second point is that this Company claims to supply those who complete the course with work. We do not believe that any Company can make good on such a claim. Another point which should be seri-

ously considered before taking such a course is that to be a successful showcard writer, the student must have considerable ability along this line. If one does not depend upon the company to furnish work it is evident that in order to take advantage of the course, work in showcard writing must be secured. It is our impression that the demand for such work is relatively limited.

Quarantine Newly Purchased Animals

WE recently received a letter from a subscriber who purchased live stock that developed a contagious disease and transmitted it to other live stock on the farm. Our reader felt that the person who sold the stock should be liable for this indirect damage.

In order to be fair to the seller, and also to protect yourself, you should quarantine any live stock purchased for a week or ten days before turning them in with the other animals. The seller may be entirely innocent, as it is very easy for an animal to contract a disease while on the road.

Money Gone—No Goods Received

I am enclosing a receipt for a Kleen-Easy table cloth. A lady came here selling them. I could not give the exact date, but I think it was in February. I waited a long time and then wrote to the company. My letter was returned stamped "no such address." I then wrote to the lady, and I put a return address on the envelope. That is about three weeks ago, or more, and my letter hasn't been returned.

WE are publishing this letter as a warning to our subscribers. It is unfortunate that reputable concerns which employ agents to sell their products must meet this kind of competition. Apparently, in order to be

Cannot Afford to Be Without Policy

PLEASE accept our appreciation of the way your insurance company handled our disability and the promptness with which we were paid as soon as our claims were filed.

Surely no one can afford to be without one of your policies in this age when accidents are so numerous.

We feel that you used us as we would like to be used and will not fail to recommend your insurance to all our friends.

Very respectfully,
Signed John Joiner,
Stella Joiner,
Dryden, N. Y.

safe, it is necessary to deal only with well-known companies selling trade marked articles, and then only in case the agents are able to furnish credentials showing they are authorized to represent the company.

Not Licensed and Bonded

I am enclosing an express receipt for a case of eggs shipped to Mr. J. L. Morrell, of Glendale, N. Y., for which I have never received returns. Anything you can do to collect this will be greatly appreciated.

ALTHOUGH we have written Mr. Morrell a number of times, he continues to ignore our letters. Mr. Morrell is not a licensed and bonded commission man, and therefore our subscriber will be obliged to accept the loss, or take legal action against him. We will be glad to send a list of licensed and bonded commission merchants to any reader upon request.

Policy-Dividend Announcement

INCREASE—35%—INCREASE

Another Evidence of the Conspicuous Success of the POSTAL LIFE INSURANCE CO.



Contingent dividends to policyholders increased by the above percentage are credited to be paid to policyholders for the year 1929. This percentage is an increase over the total paid in the year 1928, and is the definite action taken by the Board of Trustees at the April meeting. This increase of the contingent dividend is effective beginning May 1st, 1929, which date opens the new dividend year. The 9½% dividend guaranteed in the policy is in addition to the contingent dividend.

Insurance in Force, \$56,000,000.

Capital, Reserves and Surplus over \$20,000,000

The excellent trend of the Company taken from its filed financial statement is shown in increased assets—increased income—increased surplus—increased insurance in force.

Conditions Contributing to Low Cost and giving to this non-agency Company increasing popularity

- (A) The Decidedly Low Lapse Rate, showing that policyholders prize their policies and keep them in force;
- (B) The Distinctly Low Death Rate, showing that policyholders are well selected and have been benefited by the Company's Health Bureau service;
- (C) The 9½% Guaranteed Dividend, showing how policyholders, acting for themselves in applying for policies, save expense.
- (D) The Contingent Dividend Payments—an increase in 1929 over 1928 of 35%—showing the accumulative non-agency economies.

Is Your Life Insurance Quota Filled?

Nowhere can the average man invest his money so advantageously as in standard life insurance issued by this Company.

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Amer. Ag. 5-25-29

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Without obligating me, please send full insurance particulars for my age.

Name.....

Address.....

Occupation.....

Exact date of birth.....

Amount.....

Barnyard Golfers At It Again

(Continued from Page 5)

committee in power shall have full power and final jurisdiction.

Scoring Rules—Rule 18.—Any shoe that does remain within six (6) inches of the stake shall not be scored or counted. The closest shoe to the stake (within six inches) shall score one (1) point. If both shoes are closer than the opponent's they shall score two (2) points.

A ringer shall score three (3) points. A ringer and a closest shoe shall score four (4) points. A double ringer shall score six (6) points and is the highest score a contestant can make.

In case of each contestant having a ringer, the next closest shoe shall score and all such ringers shall be credited as ringers pitched but not counted as a score. If each contestant has a double ringer, both double ringers are cancelled and no points scored. If a contestant shall have two ringers and his opponent one, the pitcher having two ringers shall score three (3) points.

In case of a tie of all four shoes such as four ringers or all four shoes an equal distance from the stake, no score shall be recorded and the contestant who pitched last will be awarded the lead.

Where ringers are pitched and cancelled, they shall be credited to the contestant who pitched such ringers and no score shall be credited as point scored. All equals shall be counted as ties and no points scored. Any shoe leaning against the stake shall have no advantage over a shoe lying on the ground and against the stake; all such shoes are ties. If a contestant has a shoe leaning against the stake it shall count only a closest shoe.

Where Three Are in a Game

Three-Handed Games—Rule 19.—In three-handed games where two contestants each have a double ringer and the third contestant no ringers, the two contestants having double ringers shall score their closest shoe. If all three contestants each have a ringer they shall score the closest shoe. If two contestants each have a ringer and the third contestant no ringer, the two contestants having ringers shall score their closest shoes.

In all three-handed games the contestants having ringers shall at all times score their closest shoes over their opponents who have no ringers, whether it be two contestants with double or single ringers each. In any and all games the contestant scoring shall have the lead or pitch.

The Plains of Abraham

(Continued from Page 16)

It was the great night of two long years in the Bulian cabin, and Catherine's three Betty lamps and her Phoebe lamp and a dozen candles as well were lighted in honour of it, so that when darkness fell thick and starless about the wilderness, with masses of rain clouds gathering overhead, the home at the edge of Forbidden Valley was bright with glow and cheer. Even the crash of thunder and a deluge of rain on the chestnut-barked roof, and hatfuls of wind that rattled the windowpanes, seemed to pass unnoticed in the joy that was within. The roast was cut open, and with attendant dishes of sukquthahash, Johnnycake, potatoes, and carrots, and hasty pudding with maple syrup, gave opportunity for such feasting that an hour was well gone before Hepsibah Adams thrust back his end of the long table bench and brought forth his fat pack from under the stairs which led up to Jeems's sleeping loft.

As long as Jeems could remember, this had been a signal to clear the table of every dish and crumb that was on it, and while his father smoked a long Dutch pipe and his Uncle Hepsibah fumbled with mock clumsiness at the tyings of his pack, he ran a race with his mother to see whose side would be cleaned up first.

(To be Continued Next Week)



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AMERICAN AGRICULTURIST

\$1.00 Per Year

June 1, 1929

Published Weekly

We Go A-Sailing

Some Observations from a Summer Isle

I HAVE been given a very pleasant commission. The Editor of AMERICAN AGRICULTURIST has asked me to go down to Bermuda, spend a little time on the islands, read what I can concerning its history, interview some of the farmers, learn what I can

about the agriculture and the people and then try to make of it two or three little stories such as I think might be of interest to our farm folks at home.

Please note that from now on I shall use the term "We". I do this not at all as a concession to editorial custom but rather to indicate that this trip is a vacation because as I have said re-

garding earlier journeys a trip differs from a vacation in this way. On a trip you go alone and more or less forlorn while on a vacation you fare forth in company with your wife and hence your journeying takes on the character of a somewhat romantic adventure. For us the pilgrimage has all the charm of novelty because it is our first experience in real, deep water sailing.

We left home on April 2. That morning was rough and cold and blustering squalls had left a trace of snow. Far off against the north side of our high hills were a few grayish-white snow banks which the March sun had failed to remove. Nevertheless, the practiced eye could be sure that spring was on the way because the pussy-willows were getting fuzzy and the elm buds expanding and a reddish gleam coming along the soft-maple twigs. Also when taken in mass, the woodlands were showing a subtle, indescribable color change while the pastures on the sunny side of the hills had an unmistakable tinge of green.

That evening we walked across Central Park in New York and already it was different climate for the sheltered hollows suggested the lawn mower and the dense shrubbery seemed flooded with a sort of tender, greenish mist. We were a hundred

By JARED VAN WAGENEN, JR.

and fifty miles due south and 1200 feet nearer sea level than on the farm at home and this difference in latitude and altitude hurries by at least two weeks the coming of spring.

Bermuda is distant from New York a brief voyage of less than 48 hours and almost exactly 700 miles and at breakfast time the third day out, we were in sight of a green and wooded island rising out of a sea literally as blue as a summer sky and around us was the brilliant sunshine and the balmy air and feeling of a perfect mid-June day on the central New York hills.

Fifteen miles from her pier our boat slowed down to take on the negro pilot who came up the side over the long pilot's ladder. Theoretically at least he is in charge of the ship while she threads her way through the long, crooked intricate channel which constitutes the only

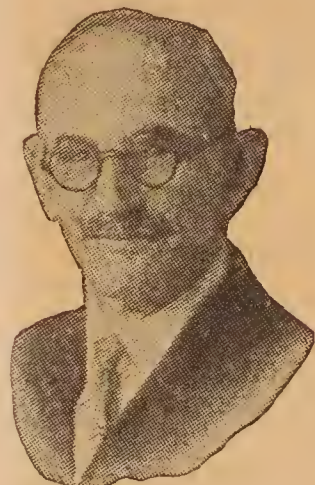
passage through the coral reefs that guard the island on every side.

Bermuda rises abruptly from an ocean floor that lies from two to three miles deep and the islands of today represent only a fragment of what was once a much larger land. Geologists say that it is a coral island reared on a mountain top foundation and largely worn away by the action of wind and wave during the unnumbered ages that lie behind. There remains today a group of about one hundred and fifty islands most of which are uninhabited and only five or six of which can be called important. In shape the group resembles a horse shoe—or more exactly—a fish hook. The greatest length from east to west is only 29 miles and the maximum width is less than three miles while the whole land area is only a little more than twelve thousand acres—literally a tiny speck in the Atlantic ocean. They lie on the latitude of Charleston, South Carolina and the nearest land on the American continent is Cape Hatteras, 565 miles distant.

Very little of the New World has been so long developed or has such a wealth of romantic history as this isolated island group. They have had a place in the annals of seafaring men almost from the beginnings of discovery in America. It is said that they are represented on a map of 1511, only 19 years after the first voyage of Columbus. In 1515, a Spanish Captain, one Jean de Bermudez, beating his uncertain way across an uncharted sea sighted them and anchored his ship, The Heron, a gun shot from the shore. He would have gone ashore to explore them and to replenish his fresh water casks but persistent foul weather and a boiling surf prevented him. He noted, however, great schools of flying fish and innumerable thousands of sea birds that filled the air with their cries and so sailed away, probably without ever setting foot on the land. Returning to Europe he made a report of his discovery and thus the islands named in his honor embalm the memory of that otherwise long forgotten mariner.

A generation later, it would seem that the island furnished the setting

(Continued on Page 8)

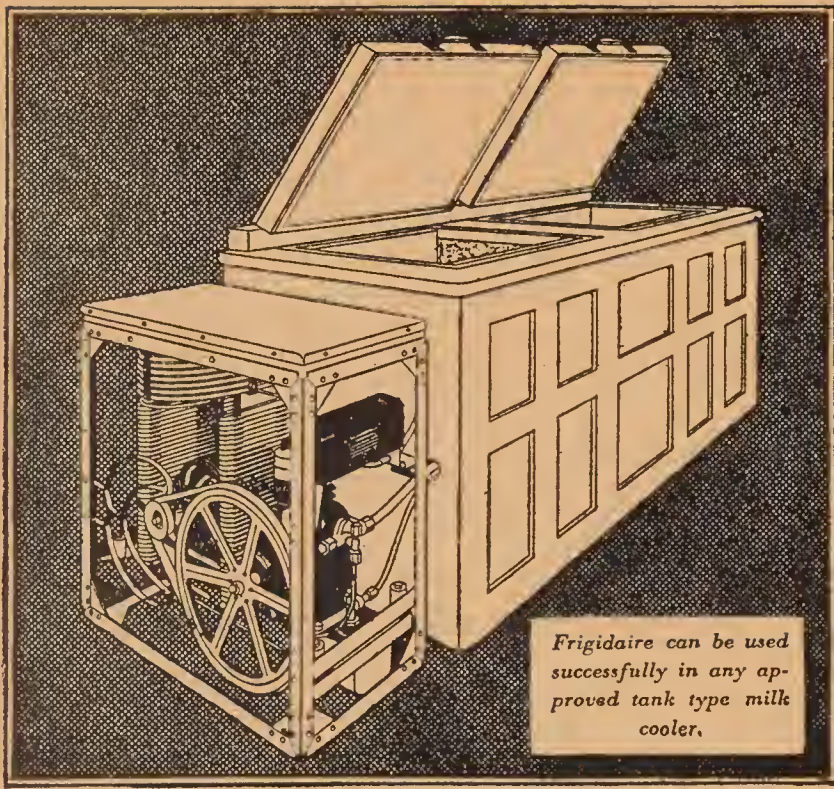


Jared Van Wagenen, Jr.



A typical scene in Bermuda where Easter lilies are grown in large quantities for the United States.

Repair Your One-Room Schoolhouse At State Expense—See Editorial



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"Frigidaire cools milk or cream faster and colder

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School and Road Questions

Improve Your School Without Local Cost

In order to get the State aid under the new law, when do we have to spend the \$1300 or such part of it as needed—this year, or next year?

State appropriations under the new law will be made during the next school year, on the basis of the money spent in your one-room school district during the school year ending August 1, 1929. Therefore, if you spend only \$1100 you will get the difference from the State between the four-mill tax on your true valuation and the \$1100.

What expenses may be counted toward the \$1300?

Everything necessary for hiring the teacher and maintaining a good school except capital outlay. All legitimate repairs may be counted, as for example, painting your schoolhouse. On the other hand, if you were to build a new schoolhouse, that would be a capital outlay and of course could not be counted toward the \$1300 to be spent for maintaining your school. See editorial.

Is there anything we have a right to do to improve our school this year that will increase the financial help we will get from the State?

Yes. This is the time, between now and the first of August, before this school year ends, to purchase needed equipment, to make needed repairs, or to paint the schoolhouse. By doing these things immediately, you will get the State to pay for them, if the total expenses for this school year do not exceed \$1300. This is an excellent time for hundreds of districts to get the State to paint their schoolhouses.

For example, suppose you will have spent by the first of August only \$1000 of the \$1300 set by the State as necessary school expenses. Then you will only get as State aid the difference between the four-mill tax and the \$1000. But if you plan to spend, between now and the first of August, some money for painting the schoolhouse or other repairs, if this does not exceed a total of \$1300, you will later get all of this money back from the State. If you do not have money on hand to do this, borrow it at the bank. You never will have a better chance to get the State to help you put your schoolhouse in shape. See editorial.

What is meant by the town rate of assessment, and how is it obtained?

The town rate of assessment is the rate at which property is assessed in your town. It is set by the State, and will not be known this year until July. The true valuation in your district is obtained by dividing your assessed valuation by the town rate of assessment. The true valuation is almost always more than the assessed valuation.

What is meant by state highways, county highways and town highways?

The state highways are usually through thoroughfares and are the roads which have been built in part, or wholly, by the State, or are under contract to be built by the State.

In general, the county roads are the farmer's market roads, which the counties are gradually building into hard surfaced highways.

And lastly are the town highways, the great majority of which are the dirt roads.

In New York State, there are about 80,000 miles of roads in all. About 11,000 miles of these are in the State system and practically all are hard surfaced roads. There are about 50,000 miles of dirt roads left in New York State, which leaves about 19,000 miles of gravel or hard surfaced roads, most of which are in the county system.

According to the Census of January 1, 1925, 29 per cent of the New York State farms were located on hard surfaced roads; 9 per cent were on the gravel roads; and 59 per cent, or more than half of our farmers, were still on the dirt roads.

How will the new laws just passed by the New York State government help the road system?

First, a gasoline tax law was passed providing a two-cent tax on gasoline, all of which is to be used for highway purposes, and 20 per cent of which is

to be returned to the counties to be used on local roads.

One of the laws of the new legislation relieves the counties of their 35 per cent share of the cost of building State roads. The State itself will now pay for all the building of its own highways.

The law returning 20 per cent of the gasoline tax to the county roads is one of the most important pieces of legislation ever passed by any state. In time, if handled properly, this huge sum of money coming from the State will make it possible to have a good hard surfaced or hard gravel road to every good farm, without additional expense to farmer taxpayers. Think what this will mean in better marketing and social convenience in the country.

Farm people should be on the watch to see to it that local boards of supervisors and road officials spend this money wisely in each county to replace the dirt roads with good highways.

How can we know how much money is going to be obtained from the State under the new school law?

The simplest way is to ask your district superintendent. He can tell you approximately.

Local officers are making our road so that it is impassable many days during the year. What can I do about it?

This is one of the things AMERICAN AGRICULTURIST cannot help you with. It is a local problem. The first thing for you to do is talk with your road superintendent. He is hired by the people of your town and is responsible to the people. Many times he is not to blame for poor road service for he simply does not have money enough to go around and do a good job on every road. If he does not lend a sympathetic ear when you talk to him, appeal to his superior, your town supervisor.

Many times a good, fair talk with either the superintendent or the supervisor will bring their attention to your problem and you will get help.

What difference does it make, whether the town or county or school district pays the taxes, or whether the State pays them? Don't we taxpayers have to pay in the end anyway?

It makes all of the difference in the world to farmers whether the State or the locality pays the taxes. If the State pays it, you get the immense help of all of the rich cities in the State. If the locality pays it, the already taxed-to-death farms have to stand practically all of the burden.

Many of our rural counties receive more money from the State than they pay to the State. The cities pay from 85 to 90 per cent of the State expenses.

The farmer's tax troubles are nearly all local ones. It is the cost of his school, his town and his county governments that is driving him out of business. Therefore, everything that can be done to transfer local taxes to the State results in immense relief to farmer taxpayers.

Will the new laws passed by the New York State government really help farmer taxpayers?

Very much. In the poorer school districts the new school laws will often cut the school taxes in half and the new road laws which return so much money from the State to the localities for building roads should very greatly reduce the farmer's road taxes.

Did the Governor's Agricultural Advisory Commission get paid?

No. Not a man on the Commission received a cent of salary from the State. Most of the members of this Commission were leaders of the farm organizations or were individual farmers who gave up their time from other work, often at considerable sacrifice, to help get the agricultural relief legislation through.

AMERICAN AGRICULTURIST is printed at Poughkeepsie, but our business and editorial offices are at 461 Fourth Avenue, New York City. Please direct all editorial and advertising mail to New York City. If you send it to Poughkeepsie, it will be delayed in answering.

Bang Abortion--Its Cause and Treatment

An Authority Answers the Questions You Have Asked Us

By R. R. BIRCH

New York State Veterinary College

SCARCELY a day goes by without at least one letter from a reader who asks how to rid his herd of abortion. The losses from this trouble are staggering and the nature of the disease is such that the danger is not realized until much damage has been done. We are glad, therefore, of the opportunity to give our readers the latest information from a recognized authority, yet written in non-technical language which can be readily understood by the man who is not a trained veterinarian.—THE EDITOR.

What is the cause of Bang abortion disease?

Bang abortion disease is caused by a germ, known as the Bang bacillus, discovered in 1896 by Professor B. Bang, of Denmark.

Are there other causes of abortion?

Yes. There are several other germs that sometimes cause abortion but none of these has been shown to cause a large number of abortions in the same herd, and none has been shown to be readily transmissible under natural conditions. Taken collectively, these germs cause many abortions, but in most herds in which abortions are frequent the Bang bacillus is the cause of most of them. There is good evidence that violent falls or injuries occasionally cause abortion, but this is regarded as very exceptional.

How does Bang abortion disease cause loss to breeders?

By causing many abortions and the birth of weak calves; by reducing the milk yield; by causing much retained placenta (after birth), metritis (inflammation), and sterility; by doing injury to udders; by reducing the sale value of all animals in the herd. These collective losses frequently become so heavy that the breeder becomes discouraged and sells his entire herd. He

frequently maintains it at a loss for a long time before he is forced to sell.

How is Bang abortion disease introduced into herds?

Usually by adding an infected animal from another herd. As a rule this is a female. Occasionally a bull with Bang bacilli localized in the genital tract is a very dangerous spreader.

How is the disease spread within the herd?

By infected animals, known as spreaders, that eliminate the germs from their bodies. Infected cows spread the germs in the discharges from the uterus and are particularly dangerous to their associates near the time when they abort or calve. They frequently spread the disease through the milk. Calves that drink milk containing the germs are spreaders, temporarily, because the germs sometimes pass unharmed through the calf's digestive tract. Some bulls with the germs localized in the genital organs eliminate them in the seminal fluid. Females readily become infected by taking up the germs through the mouth. Those artificially infected by being fed cultures of the Bang bacillus usually start to react to the blood test in from three to eight weeks following the date of infection, and abortions occur in from 30 days to several months following the time of infection. It is not definitely known how bulls become infected.

Do calves contract Bang abortion disease?

Calves very infrequently contract permanent infection. One of the surest methods of establishing a clean herd (one free from Bang abortion disease) is to separate the calves from the infected herd shortly after weaning time, and thus

give them a chance to overcome the infection before they reach breeding age.

What disinfectants will kill the Bang bacillus?

Any of the standard disinfectants. A 1% compound cresol solution is excellent for this purpose.

Is raw milk containing Bang bacilli dangerous to man?

It has been clearly shown that the Bang bacillus sometimes causes in man a prolonged fever resembling Malta fever. Sometimes this is mild but at other times it is exceedingly severe and lasts several months. The histories available on the numerous cases studied show quite conclusively that some of these follow the drinking of raw milk containing Bang bacilli. Inasmuch as raw milk from a great many dairies contains Bang bacilli, and relatively few persons become infected by drinking it, the evidence is that man for the most part is not susceptible to this infection.

When the Bang bacillus occurs in milk does pasteurization of the milk destroy it?

Yes. Provided the pasteurization is carefully done. The methods which kill tubercle bacilli are effective in killing the Bang bacillus as well.

What is the agglutination test and how is it made?

The agglutination or blood test is a development of recent years and depends on the power of the blood serum of infected cows to cause Bang bacilli floating in a weak salt solution to clump and fall to the bottom of the test tube containing the bacteria in suspension. The blood serum of normal cows will sometimes cause this clumping if relatively large quantities of it are employed, but exceedingly small quantities of

(Continued on Page 7)

How the Weather Affects Pollination

The Next Few Days Will Determine Our Probable Apple Crop

By M. C. BURRITT

TODAY, May 19th, apples except such late varieties as Spy and Rome, are in full bloom. The weather, especially as it affects pollination, is now our chief concern. The 17th and 18th were fairly warm dry days with temperatures running from 45° to 75° Fahr. But today is cold (40°) and rainy. This week is the critical one for Western New York fruit growers as far as an apple crop is concerned. More than any other factor after the buds are made, the weather during pollination week determines the amount of the apple crop. Last year a cold rainy week at this time prevented pollination and made a short crop.

Our State College is devoting a good deal of attention to this problem, somewhat belatedly perhaps, but then few of us have realized its importance. Now when interest is high in the question is the time to work at it. Good pollination is apparently primarily a question of clear warm weather so that pollinating agents, chiefly bees, can work and also of fertility of flowers. At 57° Fahr. bees are absolutely quiet, so the bee experts tell us. They hardly begin to fly at all until the temperature reaches 65° and they do not circulate freely until the thermometer is at 70° or more. Consequently, it is not sufficient merely to have bees in the orchard unless it is warm enough so that they

can work. In 1928 there were only two hours during the whole pollination period of eight days when it was warm enough for bees to circulate freely. A small apple crop was the result. There is altogether too little realization of the fact that some varieties of fruits are self-fertile and some are self-sterile, that is, they require the pollen of some other variety to fertilize them and make fruit. A few growers who have realized this have interplanted varieties as pollinators. But there are hundreds of acres of sterile orchards in Western New York planted in blocks without good pollinating varieties interplanted. To be a good pollinator a variety must produce fertile

pollen freely which will germinate well and it must bloom quite regularly and at the same time as the variety to be pollinated. For example, Rome is a good pollinator for Spy, and McIntosh for R.I. Greening. We are grafting Romes into blocks of Spys and are planting McIntosh with Greening for pollination purposes.

Other pollination questions which need study are the effect and value of wind, the flight habits of bees, the loss of bees, if any, through poisoning from spraying, sterility in fruit flowers and many others. Another interesting thing is to observe the effect of bloom of a good pollinating variety cut and set in pails of water in trees to be pollinated. To what extent will this help temporarily while grafts of desired pollinators are growing? All these and other things are being studied by College specialists, some of them in my orchards.

The spring continues to be a most discouraging backward one. We get a day or two of bright fairly warm weather and then another rain to wet the land all that it has dried off. Some farmers have done no plowing at all. Less than 25 per cent of the spring grain is sown. All crops will be late. The acreage of many crops such as cabbage and beans will be cut unless we get good weather at once because of inability to prepare for the crops. Already a few growers have abandoned cabbage because they could not sow the seed early enough and other work is piling up. Western New York is getting off to a bad start so far.

I would like to endorse every line
(Continued on Page 6)



What is more beautiful than an apple orchard in bloom? Right now, however, owners are hoping for warm weather so that bees will be able to work.

Editorial Page of the American Agriculturist

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Vol. 123 June 1, 1929 No. 22

Repair Your One-Room Schoolhouse At State Expense

THE new one-room State aid school law provides for an expenditure of \$1300 in each one-room school district in the State. This sum is to cover expenditures during the school year of 1928-1929, ending August 1, this summer.

We have had many questions asking if all of the \$1300 must be spent to get State aid. The answer is "no", but you will only get State aid up to the amount that you spend. For example, if your four-mill tax on your true valuation raises \$400, and you only spend \$1100, then the State will pay you the difference, or \$700. But if you spend \$1300, the State will pay you \$900.

Therefore, we want to urge that you have the chance of a lifetime to repair your schoolhouse or replace old equipment between now and August 1 at the expense of the State, if you are not otherwise spending the full \$1300 this year.

How do you do it? First, consult your school superintendent. If you are a trustee, you have the right to spend \$50 on repairs or equipment without vote of the district. The superintendent has the right to order \$200 more to be spent by your district for needed repairs or equipment without vote of the district.

Now suppose your district school needs painting, or the blackboards or desks or some of the other equipment are worn out and need replacement. *Now is the chance to do it without costing your district a cent, provided you have not used up all of the \$1300.* If there is no cash on hand, you can borrow the money at the bank and next year when the apportionments from the State are made, you will get it all back, including interest, up to the \$1300. If you do not use all of this money, it will be retained by the State and your district will never have the value of it.

Of course, great care should be used not to do anything extravagant, or to spend money foolishly, and you will not do this if you follow the advice of your district superintendent. If you are interested in your local school, call this matter to the attention of your trustee. If you are a trustee, we urge you to talk with your school superintendent immediately. There will never

again be a better opportunity for putting your school in better shape.

What Makes a Good Neighborhood?

SUPPOSE you had a family of children and were going to move into a farm community.

What are some of the things you would look for to make the right kind of surroundings in which to bring up your boy and girl, and in which to live yourself and carry on your business?

Dr. C. E. Ladd, extension director of the New York State College of Agriculture, was in the A. A. office the other day, and the following is about what we agreed on to make an ideal community. These are not necessarily in the order of their importance.

1. A first class school.
2. Good roads.
3. Electricity.
4. A live church within reasonable distance.
5. A comfortable and convenient meeting place where the people of the community can gather for community meetings.

What would you add or subtract from this list?

Good Plowing a Lost Art?

THAT farmers are forgetting how to plow well is the claim made by E. A. Silver, extension worker in the Ohio College of Agriculture. Mr. Silver says that modern plowing is hasty and careless and that in the haste to get work done quality is being sacrificed. He says not enough attention is paid to the proper adjustments of the plow and that in general we do not do as good work now with the plow as did our fathers.

This is a serious criticism, for good plowing is a fundamental occupation and on it depends much of the success of the final crop. Certain it is that good farmers of other days took great pride in laying a furrow just right and a field so plowed was a joy to look upon. However, it is easier to do a better job with a tractor and modern equipment than it was with the old hand plow and while there may be many instances of careless plowing, we believe that a better job is done now than ever.

What do you think about it?

End of the Dirt Roads in Sight?

WITH all of the money that has been spent on good roads in years past, more than half of our farmers still live on dirt roads, and these are worse than they were years ago. However, more progress was made in ending the dirt road nuisance in New York State this year than ever before. Look at the situation a moment with us.

There are approximately 80,000 miles of all kinds of highways in the State at the present time. About 11,000 of these are in the State highway system, and are fine, hard roads. Probably in the next ten years the State will build at least 3,000 more miles. In addition to the State system, there are about 19,000 miles of gravel or hard surfaced roads built by the counties and the towns. It is probably safe to say also that in the next ten years at least 7,000 miles more of dirt roads will be abandoned. The abandonment of roads is going on very rapidly.

Then, if we add the hard surfaced roads of the State and the counties with the roads likely to be abandoned in the next few years, and the highways that the State will build, it gives us a total of about 50,000 miles, which, subtracted from the total of 80,000, leaves 30,000 miles of dirt roads still to be taken care of.

Now under the new State aid law, the counties receive one-fifth of the gasoline tax for road purposes. This tax will amount to approximately \$5,000,000 a year, which is likely to increase each year. Now think what all of this money coming back into the counties is going to do

toward turning that 30,000 miles of dirt roads into hard surfaced roads in the next ten years. We can see no reason whatever why there should not be a good road to every good farm, and most of us will live to see this happy day.

One word of caution is necessary. Great care must be used to spend this money wisely. Local salaries should not be jumped up. Too good roads should not be built. There should be a uniform system throughout the State for building these county or lateral farm roads. This system should allow for good gravel roads in some places, for wide roads and for narrow roads in other places as conditions justify. We hope this extremely important subject will have the thought and the discussion of farmers in every community.

Sod Or Cultivation in Orchards?

THERE was a time not so long ago when the fruit growers who advocated sod mulch alone were more or less laughed at. There was some reason for this attitude for it took a very good grower indeed to succeed with sod culture. However, conditions are changing and sod culture is increasing in New York State orchards. There are several reasons for this, the chief one of which is lower prices of nitrogen fertilizers. Recent experiments and tests have shown very striking and wonderful results from the application of nitrogen on sod in orchards and this fertilizer has now reached a point in price where it is more economical than tillage under certain conditions.

Of course, there are other big advantages of sod culture over cultivation, the chief of which is the saving in labor and equipment. Sod reduces the amount of labor necessary at a busy season and leaves more time for better spraying for it is easier to haul a spray rig through a sod orchard than through a cultivated one. Better color on fruit is obtained with sod and nitrogen fertilizer than by cultivation.

There are, however, some arguments on the other side. Sod orchards suffer more from mice. Fire is a dangerous hazard, particularly where an orchard is located near a railroad. Then it is true that young orchards need cultivation to keep the trees growing.

To Little Girls and Their Mothers

OVER a thousand little girls in the A.A. family have obtained a Betty scrapbook and are taking the lessons in cooking. It is a pleasure to read the enthusiastic letters to Betty that come from these little girls and their mothers. One of the nice things about the course is that it can be started any time.

Just send ten cents to cover the actual cost of the scrapbook and it will be sent to you together with instructions on how to start.

Eastman's Chestnut

I HAVE great sympathy for the boy who is passing through the trying stage (to himself and everyone else) from twelve to sixteen when he is changing from boy to man. He is more sensitive to ridicule than at any other time in his life, and he has to put up with more of it. He wakes up some morning and finds that he has the body of a man and does not know what to do with it. His folks tell him that he would be a "big feller" if so much had not gone to feet; as to hands, he feels as if he has about six to take care of, especially when there are strangers around.

But worst of all, it is that confounded squeaky, unreliable, changing voice that makes a fool out of him every time he opens his mouth.

A boy who had reached this stage went into a grocery store and in a deep voice he demanded a sack of flour, when, his voice changing suddenly to high pitch, he added, "and a pound of butter."

"Just a minute, please," said the clerk, who had his back turned, "I cannot wait on both of you at once!"

News from the Publisher's Farm

SPRING planting on the farm has gotten under way nicely notwithstanding the extremely wet weather.

It seemed to me that the weather this spring was the worst that we have had in a long time. However, one often thinks that each spring is the worst one. I was sufficiently interested to investigate just how bad the weather was this spring in comparison with other years and I learned from the United States Weather Bureau that the average rainfall during the month of April was 6.31 inches, which is the heaviest rainfall for the month of April since 1890. The nearest approach to this record was 5.19 inches in 1901. Snowfall averaged about twice the average amount.



Henry Morgenthau, Jr.

Our silage held out—through careful nursing—until we were ready to turn out on pasture on May 14th. For the first time in a number of years our silos are absolutely empty and we will not be able to feed our cattle silage during the month of August as we have in years past. With this in mind, we have planted quite an acreage of oats and peas over a period of about three weeks. This will supply the dairy with green feed when we need it most. We have not decided yet whether we will feed it directly from the field or run it into the silo and feed it after it has been turned into silage.

We are planting about thirty acres of West Branch Sweepstakes silage corn. I think we all make a mistake in planting our silage corn too early. I have often seen our corn planted and the only thing that seemed to grow was the weeds. This year we are holding back and expect to plant our silage corn a week or ten days later. I will not be a bit disturbed if we do not get the last of the corn planted before the first of June.

We are putting in about ten acres of alfalfa. This soil was tested for acidity by a representative of the State College through the cooperation of A. L. Shepherd our Farm Bureau Agent. We were advised to use one and a half tons of ground limestone and we are complying with this suggestion. We are sowing Northern Grown Grimm Alfalfa seed at the rate of fifteen pounds to the acre.

The one lucky break that we have had on the farm this year was that during the week that the McIntosh were in bloom it only rained once and the weather was warm enough for the bees to work. It looks as though we were going to have the largest crop of McIntosh and Baldwins that we have had in years. So far we have sprayed twice and dusted once.

The sweet cherries in our neighborhood have been pretty well wiped out through freezing. I cannot see that our apples have been any way injured through freezing.

The New York Holstein-Friesian Association has an excellent program for this year. It proposes to spend \$760. to promote Calf Club Work, it is offering \$400. as prizes for the elimination of Scrub Bulls, and it is spending over \$500. in advertising New York Holsteins to the nation.

I have just returned from Chicago where I attended the annual meeting of the Standard Farm Paper Publishers. Going out on the Twentieth Century, I met my old friend, Dr. Larsen, formerly chief of the Dairy Division

at Washington. In discussing the dairy situation with Dr. Larsen, I was pleased to learn from him that he feels that there is no danger in the immediate future of over-production of dairy products in United States. Dr. Larsen pointed out that the cow population of United States is not increasing in the same ratio as the human population.

I believe that New York dairymen are facing a real crisis. Through the recent increase in tariff on the importation of milk and cream, the job of supplying New York City with its required milk next fall is made more difficult. It is all very well to tell the dairymen, "You must make more milk next fall and help save the New York City milk market for the New York State dairymen." But the fact remains that just as long as we are paid

the same rate for the excess milk that we produce in June over November, we will continue to make an excess of milk in June as it is the cheapest milk that we can produce. New York is one of the few remaining sections in the country where they have not established the practice of arriving at an average production for a dairyman's herd and paying him a bonus on any milk that he produces in excess of this average during the period when there is a shortage and paying him on a butter fat basis on the excess that he produces during the surplus period. I am firmly convinced that if this method was followed in New York State, we dairymen would soon get our dairies in such shape that we would not be producing a 50% surplus in June over November but would be producing an

average amount of milk the year-round.

I was very much pleased to receive the following letter from Mr. Frank W. Ober, secretary of the Agricultural Committee for the Near East Relief:

"While in Greece last March, I saw and photographed the fine bull you furnished. This was placed with the Agricultural School at Seres, which is headed by an animal husbandry specialist who has been thoroughly trained in Germany. You can see by the photograph that the bull is in fine shape and thriving. It will do good service in demonstrating the value of the Holstein in this country. I find that the general opinion is that this breed is too large and too heavy a feeder for this country, but time will prove or disprove."

Henry Morgenthau, Jr.

Visits with the Editor

HERE is your chance to relieve your mind. I do not pretend to know the answers to all problems, but maybe it will help to get them "off your chest."

All letters will receive answers, and those published will be printed without names.—E. R. EASTMAN.

Heroes of Everyday Life

DEAR EDITOR:—I always read with the greatest pleasure Mr. Van Wagenen's articles. When I read "He Was My Boyhood Friend", I could not refrain from writing you of James Brown of this place. My father was a subscriber to AMERICAN AGRICULTURIST before the Civil War, I believe. The more articles by Mr. Van Wagenen for your paper, the better.

"He Was My Boyhood Friend" brings vividly to mind a similar picture of my early boyhood days. Not John but James Brown arrived with his wife, Margaret Stewart, and four small children the day they were carting the lumber to build the Presbyterian church of Pluckemin, New Jersey. It was in the summer of 1851.

My good father always delighted in telling the story of how he had met a farm wagon (when going for a load of lumber for the church) and learned that James Brown and his family had just reached America from County Downs in the North of Ireland. James Brown had been a small storekeeper in Ireland and had passed through the trying days following the Irish famine. Mrs. Brown

belonged to the Stewart family, of which A. J. Stewart, the merchant prince of New York, was a member.

The Browns secured a small home in the mountain east of the village of Pluckemin and not far from the camp ground of the American Revolutionary Army where General Washington and his army officers held the great ball on February 18, 1779 to celebrate our alliance with France.

Mr. Brown saw many years of hard, strenuous labor. In the latter years of his life he removed to the village. No one ever questioned Mr. Brown's orthodoxy. Always at the prayer meeting and when there was a long pause between a long prayer he would quaintly remark he did not like to hear so much silence in a prayer meeting!

A granite stone near the roadside marks the last resting place of James Brown and Margaret Stewart, his wife, in the village cemetery. Four grandchildren, one a well known physician, one a professor in Princeton University, one an inventor and connected with a large Chicago manufacturing company, and a granddaughter connected with one of the largest law firms in the city of New York, tell the story of James Brown's splendid contribution to American life.—J.A.P., New Jersey.

MR. VAN WAGENEN'S article, "He Was My Boyhood Friend", and the above letter are interesting because they are true stories of everyday folks in everyday life. Most of us show what

we are, not so much in emergencies and under exceptional conditions, as we do day by day. There is not much chance in a country of more than a hundred million people of a boy becoming President, or Governor of his state, or even of acquiring great powers and riches of any kind. But every boy and girl does have the opportunity of becoming a good citizen and of making the old world a little bit better place because of their passing through it. So we love to read and to know about heroes of everyday life like the ones described in Mr. Van Wagenen's article and in the above letter.

Sitting Pretty While the Corn Lasts

DEAR EDITOR:—I am enclosing copy of a letter, which I have from one of my customers. It expresses so clearly conditions in the average farm home that I thought possibly you may have use for it.

This man ordered 20 bushels of seed corn to distribute to his neighbors. His letter will explain how it is handled.—J.S.M., New York.

Dear Mr. M.:—I have five or six bushels of the corn on hand including my own and am very sorry to say I have spent every dollar that has been paid in, except two checks that I have not cashed.

You see it was like this: I meant all right; I put the money in one side of my pocketbook. I do not have much ready cash by me as a rule. I needed some money and I suppose I got into the wrong side of the pocketbook. Well then it happened I was at the saw mill the other day and a neighbor was getting out some oak planks and I needed some for my old roller, and I gave him \$4.50. Then there was a bill at the oculist for \$5.00; my boy broke his glasses while catching a lamb when he was home from college Easter, and he had to have them.

My cousin did not pay me; I suppose he thought I owed him because our boys have been riding to school with his boy. Anyway, I could not say anything.

H. F. was going to pay me for his bushel but he buzzed my wood, which was a six dollar job, so I gave him \$2.00 more beside the corn. Then a neighbor girl next door graduated from the hospital last night and my wife gave her \$2.00 out of yours. I told my wife we were sitting pretty while the corn lasted.

I'll try to see that you get the money sometime.—E.E.W.

I PRINT this letter because it shows so well the struggle that goes on all of the time in most farm families to make both ends meet. The lack of money on the farm is very discouraging sometimes. There just simply is not enough to go around.

Yet it seems to me that the satisfaction is all the greater when father and mother can come through victorious after long years of struggling with poverty because they have been able to rear and educate their family and to provide food, clothing and shelter.

(Continued on Page 18)

My Favorite Song or Poem

EDITOR'S NOTE: Under this title we will publish regularly the favorite songs or poems of our readers. We will not be able to publish all of them, but will print the ones that get the most votes.

Other things being equal, the songs that have the finest poetry in addition to the melody will have first choice for printing. If possible, send an accurate copy of your favorite song or poem. Also, we would be glad to have a few words as to why the song or poem is your favorite, or why it has meant something in your life.

With your help, this should be a very interesting department of AMERICAN AGRICULTURIST.

Here is a beautiful old song, a favorite with many. The words were written by J. B. Dykes.

Lead, Kindly Light

Lead, kindly Light, amid th' encircling gloom,
Lead Thou me on;
The night is dark, and I am far from home,
Lead Thou me on;
Keep Thou my feet; I do not ask to see
The distant scene; one step enough for me.

I was not ever thus, nor pray'd that Thou
Should'st lead me on;
I lov'd to choose and see my path; but now
Lead Thou me on;
I lov'd the garish day; and, spite of fears,
Pride ruled my will; remember not past years.

So long Thy pow'r hath blest me, sure it still
Will lead me on;
O'er moor and fen, o'er crag and torrent, till
The night is gone,
And with the morn those angel faces smile,
Which I have loved long since and lost awhile.

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How the Weather Affects Pollination

(Continued from Page 3)

of the editor's "Farm Relief at Washington" in the issue of May 18th. I have discussed this legislation with many leaders state and national, studied the bill, read much of the testimony before the committee and heard it explained by its sponsors. It is the greatest undertaking of any government in reference to agriculture, outside of war time, and in my opinion is as likely to fail as to succeed. If it fails it will be of tremendous harm to agriculture. Few farmers appreciate its full significance. Many take the attitude that they are not concerned and that it is a matter only for Congress and those who urge it. This is not true, for the bill is likely to influence the markets of every farmer for better or worse. If Congress alone could bear the responsibility we might be content to ignore it, but farmers must in the end bear the result and foot the bill of this great political experiment.—Hilton, N. Y., May 19, 1929.

Some Local Reports on Fruit Prospects

Wayne County—Blossoms are heavy on all varieties of apples except Ganos. Pears bloomed heavily except on Seckels. Apples and pears have not been damaged by frost to date and cherries and peaches but very little.—W. H. F., Produce Packer.

Yates County—Frost on the night of May 19, did considerable damage to crops in some sections of Yates County. I have been in two vineyards which appeared to be completely frosted and

others where the crops will apparently be a partial loss. Reports on losses vary according to sections and it is too early to know definitely. I also believe there will be some damage to cherries and peaches. The frost was severe enough to form ice in many places. Apples are in full bloom and the bloom appears to be very heavy. The weather was bad for pollination when cherries and pears were in bloom. The bloom on pear trees has been only medium. There is considerable apprehension that cherries and peaches are damaged so that a heavy drop will result after they have set.—C. B. RAYMOND, County Agent, Penn Yan, N. Y.

Clinton County—The season here is very late and blossoming has been delayed. At the present writing there are only a few blossoms showing, but so far no frost has been noted. Everything will depend upon the weather from now until June 1.—GEORGE R. CZIR, County Agent, Plattsburgh, N. Y.

In the Hudson Valley

Columbia County—We are expecting a light set of fruit on early blooming varieties due to frost and unfavorable weather during the blooming period. In my opinion the late varieties should be a good crop.—PAUL JUDSON, Kinderhook, N. Y.

Dutchess County—The apple bloom through this section has been exceptionally heavy, indicating a record crop of McIntosh and a heavy crop of Spies. Baldwins and Greenings also bloomed heavily except trees which, like most of my own, bore a heavy crop last year.

American Agriculturist, June 1, 1929

Even here, I have noticed more of a tendency than usual for a scattered bloom on trees having their "off" year. It is too early yet to do much more than guess about the set of apples, but there seems to be an impression that the fruit in many orchards is not setting as well as the bloom promised, possibly due to our numerous light frosts just before and during bloom and the heavier frost of early April. Weather during blossoming was favorable for pollination apparently. I have very little information on other fruits. On my own place Bartlett and Clapp pears blossomed well and seem to be setting a good crop. Cherries were rather badly hit by the April freeze and many fruits that were not killed in the bud stage do not seem to be developing properly, so a light crop is indicated.—K. B. LEWIS, Red Hook, N. Y.

Ulster County—After an exceptionally heavy bloom, the setting of McIntosh is very disappointing. Probably the limiting factor was the cold weather during pollination. Other apple varieties look fairly good. Pears are very light, sour cherries are light, sweet cherries, fair; peaches, good; currants, variable; grapes, uncertain.—W. S. SALISBURY, Kingston, N. Y.

Orange County—The pear crop in Orange County under my observation is lighter than last year. Bartletts and Kieffers blossomed heavily but are shelling out badly. Seckels and Bosc varieties blossomed light. McIntosh apples blossomed heavy but are undergoing a heavy drop at present. Rhode Island Greenings, Baldwins and Delicious blossomed rather light. Northern Spys and Wealthy blossomed heavy. There were from three to four days of pollination weather during blossoms. Grapes injured by cold weather are sending out secondary shoots. Just what this will amount to cannot be settled now. Strawberries were injured in the Middlehope section by the frost of May ninth where the temperature dropped to twenty-nine degrees.—SIDNEY JONES, Middletown, N. Y.

The Fruit Situation in the West

The Hood River section of Oregon reports that the bloom of apples is lighter than usual because of the extraordinarily heavy crop last year. The season is two weeks later than usual. It is estimated that the crop will be heavier than the 1927 crop but not over 40 per cent of normal.

Reports from the State of Washington indicate that weather conditions during blossoming have been perfect and while the bloom is only about 75 per cent of last year, a normal yield is expected.

Conflicting stories come from California. One report states that the April frost damage is even more serious than was realized at first. According to this report the Clingstone peach crop is about 36 per cent of normal and the freestone peach crop about 55 per cent of normal. In addition, the pear crop is estimated at from 64 to 86 per cent, cherries 52 to 60 per cent and plums 46 to 82 per cent.

Another report from Oakdale, California, states that that district had a good crop of fruit and that damage from early frost is less than was at first thought.

The Outlook in Michigan

A report in the Produce Packer from Michigan dated May 17, states that orchards in the southwestern part of the state were in full bloom. Sour cherries appear to have been damaged by spring frosts, but the sweet cherry crop is promising. The outlook for pears and apples is good and although peaches were damaged in certain sections, the outlook is fairly favorable.

Virginia and West Virginia

Reports from Virginia state that the fruit prospects are very good. The season was early, but fortunately very little frost damage was reported, except in the southwest where there was considerable damage to fruits along about the middle of April. Many growers in the Shenandoah Valley report that they expect the largest crop they have ever had. In the Piedmont district where the Winesap is the most important variety, reports are that trees have set only a fair crop. In the Roanoke district the outlook is favorable, although the Winesap are not as good as other varieties.

A report from Martinsburg, West Virginia, stated that fruit growers are concerned over the heavy bloom and bud drop among certain varieties of apples and that Delicious and Stayman have been hardest hit. Producers predict a light crop of both varieties. Early varieties such as Grimes, Jonathans, Yorks and Ben Davis are looking good.

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The New England Grain Products Company, a Massachusetts Corporation, has been formed to take over a group of companies which have been in successful operation for many years. The Company will distribute meal feeds and grain through 40 owned stores and through over 1100 retail dealers. Its four large milling plants manufacture over 35 carloads of dairy and poultry feeds daily.

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The foregoing information, while not guaranteed, has been obtained from sources we believe to be reliable.



With the A. A. Dairyman



How to Increase Production Next Fall

WE frequently get questions asking just what dairymen in the New York Milk Shed can do to increase production next fall during the short period. The following are a few suggestions which may help:

It is a well-known fact that early-cut hay is considerably higher in protein than it is after it is allowed to get dead ripe. In fact, it has been suggested that one reason for the November shortage is that the latest cut hay is put on top of the mow and fed out during the period when the best quality of hay is needed to maintain production. A separate mow in which the early-cut hay can be put in order that it can be available for November feeding will go a long way toward helping out.

Pasture Alone Not Enough

Under certain conditions it will pay to put in some crop to be fed green during the pasture season. Anything which is done to maintain production during the summer will be reflected in the November production. Once the cow drops in production it is almost impossible to bring her back again. Millet, soy beans or sowed corn should be put in during the month of June and will furnish excellent feed during the short pasture season. The feeding of a suitable concentrate to go along with pasture at the rate of one to five pounds of milk produced, is another way of maintaining production. In case green food has not been planted during the summer, it will be worthwhile to start feeding new hay—or silage if it is available—as soon as pastures get short.

So far as possible, many dairymen may find it profitable to buy cows freshening during the late summer or fall months. It is quite probable that the demand will far exceed the supply of cows freshening at this time.

Dairymen who have animals which are due to freshen during the fall may increase their production by starting to feed them grain sometime before they freshen. This will put them in good physical condition and they will produce more heavily than if grain is omitted until after they freshen. Dairymen owning cows that will freshen during the short period should not plan to veal the calves as this takes a considerable supply of milk which the market will need at that time. If they are raised use whole milk in as small amounts as possible.

Leading dairymen feel that next fall will be the critical point in protecting the fluid milk market. Every interested dairyman can do his part by following the suggestions given above.

Bang Abortion—Its Cause and Treatment

(Continued from Page 3)

the serum of infected cows will cause it. This clumping occurs after the suspension of bacteria, with blood serum added, is incubated several hours.

What constitutes a reaction to the agglutination test?

The relative quantity of blood serum required to cause the clumping or agglutination just described of the Bang bacilli is the determining factor. One part of the blood serum of normal cows added to twenty or even to 40 parts of the suspension of the bacilli may cause them to agglutinate. When one part of the serum to 80 causes the agglutination, determinations show that the cow usually is infected. In other words agglutinations in dilutions at 1:20 and 1:40 usually do not denote infection. Those at 1:80 or higher practically always are caused by infection with the Bang bacillus.

How are doubtful reactors handled?

Doubtful cases, those showing complete agglutination at 1:40 and only partial agglutination at 1:80 (females)

may remain in a clean herd pending another test, provided they are not pregnant. Pregnant cows showing doubtful reactions should not remain in association with clean pregnant cows because there is danger that they may abort or calve at full term, and spread the disease to others. All doubtful cases should be retested until they are definite reactors or until the reaction falls below the danger line (1:80). The primary test does not interfere with the accuracy of retests.

Is the agglutination test reliable?

The agglutination test is exceedingly accurate when it is made and interpreted by experienced men. In detecting animals that are carriers of the Bang bacillus it is as accurate as the tuberculin test in detecting tuberculous animals. Failures to understand the test rather than deficiencies in the test itself are responsible for most of the objections raised against it. It is not a perfect test but it is sufficiently accurate to serve as a basis for freeing herds of Bang abortion disease.

Do all cows that abort react to the agglutination test?

No. Some abortions are not caused by the Bang bacillus; few cows fail to react at the time they abort as a result of Bang bacillus infection, but will react if retested 30 days later; and very exceptionally an aborting cow will fail to react for a long time even though she is a carrier of the Bang bacillus.

Do all cows abort that react to the agglutination test?

No. The agglutination test detects the carriers of the Bang bacillus (those with the germs actually present or localized in their bodies) but some of the carriers do not actually abort. They may calve prematurely or at full term and spread the bacillus to their associates. The recently-infected cow that calves at term is almost as certain to be a spreader at calving time as is the cow that actually aborts. The fetal membranes, the discharges from the uterus, and the exterior of the calf itself carry Bang bacilli.

Does each infected cow react in the same degree in successive tests?

No. Infected cows almost always react in dilutions at or above 1:80 but there is considerable fluctuation in successive tests.

Does the blood of each clean cow agglutinate in the same degree in successive tests?

No. There is considerable fluctuation but almost always clean cows show agglutinations ranging between none whatever and 1:40.

Do sudden changes occur from the agglutinations that denote clean animals to those that denote infected animals?

Yes. When an animal showing no reaction whatever becomes infected she may change in a very short time to a very high reactor. Usually this occurs in from 3 to 8 weeks following the date of infection but the interval in some cases is longer.

Do sudden changes occur from the agglutinations that denote infection to those that denote clean animals?

Sudden changes from high reactions to none at all are very rarely recorded and probably they are caused by errors in the technique of the test itself, or by errors in numbering blood samples. When a definite high reaction disappears it is usually a very gradual process involving months or years. Doubtful reactors, or those that react in low dilution, (near 1:80) often cease rather suddenly to react further, particularly if they are below breeding age or are not pregnant.

Does the test fail to detect infected animals?

Sometimes. An infected cow in the early stages of the disease may fail to react and an exceptional cow may be tardy in developing a reaction.

Is more than one test required, and how often should the test be repeated?

A single high reaction means that

(Continued on Page 9)



An ailing Man can't do his best

...neither can a
sickly cow or hen

THE MAN who is always "doin' poorly" in health generally does poorly in wealth, too. It is not his fault. The human machine finds it impossible to produce properly when it is run down.

The same thing applies to those egg machines and milk machines called hens and cows.

Science has discovered the importance of diet in keeping the intricate mechanism of the body running smoothly.

In the case of poultry and cattle, diet is even more important than to humans. Good feed to them is something more than a necessity for health—it is raw material to be manufactured into eggs and milk. The goodness of the finished product depends upon the goodness of the raw material and of the machine.

A good feed is one that satisfies both needs—the needs for health and production. Both are interdependent and equally important, for

a feed that stimulates to over-production may do so at the expense of health.

So the problem is to create a ration that is complete in every respect, that satisfies every need of the animal, and that is easily assimilated. The problem is one that calls for scientific research of the highest calibre.

In the research laboratories and on the experimental farms of The Park and Pollard Company, nutritional problems are constantly being solved. Solving them is an important part of the daily work of creating Park and Pollard feeds. These feeds ensure the highest degree of production consistent with the health of the bird or animal because research has gone before and enabled the makers to know exactly what they were doing.

That is why Park and Pollard feeds have brought success to poultrymen and dairymen and by doing so have clinched their own success.

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A Novice in Dairying — might pick the heavy cow on the right

But you, as an experienced dairyman, know well enough that the light weight, wedge-shaped cow on the left will give twice or thrice the milk that the heavy, beefy cow can produce. The reason is simple: the light-weight puts her feed into milk production, where it belongs; the heavy individual puts hers into laying on fat.

Heavy weight, in cows, does not mean heavy production. Just so with feeds.

Buffalo Corn Gluten Feed

is light in weight and rich in nutrients. It has a minimum of heavy starch, which is of little value in making milk. But the proteins, the corn solubles, and other parts necessary to milk production are present in Buffalo. And its bulk is a favorable factor in making up a dairy ration. Don't be misled by feeds which are just heavy. You know that heavy feeds, like heavy cows, do not necessarily mean heavy milk yields.

Your complete ration must be light and bulky, rather than heavy and compact. Then why not use light, rather than heavy ingredients, as much as possible?

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which is proof of its quality



Guaranteed Protein 23%
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the Burrell Milker
I purchased from you
21 YEARS AGO"**

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The American Agriculturist Advertisers Are Reliable!

We Go A-Sailing

(Continued from Page 1)

for one of the many unsolved mysteries of the sea. When first permanent colonists came there was still visible the remains of a wreck and at a headland yet known as Spanish Point, they found carved on a rock the letters F. T., followed by a cross and the date 1543. Local historians have made many surmises but who the carver was or what his brief inscription commemorates must forever remain an unsolved question.

Just fifty years later in 1593, sober history once more takes up the story of Bermuda. In December of that year a French ship, presumably running before a gale struck the island at midnight and out of a crew of fifty odd, only 26 men managed to come alive through the breakers and reach the shore. These survivors must in truth have been resourceful sailors. In Robinson Crusoe fashion they saved tools from the wreck, cut down cedars, built a craft of eighteen tons, calked her seams with a mixture of lime and turtle oil which hardened like cement, and after a sojourn of six months on the island hoisted a sail made from the canvas of their wreck and by dint of happy fortune and good seamanship reached the mainland of America and eventually came safe home to Europe, surely a hard, and noteworthy feat.

But the year 1609 is the real beginning of authentic Bermuda history. On June 2 of that year, Sir George Somers, a one time shipmate of the great Sir Walter Raleigh sailed from Plymouth, England, in a ship called the Sea Venture. Along with him was a little fleet of other vessels all bound to join the infant colony planted the previous year in Virginia.

Fortunately for the historian there sailed with him one William Strachy. He was an English gentleman—a man of education and literary sense and he proved to be a most voluminous and exact chronicler of all that took place on that epoch-making voyage. All went well until July 23 when they were caught in a hurricane which separated the fleet one from another. The Sea Venture was driven before it helplessly for three days and nights. Strachy tells with a good deal of detail about her desperate plight, especially the mountainous height of the waves and the unbelievable floods of rain. The Sea Venture sprang a leak, there was nine feet of water in her hold and every moment seemed to be her last but just as all hope was taken away she went ashore providentially at a protected point on St. George's Island. Someway it reads like the classic account of St. Paul's shipwreck on Miletus long ago and in its conclusion it was equally fortunate for while their ship was broken up, the whole company of 140, including women, came safely to land.

Certainly their condition might have been far worse. There was food in unlimited quantities for the taking. Either accidentally from earlier wrecks or purposely introduced by far seeing pirates, the island was abundantly supplied with hogs. During their stay of nine months they killed these animals with the greatest freedom yet seemed to make no impression on their numbers. In addition huge sea turtles were to be caught on the sands while the nests of sea birds supplied them with eggs and they gathered prickly pears as a relief from a meat diet. After the manner of earlier castaways they salvaged their wreck getting from her food, stores, cables, arms and timbers.

They first built a small boat which on September 1 sailed with a crew of seven men commissioned to carry the news of their plight to Virginia. This tiny craft which surely must have been freighted with prayers and good hopes disappeared over the rim of the western horizon and for weary weeks men strained their eyes for sight of a sail and at night lighted fires on the head-

lands to guide them on their return, but no word of tidings concerning the boat or her crew ever came back. Somewhere on that brave voyage the great deep swallowed them up. After waiting two months for their return they entered upon a much more ambitious experiment in ship-building.

Fortunately they had among their number a resourceful and competent ship-wright, one Richard Frubbisher. Under his leadership they constructed two boats. One, christened The Deliverance was 40 feet long, 18 feet beam and of eighty tons burden. In addition they built a smaller craft and named her The Patience. Finally on May 10 after many months of effort everything was ready and the entire company embarked. They had now been on the island more than nine months. During that time five of their number had died and two babies had been born. Sir George and his Captain laid a course for Virginia and singularly good fortune must have attended them for in only 14 days they arrived safely at Jamestown, a surprising quick voyage for boats as small and crude as these must have been. I doubt if in all the many annals of the sea there was ever a more surprising story of shipwreck and then of rescue by their own efforts and ingenuity.

But apparently the sea rover, Sir George Somers, could not forget the fairy island whereon he had been so fortunately cast away. So after less than a month spent in Virginia we find him gathering a crew and going back to colonize Bermuda.

The return voyage was made without disaster and preparations for establishing a settlement were begun but in November of that same year, their leader was seized by a sudden and mysterious illness, dying within a few days. With him at the time was his nephew, Captain Matthew Somers, who thereupon performed a rite which seems to us particularly gruesome but which was not uncommon in that age. They buried his heart and entrails beneath a great cedar tree close to the scene of the wreck but his body, preserved in salt, was carried back to England and laid in the ancient parish church of his old home town.

Probably few adventurers have ever been so fortunate as to have a chronicler as sympathetic and voluminous as the cultured gentleman who sailed with him and who wrote down the many exploits of "The Colonizer of the Bermudas."

The Admiral was only 56 years old at his death but I doubt not that his life had been packed with high adventure.

Bermuda has not forgotten him. Close by the market square of the ancient village of St. George's is a plot of ground, possibly an acre in extent. This is the Somers Garden. Around it on every side are the memorials of one of the oldest civilizations in America. The gardens are faultlessly kept and shadowy with palms and bright with semi-tropical flowers. Within you may peruse a tablet on which is an inscription setting forth the many virtues of the heroic Admiral.

We sat on a bench and basked in the sunshine. On the hill above was Hotel St. George with throngs of people lounging on the verandas. Close at hand flowed the stream of tourist traffic—old fashioned "Victorias" with negro drivers on the box and behind men in white flannels and bare-armed, sun burned girls with gay handkerchiefs about their heads—but we saw in imagination at least that scene 320 years before when George Somers, Kt. and his fellow castaways toiled at the building of the ship "Deliverance."

It was in November 1610 when they buried his heart close by the scene of his last great adventure.

In June 1612 arrived the Plough with 50 colonists and from that day to this, Bermuda has had an unbroken and on the whole prosperous and peaceful history.



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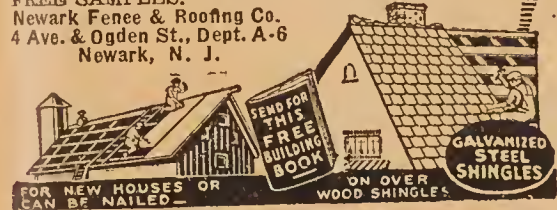
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The Perfection Milks With Human Intelligence

THE new Perfection Automatic Milker milks with human intelligence—it automatically adjusts itself to the milking peculiarities of each cow, just as an experienced hand milker would.

When the cow gives down freely, the Perfection automatically lengthens the suction period. And when the cow gives down slowly, the Perfection automatically shortens the suction; and faster manipulation coaxes the cow to give down freely.

This great advance, available only in the Perfection Automatic, makes for better milking, faster milking, and larger milk production.

You will want to know all about this great advance in mechanical milking. There is an illustrated folder describing the working of the new Perfection Automatic waiting especially for you. Send the coupon for your copy today.

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Please send me illustrated folder on the new Perfection Automatic.

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With the A. A. DAIRYMAN



(Continued from Page 7)

the animal is infected and will probably remain infected a long time or indefinitely. Frequent retesting of such animals is not necessary. Cows that test clean and those in the doubtful class, especially individuals that have been in association with reactors, require frequent retests once every month or two, until there is reasonable assurance that they are clean. When once a clean herd is established, provided no animals from outside sources are being added to it, a test once or twice a year usually is sufficient. Individual circumstances must determine the necessity for retests.

Is it safe to purchase cows on the basis of the agglutination test?

No breeder can afford to purchase valuable cows or bulls without the information that the agglutination test will give him. Two very common and disastrous errors are made in purchasing on individual test: First, a breeder may purchase non-reacting cows from a herd in which there are reactors. Some of these may be actually infected but not yet reacting. They will later react and probably will abort and spread the infection in his herd. This danger is particularly great when pregnant cows are purchased. Secondly, a breeder may purchase clean cows from a herd in which there are no reactors and place them in his own herd which, unknown to him, contains reactors. The purchased animals may contract the infection from the unsuspected reactors and disaster may follow. The breeder then loses all confidence in the agglutination test. Purchasing from clean herds, as determined by the agglutination test, for additions to clean herds as determined by the same test, is a relatively safe procedure, but purchasing from clean herds to recruit untested herds or herds known to contain reactors is not recommended. The agglutination test used intelligently is an exceedingly valuable aid in the purchase of cattle, but it is frequently abused and discredited by those who do not understand it.

On the initial tests are many clean herds found?

Yes. Many small herds contain no reactors and a few large ones are free from the infection. Almost invariably these herds are owned by breeders who raise their own animals and who do not purchase habitually.

How may a breeder protect a clean herd?

By raising his own animals just as far as possible; by discontinuing all outside breeding; by purchasing only from herds that test clean, when it is absolutely necessary to purchase; by purchasing unbred heifers and open cows in preference to pregnant females; by testing his herd once or twice a year; and by handling every abortion as though it were known to be caused by the Bang bacillus.

In case an abortion occurs in a clean herd how should the cow be handled?

The cow should be removed from the barn before any of the others are released from the stanchion. The fetus and fetal membranes should be burned and the soiled stall and gutter thoroughly soaked with disinfectant. If the cow retains her placenta she should be placed under the care of a trained veterinarian. In general terms she should not be returned to the herd for four weeks, and the period should be prolonged in case of persistent discharge. In no case should she be returned to the herd until a blood sample which has been drawn at least 30 days following the date of abortion has tested clean. As far as the cow herself is concerned it is poor policy to breed her in less than four months following any serious genital disease.

EDITOR'S NOTE—Space in this issue does not permit us to give the entire list of questions and answers as prepared by Dr. Birch. Those not printed this week will appear in an early issue.

For Fast · Clean · Perfect Milking

Nothing can Approach the Wonderful



... new ... De Laval Magnetic Milker

FROM all sections of the country reports are coming about the new De Laval Magnetic Milker. Never saw such wonderful milking. Pleased beyond expectations. It sure can milk. Runs like a clock. Cows produced more milk with first milking. Milked in half the time. A pleasure to operate.

And so we could go on quoting from pleased users. But such enthusiastic reports are not surprising. The new Magnetic retains all of the good features of De Laval Milkers, which were always considered the world's best, and combines with them greater simplicity of construction and installation, greater convenience, and less power requirements.

The new magnetic pulsation control is absolutely uniform, lightning fast,

reliable and efficient. No other milker has this feature, but electro-magnetic force is used extensively for operating railroad signals and switches, in telephones, pipe organs, and many other places where dependability and efficiency are desired.

In addition, the De Laval Magnetic has fourteen other exclusive features, making it the world's best milker. It milks cows faster and better, produces more and cleaner milk, will save more time and put more pleasure and profit in dairying than can be done in any other way. It is easy to operate, easily cleaned and easy to own, for one can be bought on easy monthly installments. Operates with electricity or gas engines. Made in a variety of sizes for milking one to 1000 or more cows. Send coupon for full information.

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A quality milker for the low price field. Units can be used on existing single pipe line installations, or it can be used as a complete outfit. Made in one and two unit sizes for milking one to 20 cows. Sold on easy terms—send coupon for full information and prices.

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Steers, calves, yearlings and two-year-olds. Uniform in size. Choice quality. Tested cows and heifers. Many cars. JOHN CARROW, Box 193, OTTUMWA, IOWA

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Foundation Guernsey herd comprising 8 mo. Guernsey bull, Maple Glen Rose Laddie—Honesty Pride of Birchfield breeding, large, well marked; and two healthy heifer calves born Jan. 1st and April 1st at \$300. Also bull calf \$35. Accredited No. 137611.
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2 Guernsey Bulls Service Age from Imported T. B. and Abortion tested Herd, A. R. Records. Several calves. Wm. A. Derstine, Sellersville, Pa.

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GOATS Registered Thoroughbreds, fresh \$80, grades \$45, bred yearlings \$30 Fine buck \$25. Pairs, trios, herds, wholesale. Eastern Headquarters World's Best California heavy milkers. GOLDSBOROUGH'S GOATERY, MOHNTON, PA.

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Pure steel gray Percheron geldings, silver mane and tails, five years, 3600 lbs. Pair sorrel Belgian geldings, five and six, 3500 lbs. Six Percheron mares with foal by their side. Show Wagon, new paint, brass trimmed, electric lighted, 2, 3, 4 and 6 horse hitch complete. H. H. BELL & SONS, MT. EPHRAIM, N. J.

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4 loads weaned calves; 3 loads short yearlings; 2 loads long yearlings; 4 loads heifer calves; 3 loads springers. Well bred, the good kind. Can sort, other cattle, pasture flesh. Write or wire. FLOYD JOHNSTON, STOCKPORT, IOWA

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Chester-Berkshire Crossed—Yorkshire-Chester Crossed
6 to 7 Weeks Old - \$5.00 each
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All pigs have the size, quality and breeding. Will ship pigs C.O.D., ten days trial, if not satisfied return at my expense. No charge for crates.
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Reviewing the Latest Eastern Markets

Milk Prices

The following are the June prices for milk in the basic zone of 201-210 miles from New York City.

Dairymen's League prices are based on milk testing 3.5%. Sheffield on the basis of 3%.

Class	Dairymen's League	Sheffield Producers
1 Fluid Milk...	3.37	
2 Fluid Cream		
2A Fluid Cream		
2B Cond. Milk...	2.16	
Soft Cheese...		
3 Evap. Cond. Milk Powder	2.41	
Hard Cheese		
	2.20	

4 Butter and American cheese. Based on New York City Market quotations on butter and American cheese.

The Class 1 League price for May 1928 was \$2.90 for 3.5% milk and Sheffield's \$2.70 for 3%.

The above prices in each class are not the final prices the farmer receives. The final price received from the dealer is the result of the weighted average.

Butter Market Holds Steady

CREAMERY	May 22, 1929	May 15, 1929	Last Year
SALTED			
Higher than extra...	43 1/2-44	43 1/2-44	45 -45 1/2
Extra (92sc).....	43 -	-43	44 1/2-
84-91 score.....	39 -42 1/2	38 1/2-42 1/2	42 3/4-44 1/4
Lower Grades.....	37 1/2-38 1/2	37 -38	42 -42 1/2

In last week's notes we stated that there was no indication of an upward or downward trend. The market developed along that line. The situation is substantially the same as a week ago. If anything, it is actually better.

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Wholesale dealer and shipper of second hand egg cases. Car lots a specialty.

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NOTICE TO CREDITORS OF WELLS J. AGEN TO PRESENT CLAIMS

Any person having a claim against Wells J. Agen for milk and cream of his own production sold to said Wells J. Agen, is hereby required to file with the undersigned Commissioner at 122 State Street, Albany, N. Y., a verified statement of such claim on or before June 15, 1929.

Dated: Albany, N. Y., April 22, 1929.
BERNE A. PYRKE,
Commissioner of Agriculture and Markets

NOTICE TO CREDITORS OF THE FRONTIER DAIRY CO., INC., TO PRESENT CLAIMS

Any person having a claim against the FRONTIER DAIRY CO., INC., for milk or cream of his own production sold to said Frontier Dairy Co., Inc., is hereby required to file with the undersigned commissioner at 122 State Street, Albany, N. Y., a verified statement of such claim on or before July 1, 1929.

Dated: Albany, N. Y., May 4, 1929.
BERNE A. PYRKE,
Commissioner of Agriculture and Markets.

BINDER TWINE

as low as 10c per pound in quantities. Best quality guaranteed. Farmer Agents Wanted. Write for circular and sample. THEO. BURT & SONS, Box 85, Melrose, Ohio

WATER PUMPS WATER

night and day with Rife's Hydraulic Ram. No attention, no expense. Write for free catalog.
H. T. OLSEN, 13 PARK ROW, NEW YORK

This week "extras" are quoted at 43c as an inside price and the lower grades are in a better position. For one thing, continued cool weather is aiding in heavy local consumption. Current demand of the consumer if anything is better than usual for this time of year. The big chain stores are making specials with some week-end sales at 47c. This is bound to attract the consumer who has been paying a lot more during the winter. There is also better out of town buying. Best of all, the speculative interest is becoming a real force. The situation, therefore, in a nutshell, is very satisfactory at this writing.

The market has got to hold its present advantage to maintain prices for indications point to an increase in supplies. Advices state that the creameries are expecting an output that is from five to ten percent heavier than last week. If qualities continue to improve as they have done in the last few days we look for heavier storing activity which will undoubtedly sustain the market.

Fresh Cheese a Shade Higher

STATE FLATS	May 22, 1929	May 15, 1929	Last Year
Fresh Fancy.....	22 1/2-	22 -	22 1/2-23
Fresh Average.....			
Held Fancy.....	27 1/2-29 1/2	27 1/2-29 1/2	29 1/2-31
Held Average.....			28 -28 1/2

As the week ending May 18 closed, the market on fresh cheese began to show signs of life. Previous to that most of the business was at 22c, but on the 18th there was sufficient business in fancy fresh flats to warrant a quotation of 22c to 22 1/2c. Since then the demand for fresh has improved to the point that 22 1/2c has become the inside price with occasional lots of pet marks at 23c, but not enough to warrant the quotation. As we go to press the demand is steady and we look for the market to hold its advantage.

Egg Market Higher

NEARBY WHITE	May 22, 1929	May 15, 1929	Last Year
Hen'y Sel. Extras...	36 -37 1/2	35 -36 1/2	34 1/2-36
Hen'y Av'ge Extras...	35 -35 1/2	33 1/2-34	33 -34
Extra Firsts.....	34 -34 1/2	33 -	32 -32 1/2
Firsts.....	32 1/2-33 1/2	32 -32 1/2	30 1/2-31 1/2
Undergrades.....	32 -	31 -	29 -30
Pullets.....			
Pewees.....			
NEARBY BROWNS			
Hennery.....	36 -37	35 -36 1/2	34 1/2-36
Gathered.....	32 1/2-35 1/2	31 -34	29 1/2-34

The uncertain condition that existed in the egg market at last week's writing disappeared as the week came to a close. On the 18th the market was again on the upward trend with prospects for a real boom. Readers will recall that we said a couple of months ago that we looked for a good egg market this year and indications now point to a fulfillment of that prediction. The shortage in U. S. stocks on May 1 of

492,000 cases has been substantially increased. The into-storage movement last year was heavy through the end of May and if the situation continues this year it looks as though the shortage will be increased still further before June 1. Receipts have been running behind last year to some degree. At the same time the demand for current distribution has exceeded that of a year ago at this time and accumulations of eggs in the warehouses have been falling steadily behind a year ago. The situation in the West and the conditions related above have tended to induce considerable speculative activity. Country costs in the West and central states have made further advances and there has been heavy buying of November options at gradually increasing prices.

Naturally, receivers are anxious to keep their floors clear. Some of the high cost Jerseys which bring a two cent premium over top quotations are not moving so well. The situation is more or less temporary and local. The national situation however, looks very good for the poultrymen.

Live Broilers Holding Steady

FOWLS	May 22, 1929	May 15, 1929	Last Year
Colored.....	34-36	-37	25-30
Leghorn.....	35-36	-37	25-28
CHICKENS			
Colored.....			
Leghorn.....			
BROILERS			
Colored.....	35-50	30-48	30-53
Leghorn.....	20-40	20-40	25-35
CAPONS			
TURKEYS.....	25-35	25-35	
DUCKS, Nearby.....	23-27	23-28	21-24
GESE.....	16-17	16-17	

At this writing, May 23, which is too far ahead of the Decoration Day market to give any authentic interpretation of trade, the market on live broilers is in a very satisfactory condition. The demand is fairly active, especially so on top qualities, with the result that the market has been clearing well. Express broilers are in heavier supply. Although they are clearing well at this writing if the situation continues we may see a revision on lower grades. Why people insist on sending in a lot of skinny, half filled, runty broilers, poor in plumage and generally disgusting in appearance, is hard to explain. Certainly folks don't eat feathers, but as we have often said, the New Yorker buys a great deal on appearance; so why not give him something good looking, and get a price.

The fowl market is not as satisfactory this week as it was last week. As a whole the situation is no more than steady. Light fowls, when available, and fancy, are enjoying quick sale. Heavy birds, on the other hand, are dragging. The freight situation is rath-

er aggravating the market because of the fact that most of the birds in the cars are heavy colored fowls, which explains the premium received for Leghorns.

There has been some question as to description of broilers. "Fancy" broilers are those weighing 2 pounds, or over, each, and full feathered. "Average Run" are those weighing from 1 1/2 pounds to 2 pounds each. "Small and Poor" are birds under a pound and a half each, thin, bare-backed or scabby.

Feeds and Grains

FUTURES	May 22, 1929	May 15, 1929	Last Year
(At Chicago)			
Wheat (May).....	1.03	1.05 3/4	1.50 1/4
Corn (May).....	.84 3/4	.85 3/4	1.05 1/4
Oats (May).....	.45 3/4	.47 1/4	.67 3/4
CASH GRAINS			
(At New York)			
Wheat, No. 2 Red..	1.30	1.30	2.07 1/4
Corn, No. 2 Yel....	1.03	1.02 3/4	1.26 1/2
Oats, No. 2.....	.58	.58 1/2	.82 1/2
FEEDS	May 18, 1929	May 11, 1929	May 19, 1928
(At Buffalo)			
Grade Oats.....	33.00	33.00	44.00
Spring Bran.....	26.00	26.50	38.50
Hard Bran.....	27.50	28.00	40.00
Standard Mids.....	26.00	26.00	40.50
Soft W. Mids.....	32.50	33.00	44.00
Flour Mids.....	31.00	32.00	43.00
Red Dog.....	35.00	36.00	45.00
Wh. Hominy.....	37.00	37.00	45.50
Yel. Hominy.....	37.00	37.00	45.50
Corn Meal.....	37.00	36.00	43.00
Gluten Feed.....	38.50	39.75	44.75
Gluten Meal.....	46.00	47.25	60.00
36% C. S. Meal.....	38.50	40.00	60.00
41% C. S. Meal.....	41.50	43.00	67.00
43% C. S. Meal.....	44.50	46.00	69.00
34% O. P. Linseed			
Meal.....	50.00	50.50	53.50

The above quotations are those of the local Buffalo market and are F.O.B. They are reported in the weekly letter of the N. Y. State Department of Agriculture and Markets.

Potato Market Turning Weaker

STATE	May 22, 1929	May 15, 1929
150 lb. sack.....		1.75-2.00
Bulk, 180 lbs.....		2.25-2.50
MAINE		
150 lb. sack.....	2.10-2.35	2.25-2.60
Bulk, 180 lbs.....	2.35-2.75	2.25-2.50
PENNA.		
150 lb. sack		
No. 1.....		2.75-3.00
Bulk, 180 lbs.....		2.75-3.00
LONG ISLAND		
150 lb. sack		
No. 1.....	2.75-3.00	3.00-3.25
Bulk, 180 lbs.....		3.00-3.25

CAULIFLOWER and Cabbage Plants. Pedigreed Seed. Selected Plants. Disease free. Safe delivery. See classified column for varieties and prices. F. W. Rochelle & Sons, Chester, New Jersey

FEEDING PIGS

228 PIGS FOR SALE

87 Handsome Yorkshire and Chester crossed; 100 Berkshire and O.I.C.'s; 41 Big heavy Poland China crossed with Yorkshire—Two months old. Price \$6.00 each. Express prepaid on 25 or more. These pigs have had the best of care and breeding and certainly show it. Jim Short hog-breeder from Iowa, on a visit here, remarks: "Mr. McCadden your hogs look fine." Terms: Check, money order or draft or C.O.D. on approval. Ship in lots to suit—1 or 50. Inquiries gladly answered. Orders promptly filled. McCADDEN BROS., Cambridge, Mass. Office: 16 Seven Pines Avenue.

SPRING PIGS FOR SALE

Buy where quality is never sacrificed for quantity. We sell only high grade stock from large type Boars and Sows, thrifty and rugged, having size and breeding. Will ship any amount C.O.D.

Chester & Yorkshire — Berkshire & Chester
7 TO 8 WEEKS OLD.....\$5.00
8 TO 10 WEEKS OLD.....\$5.50

Also a few Chester barrows 8 wks. old, \$6.50 each
Satisfaction guaranteed or money refunded. 10 days trial allowed. Crates supplied free. A. M. LUX, 206 Washington St., Woburn, Mass. Tel. Wob. 1415.

FEEDING PIGS FOR SALE

Chester and Yorkshire, 7 weeks old.....\$5.00
Berkshire and Chester, 7 weeks old.....\$5.00
8 to 9 weeks old, \$5.50

Also few Chester Whites 6 to 7 weeks old \$6.00, and some Jersey Red Durocs 7 weeks old \$6.00. Sold C.O.D. Keep them 10 days, if not satisfied, return them and your money will be refunded. No charge for crating.

MICHAEL LUX, WOBURN, MASS.

FARMERS BUY FROM FARMERS

Let us suggest to you as breeders the best kind of a pig to start to raise is a good one. You save time and money. We sell all pigs with a trial of two weeks, and then if dissatisfied, return pigs and we will return your money.

6-7 wks. old, \$4.75 ea.; 8-10 wks. old, \$5.00 ea.
Breeds—Chester and Yorkshire cross, and Berkshire and Chester cross. Crating free. These prices F.O.B. our depot. Will ship any number C.O.D. or send check or money order.

MISHAWUN STOCK FARM,
MISHAWUN ROAD, WOBURN, MASS.
P. S. No pigs sold at the farm; only by appointment.

FARMS FOR SALE

HAVING DECIDED

to quit farming, will sell my entire dairy herd.
ERNEST CANNIFF, Cedar Crest Farm, CATSKILL, N. Y.

If You Value Radio Market Reports—Read This

RADIO broadcasting stations and market reporting organizations are making an effort to give producers the best possible up-to-the-minute information on the market situation.

At the same time, broadcasting is an expensive process and those responsible for the work naturally wish to be sure that the information given is valuable and to make any changes that will add to its value. There is constant pressure from city interests to stimulate programs of interest to city people and when something is dropped it is likely to be something that appeals to you. If you value the market reports you get over the radio, take a minute now, fill in the blank printed below and mail it to us.

Would it cause you money loss if radio market reports should be discontinued?

What time of day do you prefer to have market reports broadcast?

Over what station or stations do you get market reports?

In what commodities are you most interested?

What products would you like to have added to the report?

Is present radio market broadcasting satisfactory?

Send this blank to: American Agriculturist, 461 Fourth Ave., New York City

Farm News from New York

How to Get Your Refund on the Gasoline Tax--County Notes

FARMERS using gasoline for any purpose except for motor vehicles used on the highway do not pay a gasoline tax. The state will refund all taxes paid on gasoline used by anybody for any purpose except for motor vehicles using the highway. **BUT—**

You must pay the tax on all the gasoline you buy and get a rebate from the state afterwards.

How to Get the Rebate

1. Get a receipt or sales slip when you buy gasoline showing who sold it to you, the date and the quantity. If you don't you will be out of luck.

No rebates will be allowed unless sales slips are attached to your claim.

2. Wait until June 15th and then apply to your gasoline dealer for a refund blank. If he has none, write to State Tax Department, Albany, N. Y. and they will be forwarded to you without charge.

3. Do not send in claims for rebates oftener than once a month and do not let claims for more than three months accumulate before sending them in.

4. Fill out the blanks according to the directions printed on them and forward to the address given on the blank.

Note Carefully

Gasoline consumed by tractors used for farm purposes, even though they use the highway in going from one part of the farm to another, is not taxed and can be put in your claim for rebate.

If you sell or give any gasoline to a neighbor you cannot get a rebate on it although you do not use it for a motor vehicle operated on the highways. If you give your neighbor a slip with your name and address, the date and the amount you sell to him on it, and your neighbor uses the gasoline for some purpose that is entitled to exemption, your neighbor can fill out a refund blank, attaching the slip you give him as a voucher.

You cannot get a refund on gasoline until you have actually used it, no matter if you intend to use it for some exempted purpose or not. These instructions do not apply to dealers in gasoline. If you are a dealer, write to the Tax Department, Albany, for instructions.

Westchester County Grange Has Thirtieth Anniversary

THE thirtieth anniversary of the organization of Yorktown Grange, No. 862 was recently held in the Grange Hall at Yorktown Heights, Westchester County, N. Y. This is the first Grange in Westchester County. It was organized by Deputy A. E. Hall of Amenia, Dutchess County, N. Y. on December 30th, 1898 with 24 charter members, nine of whom are living. Of the first officers there are living the Overseer, Lecturer, Steward, Assistant Steward, Ceres and Lady Assistant Steward; two of whom, the Overseer, James N. Strang, and the Lecturer, Floyd Q. White, served as the second and third masters.

This Grange, like many others, has had its "ups and downs" but never closed its doors. It has endeavored to benefit its members and also be an elevating influence in the community. It was one of the founders of the Putnam and Westchester Patrons Fire Relief Association, one of the strongest insurance companies of its kind in the state today. It has carried on co-operative buying and selling by which its members have benefitted to a large extent. It owns its hall, is free of debt and in a thriving condition. It can look with pride on having had as Brothers Prof. James E. Rice (a Charter Member), Prof. W. G. Johnson, John J. Dillon, Herbert W. Collingwood, Enos Lee, former President of the N. Y. State Farm Bureau Federation, and Past Master Strang, who has served his town fourteen years as supervisor. It can boast of 11 Past Masters all living except the first, and at a recent initiation six of them were seated at the Master's left.

The entertainment of the evening was in charge of the Charter Members. Papers were read giving the history of the Grange, the Insurance Company, the Co-operative Association and the community in general. Past Master, Charles W. Forman entertained the members in his usual pleasing manner, after which four scenes representing the first four degrees of the order were presented. A birthday cake with thirty lighted candles was presented by the first Lady Assistant Steward, Mrs. John A. Barnes. A chronicle of the organization of the Grange composed by Past Master Floyd Q. White was read

by Mrs. Albert Lee, and poetry composed by the present Master, Arthur C. Dunning by Mrs. James C. Fowler. Mrs. James N. Strang sang an original solo entitled "Then and Now." At the close of the entertainment refreshments were served.

Farmers' Meetings

A NUMBER of meetings of interest to farmers are scheduled for the near future. The annual meeting of the American Jersey Cattle Club will be held at the Pennsylvania Hotel, New York City, on Wednesday, June 4. A tour will be conducted in connection with the meeting, which will leave Columbus, Ohio, June 2, proceeding to Niagara Falls and then to the Randleigh Farm at Lockport; then to Albany and from there to New York by boat. Following the annual meeting, the

Watkins, grounds; E. A. Stelley, parade; Homer French, milk bar; Raymond Stout, baseball; N. E. Fuller, other sports; J. F. Crowley, music; L. G. Quackenbush, publicity; Mrs. Ella Finch, juvenile; Mrs. Charles Watkins, dramatics; Mrs. George Leach, rest tent; E. C. Cleveland, horse races; Mabel Young, badges; C. N. Abbe, beauty contest, which is sponsored by the county press, each selecting a winners from his community. Auto salesmen in new spick and span cars will escort the winners from which Miss Cattaraugus County will be chosen in front of grand stand by popular vote amid cheers of thousands.—M. M. S.

Tioga County—Government Inspector William J. McKensie, came to Owego recently and looked over several parcels of land for a U. S. Airport but as yet none has been decided upon. Up to this date

To Our Betty Girls

OVER one thousand of our little girls in the A. A. family are determined to make real cooks of themselves. They are doing this with the help of their mothers and with the Betty recipes in the A. A. course for little cooks. Think what this will mean for happier future homes in a thousand families! Scrapbooks have been sent on request to a thousand of these little girls. In these scrapbooks the first two pages have been pasted. The rest have to be cut out by the girls themselves from the page copy appearing about once a month in American Agriculturist. The first page to be cut and pasted in the scrapbook appears on page 7 of the May 18th issue of American Agriculturist. We hope that every little girl who has these books will be sure to cut and paste in every page and what is more important still, will try the recipes and follow the directions.

If you do we will promise that you will be good cooks at the end of two years. We will also promise to give every girl who completes the course, a beautiful certificate which you will prize all of your life. The beauty of the course is that any girl can start at any time, as we will furnish reprints of the recipes that have already been printed. If you or your mother are interested, send ten cents to American Agriculturist, 461 Fourth Ave., New York City, to cover the cost of mailing the scrapbook.

Jersey breeders will visit Twin Oaks Farm at Morristown, N. J. and a Jersey sale at Morristown on June 5. They will then go to Washington for a two day visit, including a visit to the government farm at Beltsville, Md.

The annual meeting of the Holstein Friesian Association is scheduled at the Benjamin Franklin Hotel, Philadelphia, June 4th and 5th. June 4, is designated as open forum day when delegates to the convention will discuss a number of topics of interest to breeders of Holsteins.

The annual country life rally for Long Island will be held at the Farmingdale State School of Agriculture on June 8th. In addition to a program there will be an exhibit and demonstration of modern farm equipment.

New Jersey is having its annual field day at the Experiment Station on June 12. In addition to a farm machinery exhibit most of the College staff will be available to discuss individual problems of those who attend.

Pennsylvania is having its Farmers' Field Day at the State College on June 20. The principal speaker will be E. B. Dorsett Master of the New York State Grange.

The boys and girls are not left out so far as meetings are concerned. Probably the most important will be the Third National 4-H Club camp at Washington, D. C. from June 19 to 25. Outstanding 4-H Club members from each state have been selected to take this trip. More than two thousand New York State boys and girls are expected to attend the Junior Field Days at the New York State College on June 26th and 28th.

New York County Notes

Chautauqua County—I have been watching the weather for the past two months and find that in April we had fourteen rainy days and sixteen days when it did not rain, while for the first nineteen days of May we have had twelve rainy days and only seven when it did not rain. Most of the rains have been so heavy that the ground is not fit to work on at any time. At this date practically no crops are in and very little plowing has been done. Meadows and pastures look good but the cattle "punch up" the pastures badly. A miniature cyclone ripped up Elton Turney's barn somewhat last Thursday morning.—A. J. N.

Cattaraugus County—Chairmen of committees arranging for the Farmers' Annual Picnic in Little Valley, June 29 are: J. C. Griffith, concessions; Charles

Fruit trees are in full bloom. Cold nights with light frosts.—Mrs. L. W. P.

Sullivan County—Very little garden has been planted as yet, as the weather remains too cold. Potatoes bring \$1.00 a bushel, butter, 42c to 45c a pound, eggs 28c and 30c a dozen. Calves are selling at a reasonable price, pigs from \$4 to \$5 each. The Jefferson dinner was held at Hotel Flagge at Fallsburg on May 15. Over 500 democrats were present. M. J.

Tune In On WGY

ON the regular agricultural program on WGY, Decoration Day, May 30, E. R. Eastman, Editor of American Agriculturist will give Memorial Day readings from the great poets with special reference to the American Farmer and the Civil War.

McGibbon, postmaster at Liberty passed away in a New York hospital. He had many friends. Court is being held at Monticello and many cases have been tried.—P. E.

Associated Gas & Electric Buys Large Up-State Property

THE Associated Gas & Electric interests have acquired large up-State New York public utilities properties from the Empire Power Corporation, which is controlled by Ellis Phillips and his associates. It is estimated that the price paid by the Associated system will be over \$100,000,000.

Included in the group acquired by the Associated Gas & Electric are the Lockport Light, Heat & Power Company, International Power & Transmission Company, Central New York Utilities and subsidiaries, the New York Central Electric Corporation, the Empire Gas & Electric Company, the Elmira Water, Light & Railroad Company, the Rochester Gas & Electric Corporation and the Mohawk Valley Company.

The only companies retained by Mr. Phillips are the Long Island Lighting Company and its subsidiaries which operate on Long Island.

FISHKILL FARMS

consign to

Brentwood National Sale

at Commercial Museum

Philadelphia, Pa.

June 6-7, 1929

C. S. F. LADY INKA

NORMI, No. 567442.

Born October 8, 1919. Produced at 6 yrs., 8 mos., 17 days, 16,073.6 lbs. milk and 630.81 lbs. butter in 365 days, Class C.

FISHKILL MAY

COLANTHA INKA, No. 915077.

Born December 20, 1922. Produced at 3 yrs., 4 mos., 0 days, 10,848.9 lbs. milk and 432.29 lbs. butter in 365 days, Class C.

FISHKILL COLANTHA

INKA DeKOL, No. 1000705.

Born February 19, 1925. Produced at 2 yrs., 10 mos., 5 days, 12,194.1 lbs. milk and 527.40 lbs. butter in 365 days.

FISHKILL INKA MAID

DeKOL, No. 1000708.

Heifer, born March 2, 1925.

FISHKILL ALBANY

COLANTHA DeKOL, No. 1189883

Heifer, born September 18, 1927.

FISHKILL COLANTHA

AAGGIE, No. 1271168.

Heifer, born August 1, 1928.

FISHKILL FARMS

HENRY MORGENTHAU, JR., Owner.

Hopewell Junction, Dutchess County, N. Y.

BABY CHICKS



Hall's Chicks

Leghorns-Reds-Rocks-Wyandottes

"WELL BRED FROM WELL BREEDERS"

New England Accredited stock. All breeders 100% White Diarrhea free

Special low prices for our early-maturing stock.

	S. C. W. LEGHORNS	S. C. R. I. REDS	BARRED ROCKS	WHITE WYANDOTTE
Grade A.....	\$12.00	\$15.00	\$16.00	\$18.00
Special Matings.....	14.00	17.00	18.00	20.00

Prices are per hundred. For orders of 25 chicks add 75c. For orders of 50 chicks add \$1.00.

We ship Prepaid and
guarantee safe delivery

Everyone answering this advertisement will
receive FREE our suggestions for brooding,
feeding and rearing chicks.

Hall Bros.

POPLAR HILL FARM
BOX 59 WALLINGFORD CONN.



Here: Nearly Everyone Raises
Full Blooded "AMERICAN" Quality Chicks

Write now for our new low prices. Your opportunity to
get our special flock mating chicks at utility prices. Chicks
shipped C. O. D. Catalogue and prices on request. 100%
live arrival guaranteed. 15 breeds. Write now.

American Chickeries, Box 214, Grampian, Pa.



National "Superbred" Chicks

100,000 CHICKS FOR DELIVERY IN JUNE

	50	100	500	1000
S. C. White, Brown, Buff Leghorns.....	\$5.75	\$11.00	\$52.50	\$100.00
Barred and White Rocks, Reds.....	6.75	13.00	62.50	120.00

Light Mixed—\$9.00 per 100. Heavy Mixed—\$10.00 per 100.
Also White Wyandottes, Black and White Minorcas, Anconas and Blue Andalusians.
Send for our Catalog and price list. We guarantee 100% live delivery. Member Inter-
national Baby Chick Association.

NATIONAL CHICK FARMS, BOX 408, MIFFLINTOWN, PENNA.

Buy C.M.L. Chicks

C.M.L. chicks cost no more than ordinary chicks from the average Hatchery,
but our Quality is far superior. For many years we have specialized in
Barons. We import direct from England. 100% Live Delivery Guar-
anteed. Prepaid.
Barron S.C. Wh. Leghorns.....\$3.00 \$6.00 \$11.00 \$52.50 \$100.00
Barred & Wh. Rocks; Wh. Wyandottes & R. I. Reds.....3.25 6.50 12.00 57.50 110.00
All stock carefully selected for size and health. C. M. L. chicks mature early and are sure
to please you. Better chicks cannot be had at these low prices. Write for Free Catalog or order direct from this ad.
C. M. LONGENECKER, BOX 40, ELIZABETHTOWN, N. Y.



Fairport Quality Chicks

are bred to make money for you. Strong, healthy, vigorous from the world's best
and heaviest laying strains such as—Tancred, Ferris, Owen Farms, Daniels,
Thompson, Martin, Shepard, Fishel and others. Free range flocks, scientifically
culled and supervised. Smith Hatched. 100% live delivery guaranteed. 16 breeds
9c and up. Postpaid. Members International Baby Chick Association. Send now
for free poultry book and prices. Buy Hatchery Chicks for Greater Profits.

FAIRPORT HATCHERIES Box 44 Fairport, N. Y.

BABY CHICKS

	25	50	100	500
100% Arrival.....	\$2.75	\$5.25	\$8.00	\$37.50
White Leghorns.....	\$3.25	6.25	10.00	47.50
Barred Rocks and Reds.....	2.75	5.25	8.00	37.50
Heavy Mixed.....	2.50	4.75	7.00	32.50
Light Mixed.....	2.50	4.75	7.00	32.50
Pekin Ducklings.....	7.50	14.50	28.00	
Mixed Ducklings.....	6.50	13.00	25.00	

John Shadel Hatchery MeAlisterville, Pa.
R. 2, Box 13.

BABY CHICKS ORDER DIRECT

	25	50	100	500
Free Range Bred.....	\$2.25	\$4.25	\$8.00	\$39.00
Wh. & Brown Leghorns.....	2.25	4.25	8.00	39.00
Anconas & Black Leghorns.....	2.25	4.25	8.00	39.00
White & Barred Rocks.....	2.25	4.25	8.00	39.00
Col. Wyand. & R. I. Reds.....	2.25	4.25	8.00	39.00
Heavy Mixed Broilers.....	2.50	4.75	9.00	42.50
Light Mixed Broilers.....	2.00	3.50	6.50	30.00

Full count and quality guaranteed. Catalogue free.
Hatchery Chicks ULSH POULTRY FARM & HATCHERY
For Greater Profit Port Trevorton, Penna. Box A

BABY CHIX

	25	50	100
Cash or C. O. D.....	\$3.00	\$5.50	\$10.00
Barred Rocks.....	2.75	5.00	9.00
Tancred Strain S.C.W. Leghorns.....	2.75	5.00	9.00
Heavy Mixed.....	2.25	4.00	7.00

These chicks are from free range and heavy egg pro-
ducing flock. 100% live delivery guaranteed to your
door. Write for Special Mating prices.

FRANK NACE, Cocolamus, Pa., Box No. 120

BRED TO LAY BABY CHICKS

Barred Rocks; White Leghorns \$10.00 per hundred for
May and June deliveries. 25 chicks \$2.75; 50 chicks \$5.25.
Scarborough Poultry Farm, Box A, Milford, Del.

Pennsylvania Co-Operative Leghorn Farms

Breeding COCKERELS with RECORDS to 303 EGGS.
PURE TANCRED-HOLLYWOOD-BARRON STRAINS
White Leghorns—Brown and Buff Leghorns—QUALITY
EXTRAORDINARY—PRICE WAY DOWN—SHIP
C. O. D. Get our prices quick.

Pennsylvania Co-Operative Leghorn Farms,
Box 314 Grampian, Pa.

BARRED ROCK CHICKS

A large modern Breeding Farm and Hatchery de-
voted exclusively to the production of BARRED
PLYMOUTH ROCKS.
MARVEL POULTRY FARM, GEORGETOWN, DEL.

SPECIAL SUMMER PRICE REDUCTION 200,000 CHICKS 1929

	25	50	100	500	1000
White Leghorns.....	\$2.75	\$5.00	\$9.00	\$42.50	\$80.00
"Barron & Tancred Strains".....	3.00	5.50	10.00	47.50	90.00
Bd. Rocks & S.C. Reds.....	2.75	5.00	9.00	42.50	80.00
Broilers, Heavy Breeds.....	2.50	4.50	8.00	37.50	70.00
Broilers, Light Breeds.....	2.50	4.50	8.00	37.50	70.00

Order direct. Prepaid. 100% Live arrival guaranteed.
\$1.00 will book your order. Circular free.

THE VALLEY HATCHERY Box A, R. No. 1,
RICHFIELD, PA.

SINGLE COMB Vt. Certified: Tested free
Rhode Island Reds from B.W.D. Males from
200-300 egg hens. Pullets:
Started Chicks: 3000 Baby Chicks weekly. Circular.
ASCUTNEY FARMS, A10, HARTLAND, VT.

With the A. A.
POULTRY
FARMER



Reducing Chick Losses in New Jersey

EARLY in the spring of 1928 the
New Jersey State College started
a statewide campaign to reduce baby
chick losses. The following seven points
were emphasized in letters to over 1400
poultrymen who enrolled for the cam-
paign:

1. Hatch or buy chicks early. Fig-
ures secured by the College show that
chicks hatched before May 15, produce
75 eggs during the first six months of
laying. Those hatched after May 15,
hatch only 68 eggs for the same period.

2. Keep brooder house clean. The
following recommendations were made:
(a.) Scrape the floor to remove all ac-
cumulated droppings and litter. (b.)
Sweep ceiling, wall, and floor to remove
accumulated dirt and dust. (c.) Scrub
floor, side walls, and window sills with
hot lye solution. (This solution is made
by adding 1 pound of lye to 40 gallons
of water). (d.) Clean all brooding
equipment (water fountains, feed hop-
pers, etc.) the same as you do your
brooder house. (e.) After the house is
thoroughly dry, spray it, using an ap-
proved disinfectant. It is also advised
to clean brooder houses weekly, includ-
ing the removal of all litter and replac-
ing with fresh. Water fountains and
feed hoppers were cleaned daily.

3. Provide clean range, or close con-
finement. Clean range was defined as
ground on which no chicks have been
raised for at least one year and where
no poultry manure had been scattered
for at least two years. A contaminated
soil is a source of coccidiosis and worm
infestation. Where clean range was not
advisable, confinement brooding was
recommended. Confinement brooding is
explained in vol. 15, no. 6 in Hints To
Poultrymen, entitled, "Rearing Pullets
in Confinement", which is published by
the New Jersey State College.

4. Keep chicks separate from old
hens. In almost every flock there are
some layers that carry coccidiosis and
intestinal worms.

5. Build a screened manure pit. The
common fly is a source of worm infes-
tation and screened manure pit keeps
the flies from the poultry manure.

6. Put wire mesh under the roosts
to keep chickens off the dropping board.
Droppings are a source of spread of
coccidiosis and 1½ inch wire mesh
placed underneath the roosts, prevent
the birds from coming in contact with
them.

7. Clean dropping boards daily and
put the droppings in a screened manure
pit. The New Jersey State College of
Agriculture has followed up to find out
the results secured from this campaign.
Reports secured from 230 poultrymen
showed a chick mortality of 18.6%
which is encouraging when compared
with the estimated mortality for the
state of 25%. It was also interesting
to note that those poultrymen follow-
ing all seven points of the campaign
lost only 14.2% of their chickens. An-
other group which followed only the
first four points of the campaign lost
17.2% of the chicks and the third
group who followed only one or two
points lost 20% of their chicks. The
campaign in New Jersey is being con-
tinued this season.

Killing Lice With Tobacco

IN our opinion the use of a Black Leaf
140 for treating lice will grow rapidly
because of the great saving in labor.
It is no small task to catch the in-
dividuals in a large flock and treat
them with powder.

In a recent issue we published some
information about this method which
came from a source that we believed
to be reliable. Since the article appear-
ed we have been told that the infor-
mation was not entirely correct and
that Black Leaf 40 is relatively non-
(Continued on Opposite Page)

The Easy Way to Kill Lice on Poultry



Paint the Roosts

No matter how big
the flock or how
lousy, only a small
paint brush, a can
of "Black Leaf 40"
and a few minutes
time for "painting"
it on top of the
roosts are required
to rid an entire
flock of body-lice.
Do away with old
laborious and disagreeable methods of
dusting, dipping and greasing!

Just Paint the Roosts with "Black Leaf 40"

About a half hour before fowls perch,
"paint" "Black Leaf 40" on top of
roosts. When fowls perch upon roosts
that have been so "painted", fumes are
slowly released that permeate the feath-
ers, killing the lice. The treatment is
so easy, effective and cheap that pou-
ltry owners need never be bothered by
lice on their flocks. Think of the time,
labor and expense that this method saves!
There is no individual handling of fowls.

"Black Leaf 40" is sold
by poultry supply dealers,
\$1.25 size treats 100
feet of roost. Ask your
dealer or write us.

Tobacco By-Products & Chemical Corp.
Incorporated Louisville, Ky.

"Black Leaf 40" WORKS WHILE CHICKENS ROOST

Baby Chicks

FINGER LAKE REGION BABY CHICKS

with an official record. Ask for our
Baby Chick Book describing our Pedig-
reeded Cornell Chicks from stock that
has laid from 200 to 312 eggs in
their pullet year and mated to breed-
ers that have averaged over 200 eggs
in their pullet year. Also describes
our 144,000 egg hatchery with 22
years' experience in hatching Baby Chicks, Leghorns,
Reds, Rocks, Wyandottes, Minorcas, and Giants.
The home of better Chicks at lower cost.
THE DEROT TAYLOR CO.,
NEWARK, NEW YORK

BABY CHICKS

hatched by the best system of
Incubators from
high class bred-to-lay stock. White, Brown, Buff
Leghorns, Anconas \$14.00 per 100; Barred, White
Rocks, Minorcas, Reds \$16.00 per 100; White Wyand-
ottes, Buff Orpingtons \$17.00 per 100; Giants \$20.00
per 100; Heavy Broilers \$12.00 per 100; Light Broil-
ers \$10.00 per 100; Pekin Ducklings \$30.00 per 100.
Add 25c on orders for less than 100. Safe delivery
guaranteed by parcel post.
Nunda Poultry Farm, Desk H, Nunda, N. Y.
Member of the International Baby Chick Ass'n,
and the N. Y. State Co-Operative Chick Producers Ass'n.

Reduced Chick Prices

	25	50	100	500	1000
In effect June to October.....	\$2.50	\$5.00	\$10	\$47.50	\$90

Bd. & Wh. Rocks, Reds..... 3.00 6.00 12 57.50 110
Wyandottes, Orpingtons..... 3.25 6.50 13 62.50 120

Light Assorted 9c. Heavy Assorted 10c.

Live Delivery Guaranteed. Catalog Free.

LANTZ HATCHERY, Tiffin, Ohio

Two Free Books

Breed squabs and
make money. Sold
by millions at higher
prices than
chickens. Write
at once for two
free books tell-
ing how to do
it. One is 48
pages printed in colors, other 32 pages. Ask for Books 3 and 4.
You will be surprised. Plymouth Rock Squab Com-
pany, 334 H Street, Melrose Highlands, Massa-
chusetts. Established 28 years. Reference, any bank.

Before BUYING LEGHORN CHICKS Since 1912
Get our circular of a Tan-
cred Strain Single Comb
White Leghorns. Every
chick hatched from our
own breeders. We
guarantee satisfaction.
ADRIAN DeNEEF, Sedus, N.Y.

CHICKS 8½c

CLASS A CHICKS at low prices, also pullets. Special
discounts. Several varieties. No money down. 100%
live arrival; postpaid. Catalog free.

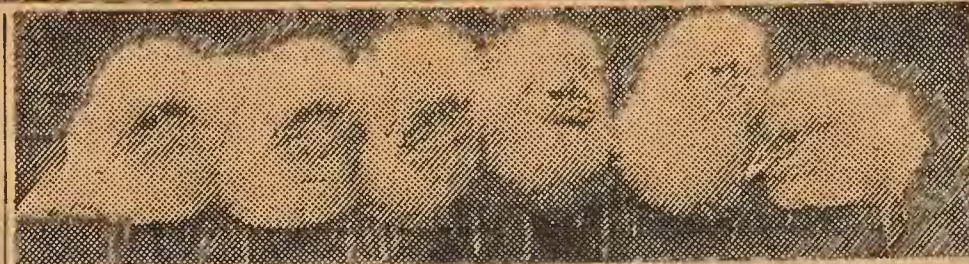
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DUCKLINGS

\$33; EGGS \$14-100
"Duck News" Free.
ROY PARDEE,
Islip, L. I., N. Y.

SPECIAL FALL prices for breeding Turkeys,
Geese, Ducks, and Guinea.
Write your wants and for mailing list. PIONEER
STOCK FARM, TELFORD, PA.

BABY



CHICKS

YOUNG'S 8x8 Ft. "Amherst" House \$45
Portable Poultry Houses

It's Cheaper To Buy; Why Bother To Build?

Positively, you can buy Brooder Houses, Colony Houses and Laying Houses from us for less than it would cost you to build. Approved designs; kiln-dried lumber; skilled workmanship. The 8x8 ft. "Amherst" house shown above \$45.00.

FREE CATALOG shows many types of Poultry and Pigeon Houses, Rabbit Hutches and Dog Kennels. Write today.

E. C. YOUNG CO. 97 Depot Street, Randolph, Mass.

(Continued from Opposite Page)
volatile and that there is no danger to anyone who handles it. The treatment consists merely in painting the top side of the roosts with undiluted Black Leaf 40 at the rate of one ounce to twelve or fifteen running feet of roost. If the roosts are dusty, clean them off before applying the material and leave the ventilators or windows open at the front of the house, but shut the ventilators behind the roosts. The lice are killed from the fumes of the material which penetrates the feathers of the hens during the night. The effect of one application lasts several days, but if found necessary, a second application can be made in about ten days after the first treatment.

The Delaware State Poultry Show Supported By State Legislature

THE Delaware State Legislature has appropriated \$1200.00 to the State Board of Agriculture for the support of the Delaware State Poultry Show for the next two years. This show which is sponsored by the Delaware State Poultry Association will be staged at Milford, Delaware, December 3, 4, and 5.

The Delaware State Poultry Show is more than a show. It is in reality a great poultry institute. Educational features are given prominence in every department and the evening lectures are always well attended.

State aid will make it possible to extend the scope of the lecture program and add other educational exhibits. 4-H clubs will be given an opportunity to display their birds and a Junior judging contest will be conducted.

Quality More Important Than Price

THE matter of determining the price to pay for chicks should be based on the relative cost of the respective pullets when matured. The fuel, labor and feed cost required to grow a pullet capable of laying 125 eggs are just as heavy as the same costs to rear the pullet capable of laying 175 eggs or even more. We can readily see that a cost of 5 cents more per chick would increase the cost of the mature pullet 15 cents. At 3 cents apiece for market eggs, this difference would be made up by an increase in production of 5 eggs per bird. The quality of the breeding stock and not the price of the chicks should determine the source from which chicks are to be purchased.

Crowding Chicks Unprofitable—Disastrous results in the way of heavy losses of chicks are likely to follow when one overestimates brooder house capacity. It is a safe rule to allow a square foot of floor space to every three chicks. In fact, giving the chicks more room than this would be advantageous, especially in early season when chicks must be closely confined to the house.

BABY CHICKS

From heavy laying strains of Barred Rocks and Reds—\$9.00. White and Brown Leghorns—\$7.50. Mixed \$7.50. Prepaid.

Member I. B. C. A.

Sunnyside Hatchery, Liverpool, Pa.

CHICKS Purebred blood tested free range brooders Leghorns, Anconas, 8e, Rocks, Reds, 10e; Wyandottes, Orpingtons, Minorcas, 11e; Black Giants, 16e. 100% live delivery. Valuable Chick Manual Free. Seidelton Farms, Washingtonville, Pa.

20th CENTURY "MARVEL" CHICKS

From Special Mating Imported Barron White Leghorns

This Superb Mating consists of 350 Yearling hens, imported from TOM BARRON, of England. The hens weigh not less than 4½ pounds and up to 6 pounds, and produce better than 250 eggs per year, per hen.

BIG HEALTHY CHICKS FROM THE WORLD'S BEST STRAINS

14 varieties. Matings sired by pure-bred Males from the World's finest Trapped Egg Strains. Dams of high production, 250 to 302 egg lines. Park's, Burroughs, Fishel, Sheppard, Dustin, Pape and others of similar famous breeding.

I Guarantee Satisfaction and give you personal service. Prices reasonable. 100% Live Delivery Guaranteed. Ref: Commercial Bank, Dun or Bradstreet.

PRICES EFFECTIVE JUNE 17 THROUGH JULY AND AUGUST.

	50	100	500	1000
S. C. White, Br., Buff & Blk. Leghorns; Anconas.....	\$4.50	\$ 8.50	\$40.00	\$ 78.00
Barred & Wh. Rocks; S. & R.C. Reds; Blk. Minorcas.....	5.50	10.50	50.00	98.00
Wh. Wyandottes; Buff Orpingtons; Buff Minorcas.....	6.50	12.50	60.00	115.00
Imported Barron Leghorns; Wh. Minorcas; Park's Rocks.....	7.00	13.50	62.50	118.00

Heavy Mixed, \$9.00 per 100; Light Mixed, \$7.00 per 100. W. P. Ducklings, 22c each. Ship C. O. D. if desired (pay postman on delivery). FREE Illustrated Catalog tells all about our big size Winter Laying Chicks and profits you can make with them. Send for your copy.

20th CENTURY HATCHERY Box R NEW WASHINGTON, OHIO

WENE Blood-Tested CHICKS

They're Worth a Lot More Than the Prices We Ask

Wene blood-tested chicks pay big dividends on investment. They cost little more than untested stock. Only Hen Breeders weighing at least 4 lbs. are used in Wene Leghorn Matings.

	50	100	500	1,000
White Leghorn, Wene Select Matings.....	\$6.50	\$12.50	\$60.00	\$115.00
*White Leghorns, Wene Ells Matings.....	8.00	15.50	75.00	145.00
W. Rock-Wyandotte Cross.....	6.25	12.00	57.50	110.00
Straight Rocks, Reds, Wyandottes.....	7.50	14.00	67.50	130.00
Mixed Broiler Cross Heavy.....	5.75	10.25	49.50	98.00

*Wene-Ells flocks headed by pedigreed 200 egg cockerels.

WENE CHICK FARMS,

DE PT. D,



All chick shipments sent prepaid —100% Live Del. Guaranteed. S. C. White Leghorn Pullets 8-10 weeks.—State-Supervised. June and July deliveries. VINELAND, N. J.



HUBER'S RELIABLE CHICKS

CHICKS 7½c and UP Make extra profits with Huber's Reliable

Chicks. At these prices your profit is assured. Nineteen years careful development. Order from this ad. 10% down. Rest C.O.D. if you wish.

Barred and White Rocks, R.C. & S.C.R.I. Reds, Bl. Minorcas.....	\$11.50
S. C. Buff Orpingtons and White Wyandottes.....	12.50
S.C. White Minorcas and Columbian Wyandottes.....	14.00
Special Mating White Leghorns.....	11.50
No. 1 S.C. White and Brown Leghorns, S.C. Anconas.....	9.50

Heavy Assorted.....\$9.50

Light Assorted.....\$8.00

50c per 100 less on orders for 400 or more.

HUBER'S RELIABLE HATCHERY, NO. HIGH ST., FOSTORIA, OHIO



Big Chicks From High Record Matings

300 to 326 Eggs S. C. White Leghorns. Our long experience in Breeding will prove a satisfaction to our customers at the following prices:

	100	500	1000
White, Brown, Buff Leghorns & Heavy Mixed.....	\$ 8.00	\$38.50	\$ 75.00
Blk. Minorcas, Bd. & Wh. Rocks, Buff Orpingtons.....	10.00	48.00	95.00
S. C. Reds; Wh. Wyandottes; Barron Leghorns.....	11.00	55.00	100.00
Jersey Black Giants.....	17.00		
Light Mixed.....	7.00	35.00	70.00
Special Tanerred White Leghorns.....	14.00	67.50	130.00

Your order will receive my special attention. Satisfaction Guaranteed.

UHL PIONEER HATCHERY & EGG FARMS, DEPT. A, New Washington, Ohio. Albert Studer, Prop. Ref.: Farmers' State Bank

Chix from Large Breeders

	50	100	1000
Ferris Strain White Leghorns.....	\$4.50	\$ 8.00	\$70.00
Everlay Brown Leghorns.....	4.50	8.00	70.00
Basom's Barred Rocks.....	5.50	10.00	90.00
Owens' R. I. Reds.....	5.50	10.00	90.00
Heavy Mixed.....	4.50	8.00	70.00
Light Mixed.....	4.00	7.00	60.00

Our breeders are selected for size, type and egg production. The kind that lay and pay. Send for literature. It's free. Tells all about our great egg machines.

JUNIATA POULTRY FARM, BOX T, RICHFIELD, PA.

CHERRY HILL CHICKS

	100
S. C. W. Leghorns—Wyckoff Strain.....	\$ 9.00
S. C. Everlay Brown Leghorns.....	9.00
Barred Rocks and R. I. Reds.....	10.00
Heavy Mixed.....	9.00
Light Mixed.....	7.00

½c less per chick in 500 lots, 1c less in 1000 lots. For less than 100 chicks add 2c per chick. 100% live arrival guaranteed. Parcel post prepaid. Bank reference. Order direct from this adv. or write for free circular.

CHERRY HILL POULTRY FARM, Wm. Nace, Prop., Box A, McAllisterville, Pa.

BABY CHICKS

PROMPT DELIVERY—WILL SHIP C.O.D.

	50	100	500	1000
Light Mixed.....	\$4.00	\$ 7.00	\$33.00	\$62.00
Heavy Mixed.....	4.50	8.00	37.50	70.00
S. C. W. Leghorns.....	4.50	8.00	37.50	70.00
Bd. and Wh. Rocks.....	5.50	10.00	47.50	90.00
S. C. R. I. Reds.....	5.50	10.00	47.50	90.00

PINECREST POULTRY FARM & HATCHERY Herbert Miller, Prop. Box 12, Richfield, Pa.

BABY CHICKS

Tanerred Strain W. Leg.....\$9 per 100 Wh. Leghorns..... 8 per 100 Barred Rocks..... 10 per 100 S. C. Red..... 10 per 100 Heavy Mixed..... 9 per 100 Light Mixed..... 7 per 100 500 lots ½c less; 1000 lots 1c less. 100% live delivery guaranteed. Order from this ad. or write for free circular.

C. P. Leister, McAllisterville, Pa.

8 WEEK OLD WHITE LEGHORN PULLETS

\$1 EACH—F. O. B. RED BANK, N. J.

ORDER NOW for July Delivery

10% DEPOSIT BOOKS YOUR ORDER

EIGENRAUCH FARMS

DEPT. G, RED BANK, NEW JERSEY

BETTER BABY CHICKS

BARGAIN PRICES—SAFE DELIVERY 50 100 500
Wh. & Brown Leghorns—Anconas.....\$6.50 \$12.00 \$57.50
Bd. Rocks—S.C. Reds—R.C. Reds..... 7.50 14.00 67.50
Wh. Wyandottes—Blk. Minorcas..... 8.00 15.00 72.50
Columbian Wyandottes—Jersey Giants.....10.00 18.00
Finest State Inspected Stock—Catalog Free.

ULSTER POULTRY FARMS, Box 40, WALDEN, N. Y.

PENNA. CHICKS

"State Supervised" Flocks inspected by officials from the Penna. Dept. of Agriculture. S.C. Wh. & Br. Leghorns.....11c ea. Bd. Rocks & Blk. Minorcas.....12c ea. S.C. Reds 14c. Assorted 8c & 9c ea. \$1 books order. 100% live del. guaranteed. Our 19th yr. Catalogue free.

THE KEYSTONE HATCHERY, (The old reliable plant) Box 80, RICHFIELD, PA.

BABY CHICKS

FROM A HEAVY LAYING STRAIN. Three years blood tested for white diarrhea and under State supervision. Barred Rocks, White Wyandottes, Reds, White Leghorns. Moderately priced. Write for Catalogue and Prices.

BYRON PEPPER & SONS

BOX 11, GEORGETOWN, DEL.

Klines Barred Rocks

Healthy stock, Penna. State College males, Strong chicks guaranteed. Prompt del. C.O.D. \$10.00-100. \$90.00-1,000. Write or wire.

S. W. Kline, Box 40, Middlecreek, Pa.

JUNE PRICES	100	500	1000
S. C. White Leghorns.....	\$ 8.00	\$37.50	\$75.00
Barron & Wyckoff Leghorns.....	9.00	42.50	80.00
Barred Rocks & R. I. Reds.....	10.00	47.50	90.00
Light Mixed \$8. Heavy Mixed \$9. Our chicks are properly hatched, strong and vigorous. 100% live delivery. Postpaid. Circular free giving full details of all breeds. CLEAR SPRING HATCHERY, McAllisterville, Pa. R. D. No. 2, F. B. Leister, Prop.			

BEST QUALITY CHICKS	100	500	1000
Tanerred Strain White Leghorns.....	\$ 8.50	\$40.00	\$75.00
S. C. Barred Rocks.....	10.00	45.00	90.00
S. C. Brown Leghorns.....	8.50	40.00	75.00
Light Mixed \$7.00. Heavy Mixed, \$8.00 per 100 100% live delivery. P. O. paid. All free range stock. CHESTER VALLEY HATCHERY, McAllisterville, Pa. Box 51			

WYCKOFF and BARRON STRAIN, White Leghorn Chicks for June 9c each; \$80 per 1000. Prepaid and safe delivery guaranteed. Our 19th year. Circular free. \$1.00 books order. THE PENNSYLVANIA HATCHERY, Box W, Liverpool, Pa.

STOP! LOOK! LISTEN!

	25	50	100	500	1000
Cash or C.O.D.	\$2.50	\$5.00	\$10.00	\$50.00	\$100.00
Wh. Wyandottes.....	3.50	6.50	12.00	57.50	110.00
Rocks or Reds.....	3.00	5.50	10.00	47.50	90.00
Wh. Leghorns.....	3.00	4.50	8.00	37.50	70.00
Heavy Mixed.....	3.00	4.50	8.00	37.50	70.00
Light Mixed.....	2.50	4.00	7.00	32.50	65.00

From carefully selected free-range flocks. 100% arrival. Postpaid. Valuable illustrated 96-page booklet FREE. Telling all about poultry.

The Commercial Hatchery,

Box 75-A (The dependable plant) Richfield, Penna.

BABY CHICKS

From Heavy Laying Free Range Flocks

	25	50	100	500	1000
S.C.W. & Br. Leghorns.....	\$2.50	\$4.50	\$8.00	\$37.50	\$70.00
S.C.W. & Wh. Rocks.....	3.00	5.50	10.00	47.50	90.00
Buff Orpingtons & Reds.....	3.00	5.50	10.00	47.50	90.00
White Wyandottes.....	3.00	5.50	10.00	47.50	90.00
Assorted Chicks.....	2.25	4.00	7.00	32.50	60.00

100% prepaid safe delivery guaranteed.

Order from this ad. or write for circular

J. N. Nace Poultry Farm, Box 161, RICHFIELD, Pa.

TAKE NOTICE

150,000 CHICKS FOR June and July Delivery

	25	50	100	500	1000
S. C. White Leghorns.....	\$2.50	\$4.50	\$8.00	\$37.50	\$70.00
Barred Rox.....	3.00	5.50	10.00	47.50	90.00
Rhode Island Reds.....	3.00	5.50	10.00	47.50	90.00
Silver Laced Wyandottes.....	3.50	6.50	12.00		
Light Mixed.....	4.00	7.00	12.00	32.50	60.00
Heavy Mixed.....	4.50	8.00	12.00	37.50	70.00

From carefully selected free range flocks. 100% arrival Postpaid. Write for illustrated catalogue.

The Richfield Hatchery, Box 80, Richfield, Pa.

FERRIS STRAIN WHITE LEGHORN CHICKS

Our breeders are large birds; long, deep, rectangular bodies. Selected for size, type and egg production.

\$8 Per 100; \$37.50, 500; \$70.00, 1000

Juniata Poultry Farm, Box T, Richfield, Pa.

When writing Advertisers

Mention American Agriculturist



Here It Is! That Different Recipe Book

A NEW book for folks who are fond of fish! And a book that will make more people fond of fish! For it shows and describes dishes so appetizing and delicious that everyone who tries them likes them—and wants more. And one of the big things about them is that they take every bit of bother out of handling fish. They all are made from Gorton's Sea Foods—the best of fish, in the most convenient form. No more cleaning, boning, skinning, etc. The "pick" of the fish ready to use. "Delicious Fish Dishes" tells you how to make hot dishes and cold dishes. Baked—creamed—scaloped—fried—broiled fish dishes. Chowders. Omelettes. Rarebits. Oh, all sorts of taste surprises! Something new for every eating occasion! And all this information is free! The edition of this book is limited, so don't put off sending. Get in a bid for your copy today. Fill out the coupon NOW!

Gorton-Pew Fisheries, Dept. B, Gloucester, Mass.
Please send me my copy of your Free Recipe Book "Delicious Fish Dishes."

Name

Address

The Belvedere Hotel

48th St., West of Broadway
Times Square's Finest Hotel

Within convenient walking distance to important business centers and theatres. Ideal transit facilities.

450 Rooms,
450 Baths.

Every room an outside room—with two large windows. Large single rooms, size 11'6" by 20' with bath, \$4.00 per day. For two, \$5.00—twin beds, \$6.00. Large double rooms, twin beds, bath, \$6.00 per day. Special weekly rates. Furnished or unfurnished suites with serving pantries, \$95 to \$150 per month. Moderately priced restaurant featuring a peerless cuisine.

Illustrated booklet free on request

CURTIS A. HALE,
Managing Director

Cuticura Toilet Preparations

Delightfully fragrant, highly developed toilet accessories—a most reliable method of cleansing and beautifying the skin and hair. 25c. each everywhere—Samples free of "Cuticura," Dept. E, Malden, Mass.

CAULIFLOWER and Cabbage Plants. Pedigreed Seed. Selected Plants. Disease free. Safe delivery. See classified column for varieties and prices. F. W. Rochelle & Sons, Chester, New Jersey

PATENTS

Booklet free. Highest references. Best results. Promptness assured.
WATSON E. COLEMAN, Patent Lawyer
724 9th Street, Washington, D. C.

Debate Outline

Grange Lecturers: Send 2 cents to cover postage and we will send a debate outline on the sub-
Should farmers adopt an 8 hour day?

AMERICAN AGRICULTURIST,
461—4th Avenue, New York City

A "Happiness Ahead" Shower

A Novel Way to Honor Brides, Both Future and Past

THERE had been many showers for the very popular bride-to-be, so a group of her friends decided to give a "Happiness Ahead" Shower. Invitations were sent out for a luncheon, and a lively group gathered around a table whose decorations were most appropriately in yellow. When the dessert of orange ice and orange cakes had been enjoyed, the hostess rose, and in a few words, extended the best wishes of all for "Happiness Ahead." She then handed the bride-to-be the end of a

articles which would be suitable could be found at the five-and-ten.—Elsie Duncan Yale.

Good Food Habits for Children

ONE of the new bulletins issued by the United States Bureau of Home Economics is "Good Food Habits for Children," written by C. Rowena Schmidt of the Bureau. In these days, when the importance is recognized of getting children started in the right food way, this bulletin is designed to be of very practical service. Here are some of the suggestions which it gives to "Try Out on Your Toddler":

Set a time for meals, and allow no distractions during the meal hour.

Have the food attractive in color, odor, and flavor, so that it will tempt the appetite.

Serve small portions so that the child can clear his plate without the feeling that he is being stuffed.

Take it for granted that he will eat happily everything served to him, and be sure that he becomes acquainted with a variety of foods.

Let him feed himself, and experience the joy of self-help.

Be consistent in responding to a child's pranks and ruses. Laughing at one time and punishing at the next is never effective.

Remember that the table is a place for good comradeship and not for discipline or nagging.

Have no differences of authority between the parents and other adults in deciding questions about the child's eating.

Refrain absolutely from discussing the child's eating habits with others in his presence.

Begin today. The training or re-training in food habits is too important to wait until tomorrow.

Single free copies of the leaflet may be obtained from the United States Department of Agriculture, Washington, D. C. It is Leaflet No. 42.

Save on Baking

I BAKE several layers of cake twice a week. I put them away in a covered jar and when ready to use, I make the filling and icing which steams and freshens up the cake. Cookies can be made also—and by using different icings a variety can be served at the same time. Cookie cutters can be made of paper patterns, then cut around the pattern with a knife and obtain the desired shape.—Mrs. C. D. W., Ill.

The Gravy Making Trick

AS I have watched so many cooks stir up the thickening for gravy by pouring a large amount of milk into the bowl with the flour, then stir and stir, and work to get out the lumps, I think, "Oh, won't you let me tell you the easy way of doing that?"

Add just enough milk so that the mixture will stir easily, then stir for a few moments until perfectly smooth. Add more milk gradually, stirring until you have as much as needed. Once you try this way, I am sure you will say, "It is easy to make gravy."—L. A. C., New York.

Little Cook's Conserve Recipe

DEAR BETTY: Enclosed find 10c in stamps for which please send me your scrapbook as advertised in the American Agriculturist and oblige

Yours truly,
V. W., New York.

P. S.—Would you like a recipe to put in your book? It is lovely. Five pounds of rhubarb, 5 pounds of sugar, ½ pound of nutmeats, 4 oranges. Cut the rhubarb and orange pulp into small pieces adding the grated yellow rind of one orange. Then add 1 pound of raisins, the sugar and nutmeats, bro-

ken in small pieces. Then cook slowly until thick, being very careful not to burn. Then can while hot.—V. W.

Address Betty, care of American Agriculturist, 461 Fourth Avenue, New York City, and enclose ten cents for a copy of the Scrapbook for Little Cooks.

Home Hints

To help children to have good appetites serve them foods without strong flavors, give them sweets only in small quantities for dessert and permit no lunching between meals.

* * *

Sixteen-mesh is the best size screen for windows and doors because it not only keeps out flies but also mosquitoes and smaller insects.

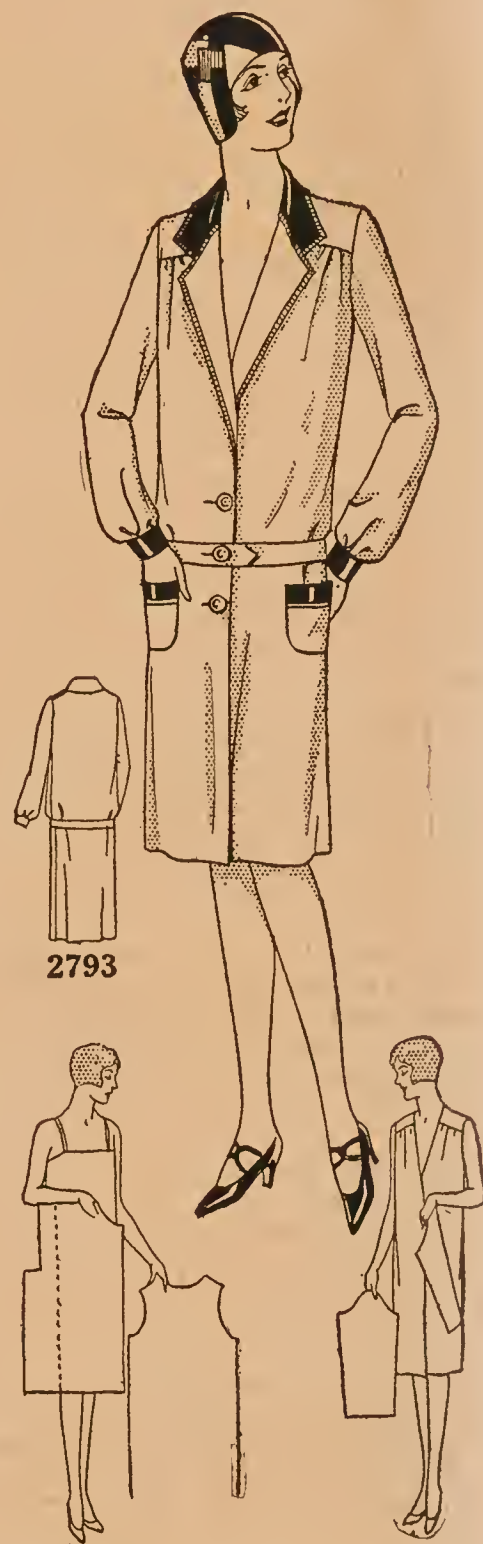
* * *

Before buying goods for summer dresses test the fastness of the dye by washing a sample.

* * *

The efficient parent makes use of the child's early years to implant desirable habits.

Travel Costume



2793

DESIGN NO. 2793 is ideal for travel or for sports wear. It is a one piece coat-frock with fashionable shoulder yokes and patch pockets. The pattern allows using vivid contrasts for trim or an all-over printed material could be used. Either light weight woolsens or the pretty printed linens or cottons answer for such use. The pattern cuts in sizes 16, 18 years, 36, 38, 40 and 42 inches bust measure. Size 36 requires 3½ yards of 40-inch material with ¾ yards of 36 inch contrasting with 2½ yards of binding. PRICE 13c.

TO ORDER: Write name, address, pattern numbers and sizes clearly and correctly and enclose with correct remittance in stamps or coin (although coin is sent at own risk). Add 12c for one of the new spring fashion catalogs and send to Pattern Department, American Agriculturist, 461-4th Avenue, New York City.

Aunt Janet's Counsel Corner

An Old Reader Sends Suggestions That Have Helped Her

DEAR AUNT JANET:

Have you time for a call from a farmer's wife? I hope you have and what I write you will find worth while to pass on in your corner. I have often thought that if each of us told the other of our short cuts, and things of every day life which our experiences have found out, what help it would be to so many of us.

So, I am now writing some of these every day facts and hope some of them our "Big Family" will find worth knowing.

First of all, spring brings housecleaning and painting and papering as well. I have a recipe given me for paste to hang paper which is as follows:

Flour Paste

Rub 3 pints of flour with 2 quarts of cold water until smooth. Add 8 quarts of boiling water and boil 10 minutes stirring all the time. I make half a batch at once as it is easier than one large one. This cannot be beat.

Second, how many of us have had to



Ready-made frock NO. B5129 stamped for embroidery is delightfully made in honey colored voile finished with double fold white organdie collar and cuffs. Quaint blue and white patches for "Garden Girl" design are included along with floss for working. Sizes 2, 3, 4, 5 and 6 years. Price \$1.50. Order from Embroidery Department, American Agriculturist, 461 Fourth Avenue, New York City.

ment, American Agriculturist, 461 Fourth Avenue, New York City.

put a patch over some discolored or torn wall paper? Here's a solution. First, match the design of your paper to be patched, taking care to cover soiled part well. Next cut saw-teeth notches around the four sides, paste, match design on wall and the patch will scarcely be noticed. Notches can be made an inch and one-half in size or smaller depending upon design of paper, either large or small. Border cut in this way and matched will not be seen so plainly as when cut straight up or on slant.

I use a clothes-pin bag when papering. This carries my brush-broom, or dry-brush, shears and all necessary articles. I use a sharp knife to cut strips of paper. Fold and cut with knife as it is so much quicker and neater than shears.

When I clean bed-springs with spiral coils and wood cleats I stand them or lay them on a slant and pour boiling water from the tea-kettle on them, going down each slat. The dust rolls off. Stand springs upright to dry in the sun.

I also use our cattle salt sacks to cover pads which I use over mattresses. Sew together and seam up like a pillow case. Slip old pad into it, tie as you would a quilt only much farther apart, about 12 to 15 inches. Bags may be colored or left plain as you wish.

To tie these pads I make first row real close to the bottom edge. I put up a line in the kitchen and hang the pad up by clothes-pins. Thus the linings hang straight and it is done quicker than if laid on a table or floor.

If I have bed-springs that are of the coil type, I use heavy paste-board boxes cut open to cover them. The kind that our merchant gets some of his goods packed in can be used. These save the mattresses from being torn and prevent sagging, especially if one has straw beds.

Our grain bags which grass seeds come in make good coverings for chairs and the kitchen couch, either colored or plain and they wear well and are much cheaper in the end than store goods.

I have three men and two children

to keep stockings mended for. I solve the problem by taking the upper parts of stockings that have been discarded. I shape the heels similar to those of the stockings to be mended and overhand on the wrong side and fell the right side. This will also lengthen the foot if it is too short. Seam may be up the back or under heel as preferred.—OLD READER.

Tested Recipes

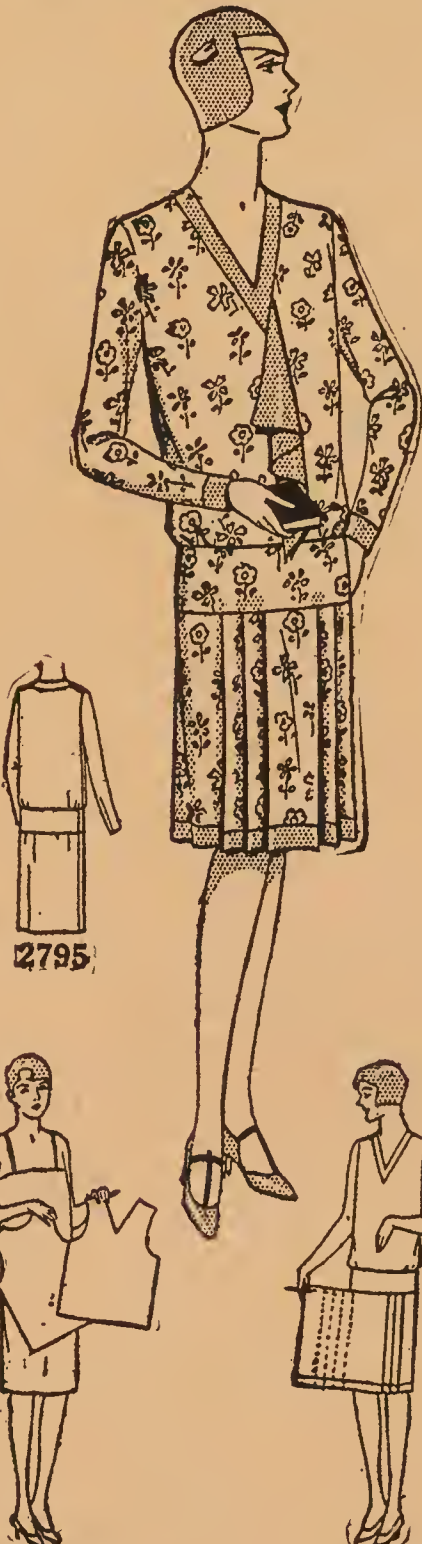
Buttered Peas

PLACE 1 cup of tender green peas and 1 teaspoonful of butter for each person to be served in an aluminum or granite kettle and place over a moderate fire. Stir peas for 5 minutes and they will turn bright green and are now ready to be used as a basis for the Escalloped Peas and Salmon Chowder. For the Buttered Peas cover with boiling water and simmer until tender. Add salt, pepper and cream and serve. The bright green color is very attractive and vitamins are saved by this method of cooking.

Escalloped Peas

Place a layer of bread crumbs in a well greased glass baking dish, cover with a layer of peas which have been stirred in butter, season with salt, pepper and dots of butter. Alternate layers of bread crumbs and peas until dish is full, having the top layer bread crumbs.

Tailored Simplicity



PATTERN NO. 2795 with its applied bands at neckline and edge of skirt, its snug hipband and flat pleats has a distinct tailored effect. Shantung, printed pique or linen or the smart printed wool jerseys would be highly suited to such a pattern. The pattern cuts in sizes, 16, 18 years, 36, 38, 40 and 42 inches bust measure. Size 36 requires 3 yards of 40-inch material with 3/4 yards of 36-inch contrasting. PRICE 13c.

Pour thin sweet cream to cover over peas and crumbs, dust with 1 teaspoon of sugar. Bake 30 minutes, in a moderate oven and serve hot.

* * *

Salmon Chowder

Take 2 cups stirred peas, add one-half can of pink salmon, place in saucepan with water to cover and 2 table-spoons butter and let simmer until peas are tender. Add 1 quart of rich milk and serve hot with crackers.

The secret of tasty green peas lies in the generous use of butter and cream, and it is hardly wise for farmer folk to economize in the use of these healthful foods raised on their own farms.—MRS. H. M. R., New York.

Aunt Janet's Contest

NOW is the chance to tell the world just where you would prefer to live and the reasons for your preference. So often other pastures look greener and other jobs seem less hard than ours. But whether we have expressed it or no, practically all of us have decided ideas about where we would rather live. Perhaps we haven't gone so far as to reason out why we prefer that place or section.

This contest offers just the incentive to make us do a little self-examination on the subject. For the best letter (250 to 300 words long) we offer a prize of \$3.00, for next best \$2.00, and for all others which we print \$1.00 each will be paid. Before June 15 send your letter to Aunt Janet, American Agriculturist, 461 Fourth Ave., New York City.



Summer colors

needn't be afraid...

If it can be washed, Fels-Naptha will wash it safely. Naptha is the safe dirt-loosener "dry cleaners" use. There is plenty in Fels-Naptha. You can smell it. Naptha blended with good golden soap by our exclusive process. Working together, they get the dirt out and leave the color in. Moreover, Fels-Naptha washes unusually well in cool water and that is best for colors. So, for dainty summer dresses as well as the family wash...remember...

Nothing can take the place of

FELS-NAPTHA

BUY IT BY THE CARTON OF TEN BARS



PARKER'S HAIR BALSAM
Removes Dandruff—Stops Hair Falling
Restores Color and
Beauty to Gray and Faded Hair
60c. and \$1.00 at druggists.
Hiscox Chem. Works, Patchogue, N. Y.

When Writing Advertisers, Be Sure to Mention American Agriculturist

Like a "Sterling" Mark

THERE are many trademarks and manufacturers' names on hardware that are as true an indication of genuine quality as the "Sterling" mark is on silver.

At our "Farm Service" Hardware Store you will find hundreds of such trademarks, positively identifying different classes of goods as the best that can be

secured. "Farm Service" Stores are quality stores, selling the utmost satisfaction for the least amount of money!

GIFT SUGGESTIONS for Brides

Kitchenware
Silverware
Washing Machines
Aluminum
Oil Stoves
Refrigerators
Radios
and thousands of gifts at any price you want to pay.

Now, when it is time to buy gifts for June brides, make it a point to visit this store before you make your selections and start those young couples out with home-making equipment of hardware of the "Sterling" quality.



Look for this tag in their window



Your Farm Service HARDWARE STORES

Where prices are lower because you get personal help in the selection and maintenance of your purchases.

The Plains of Abraham *By James Oliver Curwood*

WHEN it was done, his mother put a Betty lamp at each end of the table and then seated herself so that she was facing her brother, with delight and expectancy equal to Jeems's flushing her cheeks and brightening her eyes.

Hepsibah buried his hands in the mysterious depths of his bundle.

"Just a few little trinkets," he began, using the identical words he had employed one year after another. "A few whim-whams and baubles for the boy, a bit of trumpery for Sister, and a farthing's worth of nothing in particular for you, Henri—all picked up at small cost and no trouble in the town of Albany, where lives a Dutchman with two of the biggest and heaviest skull-breakers in the Colonies. Ah, here we have the first package, with writing on it in the hand of the scholar who sold me the goods—a cap, a ruffle, a tucker, and a bolt of lace at five shillings a yard! Now who in this room can such sillies be for—unless—" and at Catherine's delighted exclamation he tossed the bundle to her. But scarce had she opened it, with her eyes intent upon her business, than Hepsibah unfurled a red silk petticoat in the candle glow, and this time Catherine sprang to her feet with an amazed intake of breath, for so well had Hepsibah arranged his surprise that, one after another, he had a white love-hood, a black love-hood, and three more petticoats on the table—one of scarlet with black lace, one of coloured drugget with pointed lace, and a third of black silk with ash-gray lining; and as Catherine stood gazing upon these treasures fit for a queen he added to them two pairs of stays for an eighteen-inch waist, and then showered over them such an array of lace drowlas, gorgets, piccadillies, and other neckerchiefs that Catherine closed her eyes for a moment and then opened them wide as if there might be a chance of some clever trickery in it.

"Dear Mother in heaven!" she cried. "Are all of these ravishing things for me?"

"Of course not," said Hepsibah drily. "The stays are for Jeems and the drugget skirt is for Henri, to be worn when he goes to church on Sunday."

But Catherine paid no attention to his fun, if she heard at all, for her slim fingers were running swiftly over her gifts, caressing one and then another, until Henri forgot to puff at his pipe, and Jeems stood up better to see the excitement in his mother's face.

"They must have cost a fortune!" she exclaimed, pausing to look at her smiling brother and at the same time holding up the scarlet petticoat with black lace. "This one, for instance—"

"Two pounds fifteen shillings," said Hepsibah, opening his pack wider and working his hands quickly. "But an ounce or two of trumpery like this, *ma chery*, costs more," he added, trying to speak a bit of French. "A bonnet, and the best in Albany, at four pounds ten, and here half a bolt of tamboured muslin at eighteen shillings a yard, some lutestring at twelve shillings, calico at six shillings threepence, and durant with the figures turned t'other side around, at three shillings sixpence—enough cloth, the scholars who sold it to me swore, to build dresses and pretties for as fine a lady as there is in the land. And to go with these dresses I have here ruffles and tuckers and threads and buttons and ribbons, and four pairs of the nicest shoes that ever came up the Hudson," and placing these last-named articles on the table with a flourish of his arms, Hepsibah gave a gloating chuckle and paused to fill his pipe.

Jeems's heart was near breaking with suspense, and it seemed to give an audible crack when his Uncle Hep's

gnarled hands went into the pack again. The method of procedure had always been the same—his mother coming first, and then he, with his father looking on until the last. But this year Hepsibah had decided upon a change, for he drew a bulky package from his store and passed it to Jeems's father.

"Three of the finest pipes I ever laid my eyes on," he announced. "One made in Holland, one in London, and one in America, and five pounds of Virginia tobacco to go with them, Henri, along with a hat, a coat, and a pair o' boots that may take you with

to its maturity that Governor Winthrop's son became executor of his father's will when he was only fourteen years of age.)

Having delivered himself of this introductory peroration Hepsibah finished unwrapping the package, and never had Catherine beheld such a handsome piece of velvet as that which her brother displayed in the candle glow. It was, *par excellence*, the finest of the treasures he had brought, a cloth of matchless beauty, a crimson glory so filled with changing humours and colours that it seemed to be alive in his hands. Surely this was another present for his mother, Jeems thought. But to

Bringing the Story Up to Date

JEEMS BULAIN with his French father and his English mother lived in colonial times near the border between Canada and the English colonies. Their neighbor, Tonteur, is their friend but Madam Tonteur hates Catherine Bulain because of her beauty and her English blood and tries in every possible way to teach her daughter Toinette to hate Jeems Bulain.

Jeems admires Toinette and is deeply hurt by her disdain. He hates Paul Tasche, Toinette's cousin from Quebec, because Paul assumes a superior air and because he is in the good graces of Toinette.

Catherine Bulain sees and understands the situation to which her husband is blind. Jeems is brooding over the situation as he, his mother and father and Odd, his dog, walk home from a visit to Tonteur Manor.

As the four of them descend the slope to the Bulain home, they hear a blood-curdling cry. Almost immediately their alarm is changed to joy by the discovery that the cry comes from Hepsibah, Catherine's brother, a trader who visits the Bulain family at long intervals. Jeems waits the conclusion of the evening meal with great impatience and casts longing eyes at Hepsibah's pack.

honour to any swoirree or gentry merry-making this side of the sea. Now, how's that?" And he stepped back as if his pack were entirely empty and held nothing at all for Jeems.

For an eternity, it seemed to Jeems, his uncle remained in this terrifying posture. Then, with deliberate and aggravating slowness, Hepsibah Adams returned to his pack.

No one of the three who were watching him would ever have guessed that Hepsibah's act was one weighted heavily with the force of destiny, nor that with dramatic inevitableness it was to change the course of human lives, bringing the high down to earth, and the earthly to great heights, loosing passions and hatreds and loves, breeding tragedies and joys, and ending, at last, in what it is the purpose of this humble chronicle of human events to narrate.

A swift-coming thought, a deft return into the pack of a small bundle which he had intended for Catherine, and Hepsibah had changed a world. On such trivial happenings do the most powerful of the fates sometimes rest. Out of the farthest corner of the collapsing pack he brought this bundle to light once more and unwrapped it as he turned toward Jeems's big-eyed, anxious face.

"Jeemsey," he said, "if I've put the notches in my memory right, you were born on the coldest January day I ever saw, and that makes you just twelve years and four months old this evening, which means, if you figure it right, that only three years and eight months lie betwixt you and the day when you can be counted a man. According to law, you are a King's subject of maturity from that day and can take life and all its belongings into your own hands, so long as you are honest about it, and can stand up in equality before the stiffest periwigged judge in the Colonies or New France. In other words, Jeemsey, I mean that in less than three short years you will be a full-fledged man!"

(In the middle of the Eighteenth Century both male and female youth ripened early in its capacities. Boys became men by law when sixteen, girls' best marriageable years were from fifteen to seventeen, and a young lady of ten was deemed no longer a child. Experience and education so swiftly developed youth

his amazement and Catherine's surprise Hepsibah thrust the cloth into Jeems's hands.

"For Mademoiselle Marie Antoinette Tonteur from her devoted admirer, Daniel James Bulain," he announced. "Jeemsey, don't blush. Twelve and ten are not far from sixteen and fourteen, when you will be man and woman, and if ever a seigneur's daughter finds herself lucky it will be on the day she marries a son of the tribe of Adams. The writing on it, Jeemsey, tells where it came from and how much it cost; and along with it I have brought you some nankeen for britches and clothes, four shirts, and a three-cornered hat with a black ribbon, six handkerchiefs, and a jackknife, two pairs o' serge britches, as many of new shoes, and—this," and from the now completely emptied pack he drew forth a beautiful long-barrelled pistol, his eyes aglow with a fighting man's pride as he fondled it in the light of the candles and pointed out its merits to Jeems. "As long as you live, you must never part with this pistol, Jeemsey," he said. "It isn't new, you see, but its record is one of glory as long as my arm, and I'll tell you about it some day. It's a killer, lad, a killer deadly and sure, good for a hundred paces with less than an inch of drop," and he gave the weapon into Jeems's hands."

An instant of disapproval gathered in Catherine's eyes.

"It was kind of you to bring the cloth for Antoinette but I do not care for the pistol, Hepsibah," she said. "A pistol makes me think of men fighting men. And here we are at peace, having need only of the rifle and of Jeemsey's bow and arrows to bring us meat. I feel it is not best!"

As she spoke thus confidently of peace, a cloud came over Hepsibah's face, but in a moment he had laughed it away and was telling her that within a week she would be as proud of her boy's marksmanship as she now seemed fearful of the pistol's influence upon his future.

An hour later, when Jeems went to his bed in the loft, it was of neither pistol nor marksmanship he was thinking, but of the piece of red velvet which he placed close to his pillow before he snuffed his candle and laid himself down for the night. If his heart beat

less swiftly now, he was even more joyously thrilled than when he had been with his people.

To-morrow was the day of the auction sale at Lussan's place. Lussan was a wealthy farmer at the edge of the next seigneurie, ten miles away. He was returning to his old home near the Isle of Orleans, a country he liked better than the Richelieu, and was selling most of his goods. Among these were a plough with an iron point, a forty-gallon soap kettle, and a loom which Jeems's father wanted, so he had planned to start with the ox early in the morning. Jeems had heard Tonteur say he intended to buy Lussan's three slaves, a mother and father and daughter, and that the young wench was for Toinette. Toinette would be with her father. He would take his treasure package with him to Lussan's and find an opportunity to give it to her.

Should Paul Tache be there and dare to overlord him again, or laugh in his meanly suggestive way, or speak sneeringly, or so much as say a word against his gift for Toinette. . . .

A rumble of fresh-growing thunder was advancing out of the west, and preceding it came a roar of wind and a deluge of rain. Lightning cut in vivid flashings across the narrow panes of the bedroom window, and the roof seemed to bend and groan under a sudden torrential bombardment. Jeems fought in unison with the elements. His spirit mounted savagely with the turmoil. He had his enemy down and was thrusting his head into wet and slimy mud. He was beating his face and eyes, and spoiling his splendid raiment, and pulling out his hair. And Marie Antoinette was looking on. With the gorgeous red velvet in her hands and her eyes big and starry, she was watching him as he choked and kicked and pummelled the life out of Paul Tache!

The outburst of thunder and wind and deluge, a whim of playful spring, passed as swiftly as it had come, and, in passing, it left Jeems breathing quickly and fiercely in his bed.

He had risen in these moments to reckless heights, and his mind, hot with its desire for action, had settled with grim assurance upon what would happen the next day.

First he would present his gift to Toinette.

Then he would do what his Uncle Hep had told him to do. *He would whip Paul Tache.*

CHAPTER IV

HENRI and his wife sat up late with Hepsibah Adams, for this time Hepsibah had come with a set and determined purpose to his sister's home. Had Jeems crept down the stairs toward the end of the evening's talk, he would have discovered the happiness of earlier hours mellowed by a tense and almost tragic seriousness that lay in the faces of his mother and Uncle Hepsibah. The trader's countenance had grown stern, and Catherine's cheeks were like those of a pale nun in the candlelight. The rich gifts from her prodigal brother were heaped on the table, but something of deeper import than a contemplation of their beauty and the thrill of possessing them had gathered in her eyes. In Henri Bulain's face were still the cheer and good-humour and unruffled equanimity of confidence and faith that Hepsibah, with the darkest pictures he had painted, had been unable to disturb.

They were talking about war. As early as this spring of 1749, the American wilderness had begun to stir with whispers of the impending conflagration which was destined soon to turn

(Continued on Page 20)

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Advertising orders must reach our office at 461 Fourth Avenue, New York City, not later than 14 days before the Saturday of publication date desired. Cancellation orders must reach us on the same schedule. Because of the low rate to subscribers and their friends, cash or money order must accompany your order.

DOGS AND PET STOCK

HURRY if you want a trained heelbiting English or Welsh Shepherd, also young pups starting. **GEORGE ROORMAN**, Marathon, N. Y.

FREE DOG BOOK. Polk Miller's famous dog book on diseases of dogs. Instructions on feeding, care and breeding with symptom chart, 48 pages. Illustrated. Write for free copy. **POLK MILLER PRODUCTS CORP.**, 1021 W. Broad St., Richmond, Va.

PEDIGRED CHINCHILLA RABBITS, three months old. Pair \$5.00. **JOHN PARRY**, Camden, N. Y.

COLLIE PUPPIES, Sable and White, males \$8.00, females \$5.00. Cow dogs. **P. HAMILTON**, Cochranville, Pa.

RABBITS: 25 Chinchillas \$5.00 each, 50 Flemish Giants \$3.00 each, 25 New Zealand Reds \$3.00 each, while they last. Wonderful stock. Order direct from adv. **BREEDERS SUPPLY CO.**, Cobleskill, N. Y.

POULTRY

Baby Chicks, Breeding Stock, Eggs

FOR SALE—Single Comb White Leghorn chicks. **L. H. HISCOCK**, Skauteates, N. Y. Circular on request.

SINGLE COMB REDS—Barred Rocks. Eggs. Chicks. Extraordinary matings. Fine type. Bred for winter production. Catalogue. Low prices. **GRAMPIAN HILLS POULTRY FARMS**, Gramplan, Pa.

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SUNNYFIELD EXTRA LARGE Single Comb Black Minorcas. Exclusively. Chicks. Eggs. Stock. Extraordinary layers. Lay exceptionally large white eggs. Two matings. Low prices. Catalogue. **SUNNYFIELD MINORCA FARMS**, Gramplan, Pa.

REGAL DORCAS WHITE WYANDOTTES—Eggs, chicks, stock. 256 egg record. Ledger. North American contest. Winter layers. Excellent type. Fine matings. Low prices. Catalogue. **KEISER'S WHITE ACRES**, Gramplan, Pa.

GIANT LIGHT BRAHMAS—chicks—eggs—extraordinary large breeders—fine color—record layers—standard red—low price—Catalogue. **GIANT BRAHMA FARMS**, Gramplan, Pa.

THOMPSON STRAIN BARRED Rock Chicks: From healthy free range stock April—\$12 per 100. May and June \$10 per 100 postpaid. 100% live delivery guaranteed. Hatching eggs \$6 per 100. Order direct from this add. **WEST DENTON HATCHERY**, Denton, Md.

PULLETS—Barren and Tauced White Leghorns from four and five lb. breeders. Three to ten weeks old, 27c and up. Free circular. **GOODFLOX POULTRY FARM**, Leghorn Blvd., Dansville, N. Y.

WOODSIDE POULTRY YARDS, chicks, Tom Barron S.C. White Leghorns Imported 250-298 egg strain Breeder of leghorns for 28 years, Catalogue. **DAVID HAMMOND**, Cortland, N. Y.

ROSE COMB BROWN Leghorns. Frostproof egg producers. Very profitable. Baby Chicks. **J. M. CHASE**, Box 40, Wallkill, N. Y.

CHICKS S. C. WHITE Legs. \$8.00-100; Barred Rocks, \$10.00-100. Reds, \$11.00 and White Rocks, Mixed Heavy, \$8.00-100. 1 guarantee 100% live delivery. All number one chicks. Circular free. **JACOB NEMOND**, McAlisterville, Pa. Box A.

90 VARIETIES. Poultry, eggs, chicks, dogs, hares, ferrets, parrots, white mice. Free folder. Colored description, 60 page book, 20 cents. **J. A. BERGEY**, Telford, Pa.

PHEASANT EGGS. Unrelated strain. Ringneck eggs \$3.00 per dozen, \$25.00 per hundred. Instructions free with orders. **JOHN ECKERT**, Pine Pheasant and Poultry Farm, East Moriches, Long Island.

POULTRY

Baby Chicks, Breeding Stock, Eggs

CHICKS C. O. D.—100 Rocks or Reds. \$12; Leghorns, \$10; heavy mixed, \$10; light, \$8. Delivery guaranteed. Feeding system, raising 95% to maturity, free. **C. M. LAUVER**, Box 26, McAlisterville, Pa.

S. C. WHITE & BROWN Leghorns, Barred & White Rocks, R. I. Reds. Strong livable chicks. Low prices. Write for circular, it's free. 2000 White Leghorn pullets, January and February hatched, ready to ship \$1.00 each. **PERRY POULTRY FARM**, Perry, N. Y.

HATCHING EGGS from thrifty Pure Bred Jersey Giants \$1.50 per 15. \$3.00 per 45. Parcel Post, C.O.D. **INDIAN LADDER FARM**, East Stroudsburg, Penna.

BABY CHICKS: Our quality chicks are reduced to 10 and 12c. W. Wyandottes 13c, full count and guaranteed safe arrival. Send for catalog giving instructions. **MILTON POULTRY FARM & HATCHERY**, Milton, Pa.

CHICKS—9c. From Pure Barron English White Leghorns. Our large trapnetted birds will produce profitable broilers and heavy winter layers. Free Catalog. Reference Farmers State Bank. **WILLACKER LEGHORN FARM**, Box G., New Washington, Ohio.

CHICKS, ROCKS 10c; REDS, and Wyandottes 11c. White Leghorns 8c. Mixed 7c. Heavy Mixed 9c. One cent more per chick in less than 100 lots. 100% delivery guaranteed. **LONGS RELIABLE HATCHERY**, Millertown, Pa. Box 12.

MINORCAS, ROCKS, REDS, Wyandottes 11c, Anconas 10c, Brahmas 16c. **CONTINENTAL HATCHERY**, York, Pa.

THE OLD POULTRYMAN'S Calendar. Just what you need. \$1.00. **LOUIS C. FREDERICK**, 7 P. Shawmut Ave., East Weymouth, Mass.

25,000 BABY CHICKS WEEKLY. White, Brown, Buff Leghorns \$9.50. Reds, Rocks, Wyandott, Orpington \$11.50 per 100. Also Parrots. **J. A. BERGEY**, Telford, Pa.

9c CHICKS FROM BIG English White Leghorns that will produce big hens—large eggs. Order now. Catalogue free. **BISHOP'S POULTRY FARM**, New Washington, Ohio.

REDUCED PRICES. Bucher Super Quality Chicks from inspected free range stock. Reds, White Wyandottes, White, Barred Rocks, Giants, Black Minorcas, Anconas, White, Brown Leghorns. Booklet free, low prices. Pure Breeds. **BUCHER BROS. HATCHERY**, Dept. C, Bucyrus, Ohio.

COLUMBIAN WYANDOTTES. Large handsome heavy layers. Splendid chicks, right prices. **INVALE FARM**, R4, Wallkill, N. Y.

POULTRY

Turkeys—Ducks—Geese

MAMMOTH WHITE PEKIN Duck eggs for hatching, ten cents apiece, delivered, satisfaction guaranteed. **JOS. KENNEL**, Atglen, Pa.

TURKEY EGGS—from our famous pure bred Mammoth Bronze, Bourbon Red, Narragansett and White Holland flocks. Write **WALTER BROS.**, Powhatan Point, Ohio.

EXCEPTIONALLY FINE MAMMOTH Bronze Turkeys. Hardy, vigorous, free range stock with massive frames and finest markings. Eggs 10-17.50. Infertiles replaced. **MAPLE DRIVE FARM**, Dansville, N. Y.

WHITE WYANDOTTE: MAMMOTH PEKIN Duck eggs. Pearl Guinea eggs, **LAURA DECKER**, Stamfordville, N. Y.

TEN CHOICE BOURBON Red Turkey eggs. \$5. Free range stock. **HOMER LEHMAN**, Amaranth, Pa.

W. HOLLAND HATCHING EGGS. From Madison Square Garden winners. **MRS. A. H. SMITH**, Sodus, N. Y.

POULTRY

Turkeys—Ducks—Geese

POSTPAID BEST STRAIN Mammoth Pekin duck eggs 11 for \$1.50; 100 for \$11. Jersey Black Giants eggs 10c each. **RUPRACHT BROS.**, Pulaski, N. Y.

BABY TURKEYS and turkey eggs for sale. Live delivery guaranteed. Baby turkeys 85c each; turkey eggs 40c each. Rhode Island Red and Barred Rock Baby chicks 15c each; White Leghorns 10c each. White Pekin Duck eggs \$2.00 for twelve; Bantam eggs \$1.50 for fifteen. Turkey book, "How to Raise them" 25c in coin or stamps. Write for a catalog. **EATON LEGHORN FARM**, Rockfield, Kentucky.

EXCEPTIONALLY FINE MAMMOTH Bronze Turkeys. Hardy, vigorous, free range stock with massive frames and finest markings. Eggs 75c each, 10-80. Infertiles replaced. Poults \$1.10. **MAPLE DRIVE FARM**, Dansville, N. Y.

WHITE PEKIN DUCKLINGS \$26 per hundred. Mixed Ducklings \$24. **F. B. CANDEE**, Nicholson, Pa.

TWELVE MAMMOTH BRONZE turkey eggs \$5.00. **MRS. H. F. MILLER**, Mars, Pa. R.D. 2.

FARM EQUIPMENT

ROOFING PAPER, 3-ply, \$1.35 per roll, 100 sq-ft. Prepaid. Asphalt shingles, roofing, paint. Send for price list. **WINIKER BROS.**, Millis, Mass.

SEEDS—NURSERY STOCK

STRAWBERRY, RASPBERRY, BLACKBERRY, Dewberry, Loganberry, Wineberry, Grape, Juneberry plants; Asparagus, Rhubarb, Horseradish roots; Hardy Perennial and Annual Flower plants; Roses, Vines, Shrubs, Hedge Plants; Berry plants, Asparagus roots. Catalogue free. **HARRY E. SQUIRES**, Hampton Bays, N. Y.

OLD FASHIONED HARDY Flower Plants. Hollyhocks, Delphiniums, Bleeding Hearts, Anemones, Blue Bells, Canterbury Bells, Columbines, Monkshoods, Hardy Carnations, Hardy Chrysanthemums, Hardy Lilies, Hardy Phloxes, Lupines, Hardy Pinks, Oriental Poppies, and 240 other Perennials that will bloom this summer; Pansies, Asters, Salvias, Petunias, Zinnias, Snapdragons and other annuals; Roses, Vines, Shrubs, Hedge Plants; Berry plants, Asparagus roots. Catalogue free. **HARRY E. SQUIRES**, Hampton Bays, N. Y.

GLADIOLUS \$1.00 Blooming Bulbs \$1.00. 12 choice Dahlias \$1.00. Catalogue. 20 Evergreen Trees \$2.00. **GLADAHILL FARMS**, Chicopee Falls, Mass.

COOK'S CERTIFIED POTATOES. Cobblers and Russets. Better than ever. Attractive prices. We pay freight. **IRVING E. COOK**, Munnsville, N. Y.

STRAWBERRY PLANTS: Senator Dunlap, 100, 90c; 300, \$2.25; 500, \$3; 1000, \$5. Premier—Gibson—Big Joe—Cooper—Stevens Late Champion, 100, \$1; 300, \$2.50; 500, \$3.50; 1000, \$6. Everbearing, Champion, 25, 75c; 50, \$1; 100, \$1.50; 500, \$5; 1000, \$10. Mastadon, Everbearing, 25, \$1; 50, \$1.75; 100, \$3; 200, \$5; 500, \$8; 1000, \$16. Figure each variety separate. Write for prices on Black, Purple and Red raspberry plants. Our plants are strictly fresh dug, from new fields. **F. G. MANGUS**, Maple View, N. Y.

SEND \$1 for 12 Labeled Dahlias, flowers of marvelous beauty, all colors, regular value \$3.50. **BOLTS DAHLIA FARM**, Stepany Depot, Conn.

SEED CORN—West Branch Sweepstakes for sale. Greatest ensilage corn grown. Germination 98% when tested. \$3.00 per bushel. **A. L. WINTER & SON**, Montoursville, Pa.

FINE OUTDOOR GROWN Cabbage Plants—300, 75c; 500, \$1.00; 1000, \$1.50 prepaid. 5,000, \$5.00 expressed. Tomato & Onion Plants \$1.50 thousand. Pepper and Sweet Potato Plants \$2.50 expressed. All now ready. Prompt shipments, good delivery guaranteed. **OLD DOMINION PLANT COMPANY**, Franklin, Va.

SEEDS—NURSERY STOCK

LORDS GOLDEN AGE extra early yellow sweet corn. Good size, productive, tender, deliciously sweet. The originator has grown it ready for the table 57 days from planting. \$1, quart; \$1.70, 2 quarts; \$2.50, 4 quarts; \$4.50, peck; \$6.50 half bushel; \$12.00 bushel. **JAMES E. LORD**, Stonington, Conn.

DAHLIAS. ASSORTED not labeled, \$1. a dozen prepaid. **ANER L. SMITH**, Sodus, N. Y.

100 ACRES VEGETABLE PLANTS, Cabbage, \$1.00 thousand; Onion, \$1.50; Pepper, \$2.00; Sweet Potato, \$2.50; 10,000, \$20.00. Tomato, \$1.25; 10,000, \$10.00. Prompt shipments. Good plant guaranteed. **FARMERS SUPPLY COMPANY**, Franklin, Va.

FROSTPROOF CABBAGE PLANTS 75c, 1000; Bermuda Onion \$1.00; Collards 75c; Tomatoes \$1.00; Ruby King Pepper \$2.00; Porto Rico Potato Plants \$1.50. **QUITMAN PLANT CO.**, Quitman, Ga.

20 MILLION TOMATO PLANTS—Large, stalky, well rooted, open field grown, packed with damp moss to roots. Greater Baltimore, Stone, Earliana, Ponderosa. By mail postpaid; 500-\$1.25; 1,000-\$2.25. Express prepaid; 5,000-\$8.00; 10,000-\$15.00. Late Cabbage plants same price. Prompt shipment, safe arrival guaranteed or money refunded. **KENTUCKY PLANT CO.**, Hawesville, Ky.

SEED CORN—Genulno West Branch Sweepstakes, Cornell No. 11, and early maturing 8-row flints. Grown from tested disease-free ears. Thoroughly cleaned and graded. Passed corn borer inspection. \$3 per bushel. 10 bushels, \$2.80, bags free. Ninety per cent or better germination and satisfactory condition guaranteed. **K. C. LIVERMORE**, Box A, Honeoye Falls, N. Y.

SEED POTATOES. Certified Green Mountain from Prince Edward Island, finest obtainable. Michigan and New York Certified Russets, none better. Write for closing out prices. **QUAKER HILL FARM**, Box A, Honeoye Falls, N. Y.

FIELD PEAS with oats, cut for green feed will keep up the summer milk flow, but be sure to use disease free peas. Write for explanation and prices of our tested seed. **QUAKER HILL FARM**, Box A, Honeoye Falls, N. Y.

PLANTS POSTPAID. All varieties; Beet, Cauliflower, Mangle, Lettuce, 3 dozen., 25c; 100, 50c; 1,000, \$3; 5,000, \$10. Cabbage, 3 doz., 25c; 3 doz., 40c; 400, \$1; 1,000, \$2. Sweet Potato, Asters, 3 doz., 25c; 100, 65c. Celery, Tomato, Pepper, Zinnia, 3 doz., 40c; 100, 85c; 1,000, \$6.75. Egg Plant, Coleus, Coreopsis, English and Shasta Daisies, Pansies, Dianthus, Snapdragons, Salvia, Verbena, doz., 40c; 3 doz., \$1; 100, \$2. **ROHRER'S PLANT FARM**, Smoketown, Pa.

DAHLIAS—12 TUBERS, Mixed varieties, labeled, no two alike \$1.25. We grow 500 varieties. Ask for free price list. **MOOSE DAHLIA FARM**, Wayland, N. Y. Route 3.

MILLIONS CABBAGE PLANTS, Copenhagen, Wakefield, Succession, Flatdutch, Danish Ballhead, 300, \$1.00; 500, \$1.25; 1000, \$2.00 postpaid. Express \$1.25 1000. Tomato plants—Baltimore, Matchless Stone, same price. Sweet Potato and Pepper, 500, \$2.00; 1000, \$3.50 postpaid. Satisfaction guaranteed or money refunded. **IDEAL PLANT COMPANY**, Franklin, Va.

MILLIONS CABBAGE PLANTS—Copenhagen, Wakefield, Danish Ballhead, Succession, Flatdutch, 300, \$1.00; 500, \$1.25; 1000, \$2.25 postpaid. Express \$1.25, 1000. Tomato Plants—Baltimore, Stone, Matchless, Bonny Best, same price as Cabbage. Sweet Potato and Pepper plants, 500, \$2.00; 1000, \$3.25 postpaid. Quick and good service. **GUARANTEED SERVICE PLANT COMPANY**, Franklin, Va.

Additional Classified Advertising

On Page 18

HANDY ANDY Says "Here's How"

To Make Old Houses Comfortable

By Ray Inman

Old houses can be made more comfortable by overcoating with portland cement & shingles

HEY, I MAY BE OLD BUT I AINT NO HOUSE!

build window frames out 3/4" lay waterproof paper over old siding

SAY! I TOLD YOU TO BUILD THEM FRAMES OUT! NOT TEAR 'EM OUT!

AH KNOW, BOSS, BUT WHEN YO' WIFE TOOK ME FO' A BUGLAH AN' FROWED ME OUT DE WINDY, DIS FRAME JES COULDN' DO NUFFIN BUT COME RIGHT ALONG WIF ME!

for Shingle job use 24-inch creosoted, stained shingles. Lay them 10" to the weather

ASHINGLE SHOULD ALLUS LAY TEN INCHES TO THE WEATHER, IRV.

IKNOW! LOOKIT MY WIFE'S SHINGLE! IT LAID TEN INCHES O'NECK TOTH' WEATHER

for Stucco job

A. the house must be strong and solid
B. nail metal lath over waterproof paper
C. hire experienced man to do stuccoing or get details from a portland cement dealer

WILLIE, WILLIE! YOU SHOULDN'T THROW MUD AN' ROCKS AT JOHNNY JALOPI LIKE THAT

BUT DAD! I'M ONLY GIVIN' HIM A NICE STUCCO JOB!

Visits with the Editor

(Continued from Page 5)

ter, with perhaps a few extra dollars saved for the "rainy day."

If times are not too hard on the farm, so that there is money enough for the necessities and an occasional luxury, I would rather have a family of boys and girls reared under such conditions than where there is too much money to spend, and where every desire can be immediately gratified. Those who earn by hard work the good things of life best appreciate them.

* * *

The Unfairness of Tax Assessments

DEAR EDITOR:—A few words to tell you I am more than pleased with the bills passed to help the farmers, and I see no reason why they will not be of real financial help.

But there is one point I would like to have you bring out in your paper—the point of assessed value. I can take you to hundreds of hill farms in this county that will not sell for from two-thirds to one-half of the price they are on the tax rolls.

I own a hill farm of 150 acres. I tried to sell it for \$1500 for two years and was not able to get a bite. I do not think it would sell for over \$1000; perhaps \$800 would be all I could get. It is on the tax rolls at \$1950.

I have talked to the town and county assessors and all I can get is "passing the buck" to some other fellow. I use it only for sheep pasture and with the taxes as they are it makes it too expensive for that.

I can also show you town properties that cannot be bought for \$7000 and they are on the tax list at \$2000.

My claim is that an article is worth what it will sell for now and not what it was selling for twenty years ago.—R.W.D., New York.

THIS man is entirely right in what he says about assessments. The whole farm tax situation is extremely unfair to farmers and the worst thing of all is the unequal tax assessments. One reason why the true instead of the assessed valuation is used in obtaining the local tax in districts under the new school law is to equalize, so far as possible, assessments in collecting school taxes.

Farmers themselves are often to blame for unequal assessments because they hold their property at too high valuations. I know dozens of farms where, if you asked their owners to put a price on them, they would make it twice what they were worth or would sell for. You cannot blame an assessor for assessing your property on the basis of what you consider it is worth. Unfortunately, few farmers, particularly hill farmers, realize how their property has decreased in value in the last few years.

One of the things that I hope the Governor's Commission is going to work on in New York State next year is this whole problem of assessing taxes.

The Plains of Abraham

(Continued from Page 16)

the eastern part of the continent into a seething pot of fury and death.

While George the Second of England and Louis the Fifteenth of France were playing at friendship after the peace of Aix-la-Chapelle, France gasping for breath with the flower of her armies buried on European battlefields, and England with her fighting forces reduced on land to eighteen thousand men and to less than seventeen thousand on the sea, the vast colonies of the two countries; working out their own salvations, were steadily and surely and with deadly intent encroaching upon each other.

The stage was already set for the writing of the bloodiest and most picturesque pages in American history. Southward from the Richelieu were the bitterest of all the white men's enemies, the warriors of the Six Nations, and

northward, sweeping east and west through the Canadas, were the forty scattered tribes who bore allegiance to New France. Behind these savage vassals, on one side, were eleven hundred thousand English colonists holding the sea-coast lands from Maine to Georgia, and on the other less than eighty thousand souls, counting women and children as well as men, to defend and hold the illimitable domains of New France, which reached from the upper Canadas to the Gulf of Mexico and from the Alleghanies to the Rocky Mountains.

Of this alarming disparity in power of fighting men, and of the pitiless scourge which he swore would some day sweep through all the country of Lake Champlain and the Richelieu, Hepsibah Adams had spoken at length but with small effect on Henri Bulain.

"Let war come if it must," said Henri. "The heart of New France is set behind an impenetrable wall of rock and forest, and with these ramparts in our favour, eighty thousand will be a match for the million English if they come this way. But why talk of war, Brother, when there is peace and plenty and a beautiful world about us to enjoy? Let kings fight or play, just as they will, but as for me, should fighting chance to come—why, I shall be a friend to both sides and strike at neither. For no matter what cause should bring about the strife, I could not strike at the people of my Catherine's blood, nor would she have me turn against my own. So why move from here? This is a glorious place. It is neutral ground, and we, being neutral, are fitly placed here. Oneidas and Mohawks have eaten under our roof as well as Hurons and Algonquins, and when deadly enemies such as these meet thus on common ground, what cause have we for fear?"

A light of pride glowed in Catherine's eyes as she listened to her husband's words, and she added:

"Henri loves the Indians, and I have grown to love them, too. They are all our friends."

"Friends!" sniffed Hepsibah. "Henri, it is because of Catherine and Jeems that I call you a fool. Take them where this danger does not hang day and night along the edges of the frontiers. Take them to the St. Lawrence, if you will, or bring them south into Catherine's country. But do one or t'other, for God's sake, or the day will come when Christ Himself cannot save you," and his voice shook with earnestness.

"There will be no war," insisted Henri stubbornly. "England and France have bled themselves white on Continental battlefields, and the peace which was signed only last October will surely not be broken again while you and I are living, for Hanover and Austria have had their fill, as well as the others, and are like two dead men on their backs."

"That is right," nodded Catherine, with a shudder. "I think all fighting is over for many years."

Hepsibah blew out his cheeks like a balloon, then sucked them in with a smack. It was a childhood trick he had never outgrown, a way of telling the world he was fully out of temper, and remembering it as such Catherine smiled, though her fingers twined uneasily in her lap.

(To be Continued Next Week)

AMERICAN AGRICULTURIST is printed at Poughkeepsie, but our business and editorial offices are at 461 Fourth Avenue, New York City. Please direct all editorial and advertising mail to New York City. If you send it to Poughkeepsie, it will be delayed in answering.

Additional Classified Advertising

SEEDS—NURSERY STOCK

SEND NO MONEY: Frost proof Cabbage plants including Copenhagen and Golden Acre, Bermuda Onion plants, 500, 65c; 1000, \$1.00 plus postage. EUREKA FARMS, Tifton, Ga.

CABBAGE PLANTS, best kinds \$1.25 per 1000. Lettuce, Onion, Beets \$1.00, 1000. Peppers all kinds \$3.00, 1000. Cauliflower \$3.50, 1000. Egg Plants \$4.00, 1000. Tomato all varieties \$2.00, 1000. All ready for field. Send for list. J. C. SCHMIDT, Bristol, Pa.

MILLIONS OF OPEN field tomato plants, Baltimore, Stone, Marglobe, Bonnie Best, \$1.00-1000; 5000, \$4.50. Ruby King Pepper plants \$1.50-1000. Porto Rican potato plants \$1.50-1000. Cabbage plants 75c-1000 roots mossed, safe arrival guaranteed. SIMS POTATO PLANT CO., Pembroke, Ga.

TOMATO PLANTS: Six varieties. By express \$1.50 thousand. By prepaid mail 500, \$1.50; 1000, \$2.50. Sweet Peppers by prepaid mail 100, 75c; 200, \$1.25; 500, \$2.50; 1000, \$4.50. By express \$3.00 thousand. Also Cabbage plants: All varieties, including Copenhagen and Golden Acre, \$1.00 thousand and charges. COLEMAN PLANT FARMS, Tifton, Ga.

CAULIFLOWER PLANTS. Ready. Finest strains of seed. We grow only first grade plants. Catskill Mountain, Snowball, Extra Early Verburt, \$4.50 per 1000; 500, \$2.50; 300, \$2.00. Cabbage plants. Ready. Copenhagen Market, Early Jersey Wakefield, Golden Acre, Enkhuizen Glory, Succession, Danish Ballhead, \$2.00 per 1000; 500, \$1.50. 31 varieties selecting strains of seed. F. W. ROCHELLE & SONS, Chester, New Jersey.

DANISH BALLHEAD, Early Copenhagen Market and Red Cabbage plants, \$2.00 thousand. C. R. STAFFORD, Route 3, Cortland, N. Y.

VERY LARGE ASPARAGUS roots, 6 years old; bearing size, Washington, \$2.75 per dozen; \$16.00 per 100. HARRY E. SQUIRES, Hampton Bays, N. Y.

PORTO RICAN SWEET Potato Plants. Better quality, direct to your mail box. \$2.00 thousand, cash with orders. BULLARD BROS. PLANT FARM, Baxley, Ga.

4,000,000 SWEET POTATO PLANTS, Yellow Jersey Big Leaf, and Up River \$1.50 per 1000, shipping paid. Canna Bulbs seven kinds \$1.25 per 100. C. E. BROWN, Bridgeville, Del.

GLADIOLUS BULBS—My famous beautiful Rainbow Collection of thirty all different, blooming size, \$1 postpaid. Plant now. 36 page illustrated catalog free. HOWARD GILLET, Specialist, Box J, New Lebanon, N. Y.

MILLIONS NORTHERN GROWN Hardy Cabbage, Cauliflower Plants. June, July delivery. Best strains Danish seed, chemically treated. Golden Acre, Jersey, Copenhagen, Enkhuizen, Surehead, Succession, Savoy, Flatdutch, Ballhead, Red. Postpaid: 200-65c; 500-\$1.25; 1000-\$2.25. Collect: 5,000-\$7.50. Snowball Cauliflower: 50-40c; 200-\$1.00; 500-\$2.25; 1000-\$3.75. Transplanted Tomatoes: 30-45c; 100-\$1.00; 1000-\$10.00. Bermuda Onion: 200-60c; 500-\$1.00; 1000-\$1.75. PORT MELLINGER, Dept. AA, North Lima, Ohio.

50 MILLION out door grown vegetable plants—Cabbage: Copenhagen, Ballhead, Wakefield, etc., 300, \$1.00; 500, \$1.25; 1000, \$2.00 prepaid. 10,000, \$10.00 expressed. Tomato Plants: Marglobe, Bonnybest, Baltimore, Stone and Matchless, 300, \$1.50; 500, \$2.00; 1000, \$3.00 prepaid. 10,000, \$15.00 expressed. Sweet Potato and Pepper Plants: 300, \$1.25; 500, \$2.00; 1000, \$3.25 prepaid. 10,000, \$20.00 expressed. Shipping capacity 1/2 million daily. Day and Night service. Our plants must please you or money cheerfully refunded. J. P. COUNCILL COMPANY, Franklin, Va.

VEGETABLE PLANTS—Ready Now. Cabbage Plants, Copenhagen Market, Enkhuizen Glory, Succession, All Seasons Early Summer, Danish Ballhead and Early Flat Dutch, \$2.00 per 1000; 5000, \$9.00. Rerooted Plants \$2.25 per 1000; 5000, \$11.00. Cauliflower Plants, Early and Late Snowball from prize winning strains \$4.50 per 1000; 5000, \$20.00. Tomato and Pepper Plants, Transplanted all varieties \$8.00 per 1000. Potted \$30.00 per 1000; \$3.50 per 100. Egg Plant, Transplanted \$12.00 per 1000. Black Beauty, potted \$3.50 per 100. Send for free list of all plants. PAUL F. ROCHELLE, Morristown, N. J.

FARMS FOR SALE

VILLAGE FARM 100 acres, 14 milk cows, horses, 40 hens, equipment, \$6500, \$1000 down, \$250 yearly. Write MR. DOUGLAS, Herkimer, N. Y.

FOR SALE—120 acre farm situated on improved road. Near school, 2 1/2 miles from town. Good house and chicken house, extra good barn. Plenty of water. Timber for fuel. Will carry 25 head of stock. Easy terms. Will discount for cash. A money maker for the right man. Write or phone L. GLOVER, E. Randolph, N. Y.

FOR SALE—Ideal Dairy Farm in Excellent, old dairy section near Greene, Chenango County, N. Y., 150 acres, some equipment, price low to quick buyer to settle estate. Address MISS BERTHA CARTER, care Postoffice, Greene, N. Y.

LIVE GOOD WHILE MAKING A GOOD LIVING ON THE DEL-MAR-VA PENINSULA. Low-priced, productive land, town and waterfront homes. Three to ten hours to largest Eastern markets by motor or Pennsylvania Railroad. Very little snow and freezing. Finest concrete highways. Good schools, low taxes. Handsome descriptive booklet, FREE. Address 164 Del-Mar-Va Building, Salisbury, Md.

SACRIFICE 6 ACRE FARM in chicken belt. Vineland, N. J. Information JACKSON, 522 W. 112 St., N. Y.

FOR SALE Taggarts Poultry farm, Vineland, N. J. Ten acres, New bungalow, all conveniences.

HELP WANTED

WANTED: Married working dairyman July 1st in the Animal Husbandry Department, Cornell University. Will have direct charge of the feeding, breeding and management of all dairy cattle and the production of milk. Apply in own handwriting giving full details of training and experience. State salary expected with no perquisites. House will be provided at twenty-five dollars per month rent. DEPT. OF ANIMAL HUSBANDRY, Cornell University, Ithaca, N. Y.

SITUATIONS WANTED

DO YOU NEED FARM HELP? We have Jewish young men, able-bodied, some with, but mostly without experience, who want farm work. If you need a good, steady man, write for an order blank. Ours is not a commercial agency. We make no charge. THE JEWISH AGRICULTURAL SOCIETY, Inc., Box A, 301 E. 14th Street, New York City.

CORN HARVESTER

RICH MAN'S Corn Harvester, poor man's price—only \$25.00 with bundle tying attachment. Free catalog showing pictures of harvester. PROCESS CO., Salina, Kans.

CLIPPING MACHINES

CLIPPED COWS mean clean milk.—Improve the health of cattle, horses, mules, etc.—use a "Gillette" Portable Electric Clipping Machine. A postcard will bring you prices and interesting information. GILLETTE CLIPPING MACHINE CO., Dept. A-1, 129-131 W. 31st Street, New York City.

PRINTING—STATIONERY

EVERYTHING PRINTED! FRANKLIN PRESS, Milford, N. H.

500 PRINTED ENVELOPES, \$1.50 postpaid. Other stationery, cards, tags, butterwrappers, reasonable. HONESTY PRESS, Putney, Vermont.

MISCELLANEOUS

WANTED USED BAGS any quantity and grade. Highest prices and freight paid. HOFFMAN BROS. BAG CO., 39 Gorham St., Rochester, N. Y.

USED CIVIL WAR ENVELOPES with flags, designs, etc., \$1 to \$15 paid. Other stamps on envelopes before 1871 bought. Three-face lamps and old glassware bought. W. RICHMOND, Cold Spring, N. Y.

AVIATION—Earn while learning aviation, \$18 to \$35 per week while under instruction in our factory and shops. Call or write for information without obligation. AERO CORPORATION OF AMERICA, Department DA, Plankinton Building, Milwaukee, Wis.

COTTON DISCS for your milk strainer, 300 sterilized 6 inch discs at \$1.30, postage prepaid. HOWARD SUPPLY CO., Box 30, Canton, Maine.

RUBBER TUBING for all makes of milkers. Attractive prices. Cotton strainer discs (sterilized) 300 in package 6 inch \$1.40, 6 1/2 inch \$1.60 Postpaid prepaid. Tubing and cotton discs very highest quality obtainable anywhere. ANDERSON MILKER CO., Jamestown, N. Y.

BOXWOOD TREES, 200 years old. C. T. SMITH, Croton, Virginia.

FOR SALE, Sharples Motor-Milker used less than 1 month. In excellent condition. Price \$125.00. DANIEL WILBOUR, Little Compton, Rhode Island.

KODAK FILMS DEVELOPED 5c roll. Prints 3c each. Trial offer. Beautifully mounted 8x10 enlargement 40c. Overnight service. YOUNG PHOTO SERVICE, 409 Bertha St., Albany, N. Y.

KEOUGH'S—Foul remedy. For fouls or hoof rot. Used by farmers for over 25 years. Satisfaction or money back. Get a bottle at your druggist or feed dealer or send one dollar for a bottle. KEOUGH PHARMACAL COMPANY, Box A, New Berlin, N. Y.

HONEY. Fine quality clover Autumn flower blend \$5.00 per 60 lbs. J. G. BURTIS, Marietta, N. Y.

AGENTS WANTED

BIG OHIO CORPORATION wants county manager. \$50 weekly commission. Earnings start immediately. Good for \$5000 yearly. We furnish everything, deliver and collect. Capital or experience unnecessary. Fyfe Co., 1885 Fyfe Bldg., Dayton, Ohio.

AGENTS: \$16 day and New Buick Auto Free. Sell groceries. Over 400 items used daily every home. Steady all year job. Your own groceries about half price. Send for samples. HARLEY COMPANY, Dept. H-2265, Dayton, Ohio.

WANTED TO BUY

WANTED—HAY, GRAIN, Potatoes, Apples, Cabbage, Carloads. Pay highest market prices. THE HAMILTON CO., New Castle, Pa.

WANTED TO BUY old bags. We pay excellent prices. Write for prices. We pay freight. OWASCO BAG CO., Rochester, N. Y.

WOMEN'S WANTS

SPECIAL VALUE, while they last. 6 Piece Ruffle Cottage Sets Neatly made of good quality White Muslin. Size of Lower Curtain 33x30. Size of Upper Curtain 44x31, 3 inch Ruffle. Tiebacks. Hemmed and Headed per set 50c. 6 Turkish Towels size 20x36 splendid Quality Double Loop Pure White unhemmed. Postman \$1.00 plus postage. Silks or velvets, large package 25c postpaid. NATIONAL TEXTILE CO., 95 B Street, South Boston, Mass.

TOBACCO

LEAF TOBACCO—Good sweet chewing, 3 lbs., 90c; 5, \$1.25; 10, \$2.00. Smoking, 3 lbs., 60c; 5, 90c; 10, \$1.50. UNITED FARMERS, Mayfield, Ky.

CIGARS FROM FACTORY—Trial 50 large Perfectos postpaid \$1.00. SNELL CO., Red Lion, Pa.

GUARANTEED HOMESTUN TOBACCO. Chewing, 5 lbs., \$1.50; 10-\$2.50. Smoking, 10, \$1.75. Pipe Free. Pay Postman. UNITED FARMERS, Bardwell, Ky.

AMERICAN AGRICULTURIST Classified Ads get results. Try one.



The Service Bureau

A Department Devoted to the Interests, Welfare and Protection of A. A. Readers



Where Does "Charity" Begin?

"Can you give us any information about an organization called 'Radio Activities for Shut-Ins and Needy Blind'. They recently solicited over the telephone for a magazine and told that part of the subscription price goes for the benefit of shut-ins. Will you please tell me just exactly what is done for them?"

OUR subscriber asks a logical question and we are glad to answer so far as we have been able to get information. After they have the facts concerning this organization, our subscribers will be able to decide for themselves whether the organization is primarily interested in providing radios for shut-ins or in getting subscriptions to a magazine. The organization called "Radio Activities for Shut-Ins and Needy Blind" was incorporated under New Jersey law on January 22, 1929. This organization advertises for agents who, we are informed, are then made members of "Radio Activities for Shut-

your help, and cannot speak too highly of your paper.

OUR subscriber originally wrote us that he had consigned some fruit to a commission man, and had not received returns for it. On investigation, it developed that the commission man had never received the fruit, and inasmuch as the transportation company could not prove delivery, they sent a check to our subscriber to settle the claim. We were very glad to be of assistance in the matter.

A Question of Thrift

WE are thoroughly in sympathy with the efforts of our readers to be thrifty in buying. Taken as a group we believe that they get as much for their money as anyone. There is a point, however, where thrift stops. Perhaps this point comes where goods are offered at a price that is way below the usual price for the same product. We have in mind the problem of buying clothes. Recently we have had a heavy correspondence from readers who have ordered made-to-measure suits or overcoats. There are a few such companies that are reliable and many that are not.

A common type of experience in ordering from the latter variety is as follows: The suit or overcoat is ordered and a deposit which represents the agent's commission is made. The suit or coat is received and found to be a poor fit or the material is different than that ordered. The clothes are returned after which it is difficult or impossible to get any word from the company. If they are sent C. O. D. our subscriber gets a note saying that the company does not accept C. O. D. packages and that the charges must be released before the package will be ac-

cepted. If this is done, there is further difficulty in getting a refund. In most cases the company demands the opportunity of sending another suit which proves no more satisfactory than the first.

If a refund is finally secured it lacks the initial payment made to the agent because, of course, the company never

We Are Glad to Help

I WANT to say that I have received a check for \$20.50 from the ———, and the matter is satisfactorily closed, thanks to the efforts of your Service Bureau. I am a thousand times obliged to you for this service.

received this amount. In some cases the buyer is told that the returned suit was never received. On two such cases the A. A. Service Bureau has proved delivery by the Post Office.

Several companies do business under two names and two addresses. It appears to an impartial observer that they operate with the intention of tiring out the purchaser until he is willing to accept anything, if indeed they do not intend deliberately to swindle him.

As we have already said, some clothing houses selling through house to house agents are reliable. The A. A. Service Bureau will be glad to report to any subscriber concerning the reliability of any particular concern.

Duplicate Order Sent

I am dropping a note to let you know that the ——— company have sent us the order about which we wrote you. I wish to express my sincere thanks for your help.

THE original complaint from our subscriber was concerning an order which was not received. It is impossible to be positive whether the error was on the part of the company, or whether the package was lost, but at any rate, the company duplicated the order as soon as the situation was called to their attention.

Some Questions Car-Owners Ask Us

"It is necessary for us to drive our cattle across an improved road in order to get them in part of our pasture and frequently we find that motorists are very unpleasant when it is necessary for them to stop. What are the legal rights of cattle on the highway?"

YOU have a right to drive the cattle across the road and drivers of cars are required by law to exercise due caution or to stop in case you signal them to do so. They are required by law to remain stationary as long as necessary in order to allow the cattle to pass. A violation of this is a misdemeanor and in case injury is done to the animals you should be able to recover from motorists by legal action. This is, of course, assuming that he is financially responsible.

* * *

We have heard that the driver of a car is liable in case he invites a friend to ride with him and in case the friend is injured as a result of an accident. Is this true?

AS a general proposition, anyone riding with you can collect damages for injuries sustained, only in case they can prove that you were negligent in operating the car. In other words, if the accident is a result of unavoidable circumstances, they cannot collect from you for injuries they have sustained.

* * *

Under what circumstances can an operator's license or a registration certificate be revoked and how can he get it restored?

AN operator's license or a registration certificate can be revoked by a number of officers, including police officials, judges or the Commissioner of Motor Vehicles. The license must be revoked following the conviction of the driver for a number of offenses, including the operation of a motor vehicle while intoxicated, leaving the scene of an accident without reporting, making

a false statement in application for registration and a third or subsequent conviction for reckless driving.

In addition to this, a license may be revoked for a physical or mental disability or for habitual violation of the highway or traffic laws or for gross negligence in the operation of an automobile. On occasions where the suspension is not mandatory the holder of the license or certificate is entitled to a hearing to establish the facts, although the license may be temporarily suspended prior to the hearing. The suspension of a license or registration certificate cannot be for longer than six months but where the revocation of a license is required by law no new license will be issued for at least six months. Where the revocation is permissive; that is, not required by law, a new license will not be issued in less than thirty days and not then except at the discretion of the Commissioner of Motor Vehicles after an investigation or hearing.

* * *

"What is the law regarding the loaning of a car and who is responsible in case of accident?"

IN Pennsylvania the courts have ruled that the owner of an automobile who loans it to a friend, is not liable for damage or injury caused by the negligence of the operator.

In New York State the owner of a motor vehicle is liable for damages done as a result of the negligence of the operator of the car so long as the driver is legally using the car with the permission of the owner.

* * *

How can we secure another copy of our operator's license when the original has been lost?

A DUPLICATE of any lost operator's license may be obtained at any county clerk's office by signing an affidavit and paying the fee of one dollar.

Just Imagine
getting your
crops to market
two weeks ahead!



EVERY planter recognizes the importance of earlier crops—crops that can be shipped to a WAITING market rather than to a glutted one. And that is one of the reasons why many planters are using Gator-Hide Mulch Paper this year.

For Gator-Hide not only stimulates plant growth—not only produces BIGGER CROPS—not only reduces weeding to an absolute minimum—but it produces EARLIER CROPS.

The answer is that Gator-Hide Mulch Paper increases soil temperature and conserves soil moisture, promoting continuous bacterial activity and freeing nitrous food matter for plant life both night and day. It practically insures twenty-four hours of growing each day!

Write for your free copy of "The Miracle of Mulch Paper" today. Let it give you some real, astounding facts concerning its use. And if your regular dealer is not yet stocking Gator-Hide Mulch Paper, please write his name on the coupon.

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New York, N. Y.

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Mulch Paper Division
Room 1007, 106 East 42nd St., New York, N. Y.

Please send your booklet, "The Miracle of Mulch Paper", and tell me where I can secure a supply of Gator-Hide Mulch Paper in this territory.

My dealer is

My name

My address

Commission Paid on Sales

I have been taking orders for the ——— nursery company, and for some reason have not received my check for commission. I would appreciate having you look this up for me.

WE found that our subscriber had changed his address, without notifying the company, and upon investigation, they were very glad to forward him the check for the commission due. Even though the fault was our subscriber's and not the advertiser, we were very glad to be of assistance in straightening out the matter.

Receives Check for Fruit

I have just received a check from the transportation company, for the fruit which was lost. I am very thankful for

The Question Box



Varieties for Pollinating McIntosh

What varieties are recommended for pollinating McIntosh?—W. M., New York.

THE Delicious is an excellent variety for pollinating McIntosh and the Cortland is another good variety, although McIntosh trees do not pollinate Cortland trees as well as Cortlands pollinate McIntosh. However, the Cortland has a habit of blossoming practically every season sufficiently to furnish pollen. The Wealthy is a good variety to pollinate McIntosh but it does not blossom every year. A good plan to follow is to set out three rows of McIntosh, then one row of one of the above varieties for pollination.

Duchess Not Recommended For Top-Working

We have a number of Duchess of Oldenburg apple trees and are considering the advisability of top-working them into varieties which are more profitable. Is Duchess a good variety to top-work and what varieties would you suggest which would give us best results?

EXPERIENCE has shown that Duchess makes a poor stock for top-working. For this reason we question the advisability to try and graft in new varieties. Duchess is one of the poor paying varieties but in some cases it is possible to work up a fairly profitable local market. If this is impossible the best thing is to cut down the trees rather than to attempt to top-work them into other varieties.

Transplanting Cucumbers

Is it possible to successfully transplant cucumbers?—D. W., New York.

SOME plants are much easier to transplant than others and cucumbers are among those that need particular care. Yet it is perfectly possible to transplant them in order to get an early crop. Probably the best plan is to use peat flower pots, paper bands or veneer bands so that the young plants can be transferred without disturbing the root system at all. When cucumber plants are once stunted, they never seem to recover. They also seem to be injured by holding them in pots or baskets or boxes after the root systems have completely filled them. For this reason it is not wise to plant the seeds too early. In other words, cucumbers should be transplanted just as soon as they have reached the right stage.

Using Salt on Poorly Cured Hay

Is there any advantage in putting salt on the hay when it is put in the mow before it is thoroughly cured?—F. B., New York.

SO far as we know, there have been no experiments on this; however, authorities recommend it on the theory that it does no harm, and may do some good. It is probable that it reduces mold if the hay is put in slightly wet, and there is some evidence that the leaves do not shatter as they do where salt is not used. It is not advisable to use more than 12 quarts of salt to a load of hay.

Top-dressing Alfalfa

Is it advisable to top-dress alfalfa sod with farm manure?—D. G., New York.

MANURE is not an ideal material for top-dressing alfalfa, due to the fact that nitrogen and potash are not particularly essential for the crop. Phosphorus is the most necessary element for alfalfa, and at the same time the nitrogen contained in the manure will promote the growth of grass and weeds. Where winters are severe, the

top-dressing of manure does help to protect against frost injury. Otherwise, the alfalfa can be top-dressed with 400 or 500 pounds of 16% acid phosphate with good results. The time of application is not especially important, but early in the spring would be as good a time as any.

Etching Name on Tools With Acid

"Some years ago I saw a recipe for marking one's name on farm tools, using wax and some kind of acid. Can you give us these directions?"—B. L., New York.

TO mark one's name or initials on steel tools or other metal objects, first warm the tool and then coat with beeswax or paraffin so as to have a thin, smooth coat when cooled. Then with an awl, a sharpened nail, or something similar scratch in the wax the letters to be etched, being sure that the mark goes clear down to the metal. Then brush or drop on some commercial nitric acid and let it remain from 15 to 30 minutes, wash thoroughly, warm and wipe off the melted wax, and scrub with a rag dipped in water in which some soda has been dissolved.—I. W. D.

New York Law on Retesting Accredited Herds

MANY subscribers are writing us asking when the Kirkland Law, providing that the expense of testing accredited herds should be borne by the State, goes into effect. Many believe that this law goes into effect immediately, but we are informed by the New York State Department of Agriculture and Markets that the law does not go into effect until January 1, 1930. In fact, no appropriation was made by the legislature so it may be even later before money is available to pay costs of retesting.

We believe that the state should bear the cost and feel that the new law is a distinct victory. Naturally, we regret that it does not go into effect immediately and that our readers who have tests due on accredited herds between now and January 1, will be obliged to stand the expense of testing as they have in the past.

Grinding Feed With Electricity

"Which is the better adapted for electric motor drive, a hammer mill or a burr mill for feed grinding?"

THE hammer mill is usually recommended because it is essentially a high speed machine, the same as the electric motor, and it therefore does not require much difference in pulley size, or the motor may be directly coupled to the hammer mill shaft. The hammer mill is not harmed by stray iron or stones in the feed, and it is not otherwise subject to damage or getting out of adjustment.

Feeding Cows on Pasture

In your opinion, does it usually pay to feed grain to cows while they are on pasture?

WE believe it pays to feed good cows heavily the year round. In addition to the increase in milk secured during the summer, there are at least two other advantages. The cows will maintain production better during the fall and winter and they will also produce better during the next lactation period. It is impossible for a cow to eat enough grass to maintain heavy production. She must either produce less milk or else lose body weight.

Be sure you have enough room in your brooder house for your chicks. Overcrowding results in heavy losses.



The good low-priced tire

The Buckeye tire is built by Kelly-Springfield workmen in the Kelly-Springfield plant.

There is no better low-priced tire on the market.

If you don't need the *extra* mileage of a regular Kelly, you'll find that Buckeyes compare favorably with many tires sold at higher prices.

Try them and prove it for yourself.

"Kelly dealers everywhere—there must be one in your town"

KELLY-SPRINGFIELD TIRE COMPANY
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BUCKEYE TIRES

Built by Kelly-Springfield



SLUG-SHOT

USED FROM OCEAN TO OCEAN FOR 50 YEARS
Destroys Mexican Bean Beetle and Army Worm

Saves Currants, Potatoes, Cabbage, Melons, Flowers, Trees and Shrubs from Insects. Put up in popular packages at popular prices. Write for free pamphlet on Bugs and Blights, etc. to

Hammond's Paint and Slug Shot Works Beacon, New York

FARM SUPPLIES - Information About Them

WE frequently get letters from subscribers who ask where they can buy certain equipment or supplies. It is good business when you are in the market to get all the information possible before buying. Consequently, we have made arrangements to forward to you, information, catalogues and prices on such equipment or supplies as you may need.

In taking advantage of this service you are under no obligation either to us or to the manufacturer. Just clip this coupon, mark the items in which you are interested and mail to us.

AMERICAN AGRICULTURIST, 461 Fourth Ave., New York, N. Y.
We are interested in the items checked below and would like to have you send us catalogues or other information.

Acetylene Lights	Guns & Ammunition	Seeds
Barn Ventilators	Harness	Seed Disinfectants
Bathroom Equipment	Incubators	Separators (Cream)
Brooders	Mail Order Catalogs	Silos
Concrete Construction	Milking Machines	Spray Materials
Dairy Feed	Nursery Stock	Sprayers
Dynamite	Paint	Tillage Implements
Ensilage Cutters	Potato Growing	Tires
Farm Electric Light	Machinery	Tractors
Plants	Poultry House	Wagons
Feed Cutters	Equipment	Wall Paper
Fences	Poultry Feeds	Washing Machines
Fertilizer and Lime	Pumps	Water Systems
Flowers	Reapers and Mowers	
Furnaces and Stoves	Roofing Materials	
Gasoline Engines		

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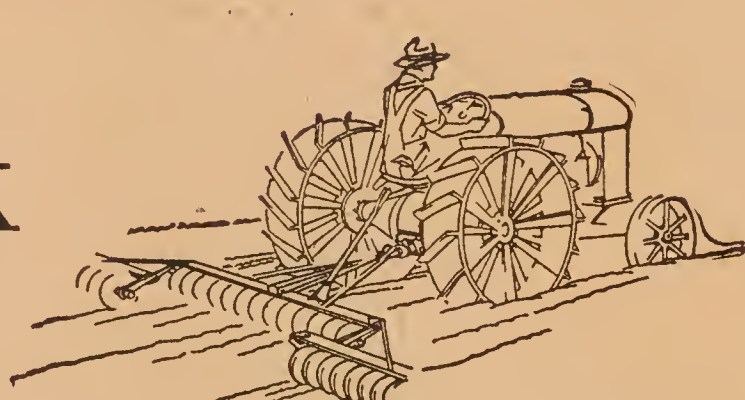
Beauty Spots of the East—The gorge below the falls of Bash Bish Brook in Taconic Park in Eastern New York—See Editorial.

National Dairy Show to be Big Event—Page 3

the New Mobiloil

will save you money

the year 'round in car,



truck

and tractor operation

1. The New Mobiloil does a *better* lubricating job because it is *made* for today's high-speed engines and heavy-duty farm machinery. Regular use of the New Mobiloil commonly cuts tractor repair bills in half.
2. The New Mobiloil gives a really *noticeable* increase in power. Hook a gang-plow on your tractor and watch how it takes the hard places that used to make it labor.
3. The New Mobiloil will give you at least 20% more oil service. You may find that hard to believe, but this remarkable New Mobiloil has repeatedly bettered that figure in tests with other high-quality oils recommended for farm use.

4. You can make a substantial saving by buying the New Mobiloil in the practical 55-gallon and 30-gallon drums with handy faucets. This brings the price of the New Mobiloil down to within a few cents per gallon of ordinary oil.

The Nebraska state law requires a demonstration of a tractor to qualify for operation in that state. Records of all these tests to date show that Mobiloil has been used in 91% of the tractors approved. This is clear evidence of how important Mobiloil is to the manufacturers of tractors.

Think over these facts about the New Mobiloil, get your dealer's price on a 55-gallon drum, and then figure it out for yourself. It's just plain, commonsense economy to buy oil that reduces idle time for repairs or breakdowns. Made by the oldest and largest specialists in lubrication.

VACUUM OIL COMPANY
Makers of high-quality lubricants for all types of machinery

the New



Mobiloil

Make this chart your guide

It shows the correct grades of Gargoyle Mobiloil for certain prominent cars. If your car is not listed here, see at your dealer's the complete Mobiloil Chart, which recommends the correct grades for all cars, trucks, tractors, etc.

NAMES OF PASSENGER CARS	1929		1928		1927		1926	
	Engine		Engine		Engine		Engine	
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
Auburn, 6-66.....	BB	Arc.	BB	Arc.	BB	Arc.	A	A
" 8-cyl.....	A	Arc.	A	Arc.	A	Arc.	A	A
" other models	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Buick.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Cadillac.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Chandler Special Six	A	Arc.	A	Arc.	A	Arc.	A	Arc.
other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Chevrolet.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Chrysler, 4-cyl.....	BB	Arc.	BB	Arc.	A	Arc.	A	Arc.
" Imperial.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
De Soto.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Dodge Brothers.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Durant.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Erskine.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Essex.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Ford, Model A.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" Model T.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Franklin.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Gardner, 8-cyl.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
" other models	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Graham-Paige.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Hudson.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Hupmobile.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
La Salle.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Marmont, 8-cyl.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Moon.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Nash, Adv. & Sp. 6.	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Oakland.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Packard.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Peerless, 72, 90, 91.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
" other models	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Plymouth.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Pontiac.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Reo.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Stearns Knight, 6-80.	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
" other models	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
Studebaker.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.
Velie, 8-cyl.....	BB	Arc.	BB	Arc.	BB	Arc.	BB	Arc.
" 6-cyl.....	A	Arc.	A	Arc.	A	Arc.	A	Arc.

School and Road Questions

I understand that the new school law states that \$1300 may be spent this year for running a one-room district school. Our school is about ready to close, and we have only spent \$1100. Will the rest of the \$1300 go back to the State?

THE State will apportion to your district only on the basis of what you spend. For example, if your four-mill tax on your true valuation raises \$400 locally and you spend \$1,100, then the State will apportion the difference, or \$700; if you spend \$1,200, you will receive \$800 from the State; and if you spend the full \$1,300, you will receive \$900 from the State.

In order to draw on this appropriation, the money must be spent during the present school year ending August 1, this summer, but you will not receive the money from the State to cover this year's expenses until the apportionments are made next year.

Suppose our regular expenses will take only \$1100. Is there any way we could use the extra \$200 so that we would get it from the State?

There certainly is. You can use the difference to paint your school-house, put in new blackboards, new seats, or to replace any worn-out equipment. Great care should be taken not to spend money extravagantly or foolishly, but hundreds of district schools have a wonderful opportunity between now and August 1 this year to put their equipment and their building in good repair without a cent extra of local taxes.

A trustee may spend \$50 without special vote of the district; a district superintendent may order him to spend \$200 more. This money will be refunded by the State next year up to a total of \$1,300 for the entire year's expenses of your school. If you are a school patron, talk with your trustee; if you are a school trustee, be sure to discuss this matter with your district superintendent of schools. Be sure also to follow his advice in order to have the whole transaction legal and approved.

Is there any difference between centralization of schools and consolidation of schools?

The term "centralization" usually applies to the Cole Central School Act in New York State, which is a consolidation of districts and of school administration, but not necessarily a consolidation of schools themselves. Under the Central School Act, the taxable unit is enlarged from each of the small districts to one large district. Instead of a trustee for each small district, there is a board of education for the one large district.

But the small schools themselves cannot be consolidated under this act unless each district votes separately to close its school. The law provides that the people in each district may keep their school open for the children up to and including the sixth grade. Therefore, there may be no school consolidation under the Centralization Act.

But a consolidation, on the other hand, has nothing to do with the Central School Act and is made legal under Articles 128-129 of the Education Law by giving school superintendents the right under certain conditions to consolidate two or more schools. The school superintendent's decision may be appealed by the people to the State Commissioner of Education.

How can I get a refund for the gasoline tax I have paid for gasoline used on my farm?

Refunds are given on gasoline consumed otherwise than in the operation of motor vehicles on the highways of New York State. Refunds are given on gasoline, for example, used in boats, road rollers, tractors used exclusively for agricultural purposes, vehicles run on rails or tracks, aeroplanes, stationary engines, industrial purposes, etc.

When you buy gasoline for other than road purposes, be sure to get a receipt for money paid. On the refund blanks you will be asked for the following information: date of purchase, from whom purchased, amount purchased, purpose for which non-taxable gasoline is used, and the amount so used. So be sure to set down this information when you buy gasoline.

Write to the Department of Taxation

(Continued on Page 6)

National Dairy Show to Be Big Event

A.A. Excursion Train an Opportunity of a Life Time

MANY of the interesting letters that have come to us asking us about the AMERICAN AGRICULTURIST dairy excursion train to St. Louis have also asked for more information about the National Dairy Show itself, which is to be held this year in St. Louis, from October 12-19.

The National Dairy Show was started by a group of dairymen from various sections of America twenty-three years ago in Chicago with some two hundred dairy animals. Since then it has grown steadily and has been held in many different cities of the country, including Springfield, Massachusetts, in 1916, and Syracuse, New York, in 1923. This annual gathering of the dairy industry of America has done much to increase the interest in and knowledge of milk production and marketing, and has come to be an event to which thousands of leading dairymen look forward each year.

Southern Dairying Increasing

In all of the twenty-three years, the most interesting and the best exhibits took place when the show was held at Memphis, Tennessee, two years ago. Farmers from all parts of Dixie, and particularly from the Southwest, showed a great revival of interest in the whole dairy business, and they came out to the show at Memphis to learn what was latest and best in the production and marketing of milk. Great train loads of southern dairymen

rolled in to Memphis with bands playing and flags flying, and it was hard to realize that all of the interest was centered upon the good old dairy cow.

Probably the reason why the permanent home of the National Dairy Show has now been located at St. Louis, on the edge of the South, is the fact that southern farmers and dairymen are becoming so much interested in the business and attend the exhibitions of dairy cattle in such large numbers.

A Crisis in Eastern Dairying

This interest in the dairy business of the farmers from Dixie is also a reason why the dairy-

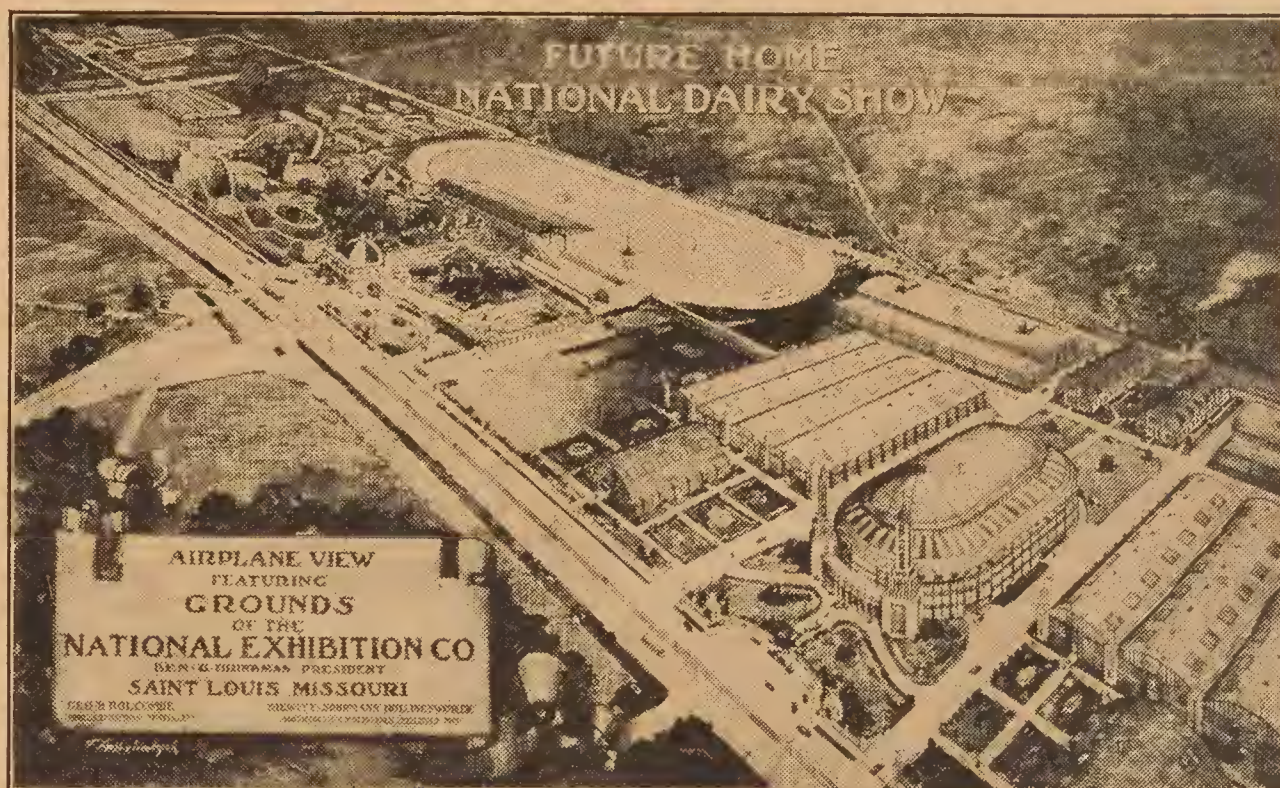
men of the East should be on their toes to increase their knowledge of the production and marketing of dairy products. During the past two generations, eastern farmers have had to stand by and watch many of their old-time farm enterprises leave the East to go West. New York was once a great sheep state, but the West took up the business and New York could not compete successfully. New York is still a great fruit state, but it has to meet more competition now than ever from fruit growers of other sections of the country. So it is with many of our other farm crops. We no longer have a monopoly on our markets.

Now we have come to a crisis in the milk business. Shall we as eastern dairymen continue to control our eastern markets, or will this business go west also? The answer lies largely in our own hands. New York dairymen are in a position where they may now highly resolve that the West or the South shall not steal our chief farm business, that is, dairying, without a fight.

A Chance to Learn About Western Milk

The first step in such a fight to keep our New York milk shed intact is information; it is to learn what our competitors from other sections are doing. That is why the National Dairy Show exhibits and the gathering from all parts of America should be

(Continued on Page 8)



The How, When and Why of Cultivation

Weed Control the Principal Benefit--Deep Stirring May Do Damage

FOR the next month or two one of the most important jobs in AMERICAN AGRICULTURIST territory will be the control of weeds in cultivated crops. It sometimes seems, particularly in a wet season, that the weeds grow twice as fast as the crop itself. It is remarkable, though, how a crop will recover from a discouraging start if weeds have been kept down until warm weather comes. Two fields may be about equally advanced early in the season, but in July the crop that has been kept free of weeds will be looking fine, whereas the one where weeds are not controlled will be a total failure. At one time conservation of moisture was given as one reason, if not the principal reason, for cultivation. It was believed that maintaining a dust mulch on top of the soil prevented evaporation of moisture thus making conditions more favorable for the growth of the crop. Although under certain conditions cultivation may actually prevent some evaporation, experiments have definitely shown that the principal reason for cultivation is to kill weeds. Actual fields kept free of weeds by scraping the surface of the soil yielded as good or better than adjacent cultivated fields.

There are at least three ways in which weeds injure a crop. It requires from three hundred to eight hundred pounds of water for each pound of dry matter produced in the crop. Silage corn, when cut contains about 80 per cent of water. It follows then, that every one hundred pounds of green corn stalks contains twenty

pounds of dry matter. A crop of silage corn yielding ten tons to the acre will contain two tons of dry matter and during growth will require the enormous total of at least 600 tons of water from every acre which must be taken in by the root system and given off by the leaves. It is easy to see how the crop suffers if weeds are allowed to use the moisture that should go to the crop. At the same time, weeds develop an extensive root system which uses the available plant food needed by the crop. The third way in which injury is done is by actual shading in case the weeds get larger than the crop itself.

The first question that might be asked is how

can the producer control weeds with the least possible work? The best time for control is before the crop is planted or before it comes up for at this time there is no danger of crop injury and the weeds are still small and easily killed. The slowest, hardest and most expensive way to kill weeds is to wait until they have a good start and then take them out of the rows with a hand hoe. In spite of the fact that hoeing is just as good exercise as it was fifty years ago, the hoe is pretty nearly obsolete on the dairy or general farm in the east. With modern production methods, hoeing is too costly. Several harrowings before the crop is planted, preferably with a few rain storms interspersed, will go a long way toward lessening cultivation later in the season. If followed by several cultivations with a weeder or spike-tooth harrow before the crop is up, the chances for the crop will be still better.

It seems that many of us are like the old fellow who never shingled his roof. He said that when it did not rain his roof did not need to be shingled and when it did rain it was so wet that he could not do the work. Likewise in cultivating, we sometimes apparently reason that no cultivation is needed until the weeds appear. When they do appear cultivation largely results in digging up weeds and transplanting them to another spot.

It is possible to overdo cultivation. When not needed, every operation adds to the cost of producing the crop without increasing returns and under



Although this cornfield appears to be free of weeds, cultivation is not a waste of time as weeds are being killed before they get a start.

(Continued on Page 7)

Editorial Page of the American Agriculturist

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Farm Marketing Through Better Salesmanship

"Please comment editorially on the article, 'Wanted—Crop Salesmen!', in the New York Herald Tribune, May 19th."—M.B.

WE are always glad to get readers' suggestions like the above and so far as practical try to follow them.

The article mentioned had the following paragraph:

"As a result of all the political discussion, tiresome as it is getting to be, the public thinking about farmers is changing. We begin to see that as producers—the only possible function farmers can perform—they have succeeded and, in many respects, magnificently. They have improved continuously the quality of their grains, fruit, vegetables, meats and dairy products. They have doubled and sometimes trebled the quantity of their yields. Therefore, they have not brought on the farm problem as farmer-producers. Lack of salesmanship has."

The article also stated that very few people had enough fruits and vegetables in the winter months, and then says:

"Yet this spring three million boxes of golden fruit will rot on the citrus trees in Florida. Something goes wrong, not in the production, but in the delivery from Florida to the consumer. And it isn't the farmer. It isn't over-production. The fault shifts squarely from the shoulder of the abused farmer to that of the much lauded American salesman, forwarders, carriers, bankers and others who have always made, and must continue to make, distribution their special business."

So far so good. No one familiar with farm conditions will disagree with the above. However, when it comes to conclusions and suggestive remedies, the author is just as wrong as city men usually are when they begin to tell how to solve the farm problem.

For example, the article describes the dealer system of handling meat and milk products and claims that because these systems are efficient the milk farmers of America and the meat farmers are for the most part prosperous and have no complaint, and therefore what is needed is a similar dealer system in fruits and vegetables and in other farm products.

How many meat producers of the West or dairymen of the East would agree with this conclusion? If the milk farmers have been getting

better prices than other farmers, then it is because of increased demand for milk products in the markets and better farmer organizations. The transportation and distribution of milk are no more efficient than for other farm crops.

The author is perfectly right, however, in stating that one of the chief troubles in farm marketing is an inefficient distribution system for farm crops. He is wrong when he says that none of the problem is due to over-production. Increased efficiency on the part of the farmer and more and better machinery keep production ahead of consumption of almost every farm product, and thereby keep prices too low.

The article quoted above has this to say on over production:

"Only twenty years ago almost all motor makers argued that it would be very dangerous to make many motors. Over-production would be very easy. Few could afford to buy. In that year, about 65,000 passenger cars and trucks were sold. * * * In 1927, it was necessary to build in the United States alone 2,939,191 passenger cars and 477,653 trucks to supply the demand of the poor buying public.

"How much easier it is to demonstrate that food-stuffs have never been over-produced."

Such an argument is silly. There is no comparison between the consumer of foodstuffs and the consumer of automobiles. After all, the human stomach will hold only about so much. When it is full, it can be no fuller. Advertising and sales emphasis on one food product may result in increased consumption of that particular product, *but it will almost always be at the expense of some other product.* When you eat more oranges, less apples are consumed. More dairy products mean less meat eaten. And when you get beyond the capacity of the consumer's stomach, you are going to have a surplus and over-production.

Beauty Spots of the East—Taconic Park—See Cover

WAY over on the extreme eastern side of New York State in Dutchess and Columbia Counties, on the border of New England, in Taconic Park, a picture from which we show on our cover page this time. Here is a section that many New York State folks do not know much about. It is worth visiting.

Taconic Park is fifty miles from Poughkeepsie and about forty-five miles from Albany. The main New York entrance is at Copake Falls. There are fine camping facilities there, and much to see and enjoy for one who loves the outdoors. It is in the center of a very noted historical region, first settled under the old patroon system, and by those most excellent early citizens, the Dutch. Many noted historical places are within short driving distances of the park.

Good New Farm Laws in New Jersey

FARMERS of New Jersey are certainly to be congratulated on the fine help which they received from the State government this year in the form of new, helpful farm legislation. These new laws were explained in detail in the New Jersey edition on the news page of last issue.

Especially important are the laws increasing State appropriations for the township and dirt roads and for increasing indemnities for cattle condemned for TB. Under the present law, each county receives \$60,000 a year for its township roads. Under the new law, this has been increased to \$100,000 a year, and should go a long way toward increasing the New Jersey farmers' market roads. It is one of the best laws for the country passed in New Jersey in many a long day. The legislature also agreed to appoint a special commission to study the township road situation in the State.

Under the new indemnity law for cattle, increases amounting to about 17 per cent more than under the old law are granted for con-

demned cattle. This will come nearer than ever before to the replacement value of the cattle.

It is certainly a hopeful sign that, while the federal government struggles with doubtful farm relief bills, states like New York and New Jersey are getting down to where the farmer lives with practical relief measures.

Aliens Should Not Count for Representation

THE Constitution provides that there should be a census of population taken by the federal government every ten years. One of the chief purposes of this "counting of noses" is to determine proper representation of each state in Congress. A reapportionment of this representation will be made after the census of 1930.

One of the unfair things about the apportionment for members of the House of Representatives is the fact that aliens are counted as well as citizens. Therefore, a section or city having a large number of foreigners gets more representation in Congress. This is unfair to the rural districts and has no basis in common sense. The aliens cannot vote; why should their numbers be used to swell representation in Congress, especially when Congress is getting too large and unwieldy anyway?

A similar situation developed in the days of slavery when the southern states insisted that the slaves should be counted for representation but not for voting. The matter was finally compromised, permitting one slave to count the same as three-fifths of a free person.

Farm Labor

FARMERS often complain, especially those who live near cities that it is impossible to keep good help. Here is the reason in cold figures.

Let 100 represent a starting point in 1914 of farm wages. The wages rose from this point to 239 in 1920. They went back to 146 in 1922 and rose again to 175 in October last year. During this same time the wage levels in other occupations climbed from 100 to 222 from 1914 to 1920. They went back only to 197 in 1922 and since that time they have more than regained their loss. In other words, it has been impossible for farmers, particularly during the hard times of recent years, to compete with the other occupations for help. Of course workers are attracted also by more social life and entertainment in the cities and by the shorter hours.

However, a scarcity of farm help is in a way a blessing to agriculture. It makes a problem, of course, for farmers who have to depend upon hired labor but on the other hand, the less help there is, the less surplus there will be and the higher will be the prices for farm products.

Eastman's Chestnut

THERE is quite a lot of interest on the part of the farmers in the Central West over the new use that has been made of cornstalks by making them into paper. It is hoped that the cornstalk paper business is going to grow so that it will offer a large and profitable market to farmers for their cornstalks and at the same time make paper cheaper. Two of our Standard Farm Papers in the West have had issues printed entirely on this paper.

However, they find that it has its drawbacks. Not very long ago a drayman attempted to deliver several reams of this paper to the publisher's office. The door was locked so the drayman just left it in front of the office.

A cow wandered down the street and had a wonderful feast off this new-fad paper. The owner of the cow took her home, milked her as usual, and delivered the milk. The next day all the milk customers were spitting paper wads. Now you tell one!

Hats Off! The Scouts Are Coming

What This Great Organization is Doing for Farm and City Boys

NINETEEN years ago, an American publisher and business man by the name of W. D. Boyce was lost on a London street in one of the terrible fogs that that city is frequently afflicted with. He was finally met by a boy who said:

"Excuse me, sir, but would you like to have me show you to your hotel and carry your bag?"

Mr. Boyce was delighted and, accepting the boy's guidance, was soon in his hotel. Then he attempted to give the boy a tip, and the little fellow, stepping back and saluting smartly, said:

"Oh, no, sir. A Boy Scout never accepts money for his daily good turn."

Boyce was so interested that he said, "We need an organization like that for our American boys," and so American Scouting was born out of the daily good turn of an unknown Scout in England.

More than 800,000 men and boys are now in Boy Scout work. Of these, 625,000 are the Boy Scouts themselves, and the remainder are the men who are giving up their time to the leadership and guidance of boys. Add to this 650,000 more boys and girls who are enrolled in 4-H Club work in America, and you get some idea of the size of the mighty army that is building sound foundations for the future.

Imagine, if you can, nearly a million and a half boys and girls in Scouting and 4-H Club work, more than all of the inhabitants of some of our largest cities, all of them interested in learning to do by doing and in teaching themselves to be first class American citizens.

The other night was parents' night in Boy Scout Troop 20 in Yonkers, where I live. George belongs to this troop, so Mrs. Eastman and I went over to watch the boys give demonstrations of some of the things they had learned in scouting. If you have a boy, or if you are interested in boys, find out where your nearest Scout troop is and visit it. You will find it one of the most interesting evenings you have ever spent.

One of the good things about scouting is that it teaches the boys how to do practical work with their hands. Near-

By E. R. EASTMAN

ly every boy in Troop 20, for example, can tie at least twelve or fifteen different kinds of knots with rope, and tie them so fast that you can hardly see their hands go. They can also splice rope. Almost any good Boy Scout can start a fire without matches, by using flint or by friction. Most scouts are also pretty fair camp cooks; that is,

month all winter for two years, and has been out many nights when the thermometer has been around zero, when there was heavy snow on the ground. But we have not worried about him because he has proper equipment and has been taught by his Scout leaders how to take care of himself and be perfectly comfortable in any kind of weather outdoors. He can carry a heavy pack on a hike so far that it would make many a soldier cry "halt."

George seldom goes to a motion picture show, nor does he have time for any questionable recreations because in addition to his school work scouting furnishes him with all the recreation and wholesome fun that he cares for. The same is true with nearly all of his associates in Troop 20. Their time is fully occupied.

The Boy Scouts is not a military organization, but one of the fine things about it is the strict habits

of discipline and control that are taught. The boys are shown how to drill, to march, to handle themselves properly in coordination with their fellows and the necessity for strict obedience.

I am enthusiastic about scouting also when there is good leadership, because it supplements the theory that the boy gets in school with practical knowledge, and the boy acquires this knowledge because he wants to. Every time he masters a subject, he receives a merit badge, and you ought to see the way the boys work to get these badges. They have to know their subject very well, too, before the badges are awarded.

When a boy first joins the organization he becomes a Tenderfoot Scout. Then he gradually works up through obtaining merit badges to

Second Class Scout, First Class Scout, Star Scout, Life Scout and Eagle Scout. It takes twenty-one merit badges in addition to several other qualifications to become an Eagle Scout, and these twenty-one must include: first aid, life saving, personal health, public health, cooking, camping, civics, bird study, path-finding, pioneering, and athletics or physical development.

The boy has a choice in merit badge work in nearly every branch of human

(Continued on Page 24)

THE SCOUT LAW

1. A Scout Is Trustworthy

A scout's honor is to be trusted. If he were to violate his honor by telling a lie, or by cheating, or by not doing exactly a given task, when trusted on his honor, he may be directed to hand over his scout badge.

2. A Scout Is Loyal

He is loyal to all whom loyalty is due; his scout leader, his home, and parents and country.

3. A Scout Is Helpful

He must be prepared at any time to save life, help injured persons, and share the home duties. He must do at least one good turn to somebody every day.

4. A Scout Is Friendly

He is a friend to all and a brother to every other scout.

5. A Scout Is Courteous

He is polite to all, especially to women, children, old people, and the weak and helpless. He must not take pay for being helpful or courteous.

6. A Scout Is Kind

He is a friend to animals. He will not kill nor hurt any living creature needlessly but will strive to save and protect all harmless life.

7. A Scout Is Obedient

He obeys his parents, scoutmaster, patrol leader, and all other duly constituted authorities.

8. A Scout Is Cheerful

He smiles whenever he can. His obedience to orders is prompt and cheery. He never shirks nor grumbles at hardships.

9. A Scout Is Thrifty

He does not wantonly destroy property. He works faithfully, wastes nothing, and makes the best use of his opportunities. He saves his money so that he may pay his own way, be generous to those in need, and helpful to worthy objects. He may work for pay but must not receive tips for courtesies or good turns.

10. A Scout Is Brave

He has the courage to face danger in spite of fear and has to stand up for the right against the coaxings of friends or the jeers or threats of enemies, and defeat does not down him.

11. A Scout Is Clean

He keeps clean in body and thought, stands for clean speech, clean sport, clean habits, and travels with a clean crowd.

12. A Scout Is Reverent

He is reverent toward God. He is faithful in his religious duties and respects the conviction of others in matters of custom and religion.

The Scout Oath

Before he becomes a scout a boy must promise: *On my honor I will do my best:*

1. To do my duty to God and my country, and to obey the Scout Law;
2. To help other people at all times;
3. To keep myself physically strong, mentally awake, and morally straight.

The Steps In Lone Scout Work

1. A Lone Scout starts as an individual and does not wait for any other boys to start his Scout work.
2. He fills out his registration blank, which may be secured from Boy Scout Headquarters, 2 Park Ave., New York City, and sends his 50c fee for membership; then he starts immediately to become a Tenderfoot in Scout rank.
3. He then is furnished an Acceptance Blank, and letter of instruction from the Scout Executive to select an outstanding man in community for his "Scout Friend and Councilor".
4. A circular letter from Scout Headquarters indicates to the boy as well as to the man, the relationship between the adult leader and the boy. The man is told that his obligations are as follows:
 - (a) He uses his best judgment as to leadership and guidance of the boy.
 - (b) He acts as Examiner in the Lone Scout's advancement tests.
 - (c) The boy visits the man on his farm, place of business, or in his home at least once during the year, and the adult friend visits the boy in his home at least once during the year.
5. In addition to individual leadership of an adult, a Lone Scout gets the following for his 50c membership fee:
 - (a) Membership, and a beautiful certificate to show that he belongs to one of the world's greatest Boy's Organizations.
 - (b) He gets free subscription for one year to THE LONE SCOUT. This is a Direct-by-Mail leadership service, and through this definite instructions reach him 12 times a year.
 - (c) Participation in National and Local Council activities as represented by Camps, Hikes, Educational Trips, Anniversary Week, special programs and contests.
 - (d) Training in character building, citizenship, Preparedness, the Daily Good Turn and the varied Scout crafts.
6. A Lone Scout has 3 extra projects which are not a part of the Home Patrol or the Troop Program. They are as follows:
 - (a) The Contributor Program: This program encourages the Scout to write for the Scout publications, National, Regional, Local Council, Troop, Patrol, or Tribe, and also may contribute to the amateur Boy Scout papers, farm journals, and cooperating publications. In this program the Gold Quill is the highest award.
 - (b) The Mail Tribe provides cooperation and team work on a correspondence basis with other boys in Lone Scouting all over the nation.
 - (c) The use of THE LONE SCOUT publication, issued monthly to Lone Scouts only. When Lone Scouts transfer to Patrols or Troops, the service of THE LONE SCOUT publication automatically ceases. With the above help there is no reason why a Lone Scout should not be able to carry forward effectively the whole Scout program, and get out of it as much as any other boy who is taking a Scout program by any other method. A Lone Scout is never alone, with a Boy Scout Handbook and THE LONE SCOUT publication. He is a Boy Scout of America and a brother to every other Scout, local, national, and international.

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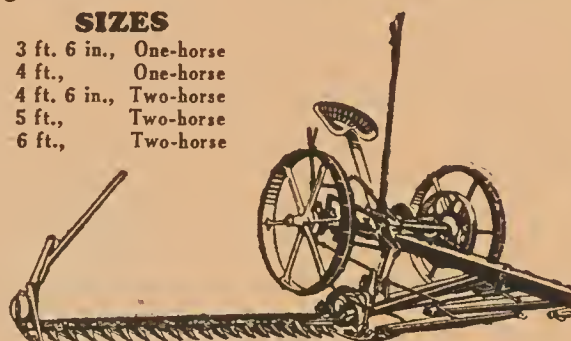
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A.A.'s Western New York Farm and Home Talk

The Weather Settles Down

AT last the spring weather map has apparently changed and March and early April storms are no longer chasing each other across the country every other day in May. We have had a



M. C. Burritt

whole week of more or less settled weather without rain, although it still remains cool. Fruit trees have been in full bloom all week. Plenty of sunshine has been good for pollination but temperatures have been too low for bees to work much of the time, ranging from 32° to 70° Fahr. Probably there has been more time when temperatures were under 50° than when above 50°. Two or three sharp white frosts have occurred.

Many are wondering about frost injury. None is apparent here in the fruit belt as yet. Reports from interior points and from higher elevations indicate considerable damage apparent. Such injury as has been done here along the lake probably will not appear at once, but will show itself in half formed fruits and in weakened stems later in the season when many fruits will fall off. Considerable frost injury to leaves is apparent in curling at the ends and along the edges.

Oats Not All In

Clear drying weather has permitted work on the land and many fields have been sowed with oats, although 25 per cent or more of spring grains remained to be sown on May 25th. Comparatively little plowing has been done for corn, beans and cabbage. Partly as a result of the effect of tile drains, and partly because plenty of reliable tractor power enabled us to take advantage of the good weather, we have our spring plowing practically all done.

Wheat, clover and alfalfa stands have been injured considerably by the wet weather. The yellowish cast and the stunted condition together with the killing outright in spots has thinned the stands, and developed unevenness. The condition of wheat is 15 or 20 per cent below that of early April which was excellent. Alfalfa especially in lower lands has been injured 10 to 15 per cent.

Plowing Under Sweet Clover

We have plowed under the finest stand of sweet clover for cabbage that I have ever grown. Sown in wheat May 16, 1928, a poor stand of wheat permitted fine growth and development last season. The binder cut off many tops in cutting the wheat and by late fall a thick rank growth nearly two feet high covered the ground. This, of course, died down and now in late May, 1929, the growth is again 18 inches high, all the plows can turn under. This seeding including seed, an application of lime, inoculation and all labor cost us nearly six dollars an acre, but in land improvement, and I believe in the coming crop, will be a good investment. This spring we repeated the seeding in preparation for next year.

How will the late spring affect the early season's plans? The acreage of spring grains will undoubtedly be reduced. Will this tend to increase the bean and cabbage acreage? I would expect that it would. A limiting factor, however, will be the ability to get bean seed which is scarce and high (12-14 cents per pound) and to secure cabbage plants which are likely to be late. From now on for a month or more, as well as last week, there will be a rush to finish spring planting under somewhat difficult conditions. The ground has been water-soaked so long

and rains have been so heavy that it is very hard. With a couple of weeks of dry weather, land will be very hard to plow and fit. All work will necessarily be late. We must begin the petal fall spray in apples at once as blossoms are off the early varieties now. There will be little time to fix the tennis court and clean up around the buildings for a week or so at any rate. But with all the pressure of farm work it is a delightful time of year.—Hilton, N. Y., May 26, 1929.

Time to Cut Hay

THE New Hampshire Station several years ago studied timothy hay cut every five days from June 4 to July 31. The general conclusions from these various tests may be summarized as follows:

(1) Timothy grows fastest between the appearance of the head and the beginning of the bloom.

(2) Timothy hay will contain the largest amount of digestible protein if cut in full bloom.

(3) The yield of hay is largest when the grass is cut at the time the seed has just formed.

(4) The yield of hay decreases as the plants approach maturity due partly to the storage of material in the bulbs, partly to loss of leaves by drying and breaking off, and partly to the washing of rain.

(5) The digestibility of the hay is greatest in the earlier stages, and gradually decreases in the later cuttings.

(6) The palatability of the early cut hay is also greater than that of the late; steers fed on the various cuttings showed a marked preference for the younger ones, eating all of the first three cuttings before they would touch the others.

(7) Timothy cut young is more difficult to cure and more easily damaged by rain.

(8) Very early cutting is thought to weaken the bulbs and to lessen the next year's crop.

The Cost of Irrigation

What system of irrigation is best suited for growing vegetable crops in New Jersey and what is the cost of this system.—R. D., New York.

THE sprinkling system of irrigation is already used on 4,000 acres of crops in New Jersey and is commonly recognized as being the best system. It applies water without waste and can be used on rolling land as well as level land.

The sprinkling system has even been used to prevent frost injury since water contains some latent heat which is given off during the sprinkling process.

The cost of such a system will be somewhat over \$300 an acre. It is well to study the problem thoroughly before laying out the irrigation system in order to get fields that are properly shaped and that have mains, laterals and nozzle lines of ample size and capacity.

School and Road Questions

(Continued from Page 2)

and Finance, Albany, New York, for applications on which to make your claim for refunds. When you get these blanks, fill them in according to instructions, at least every three months, but preferably oftener. Then send your claim to the Tax Department and if it is properly made out, it will be paid.

The How, When and Why Of Cultivation

(Continued from Page 3)

certain conditions it is even possible to lessen the yield. The tendency in recent years has been to cultivate as shallow as possible. This makes it even more important to cultivate before weeds have a start and while the root systems are still small. The principal reason for shallow cultivation is that deep cultivation, particularly late in the season, destroys and injures many of the fine feeding roots which the plant has sent out in search of moisture and food. Due to aeration and warmth the available plant food is highest near the surface of the soil, and—if not destroyed—the plant sends out a network of roots in this top layer. It is evident that continually stirring this soil and breaking these roots, robs the plants of the opportunity to take advantage of this particularly rich area.

A nicely cultivated field is a beautiful sight, except, late in the season, to the man who realizes that deep cultivation at that time is likely to lower his profit. The usual procedure is to cultivate reasonably deep early in the season, to gradually lessen the depth of cultivation and to discontinue it altogether as soon as possible.

Early Cultivation Important In Orchards

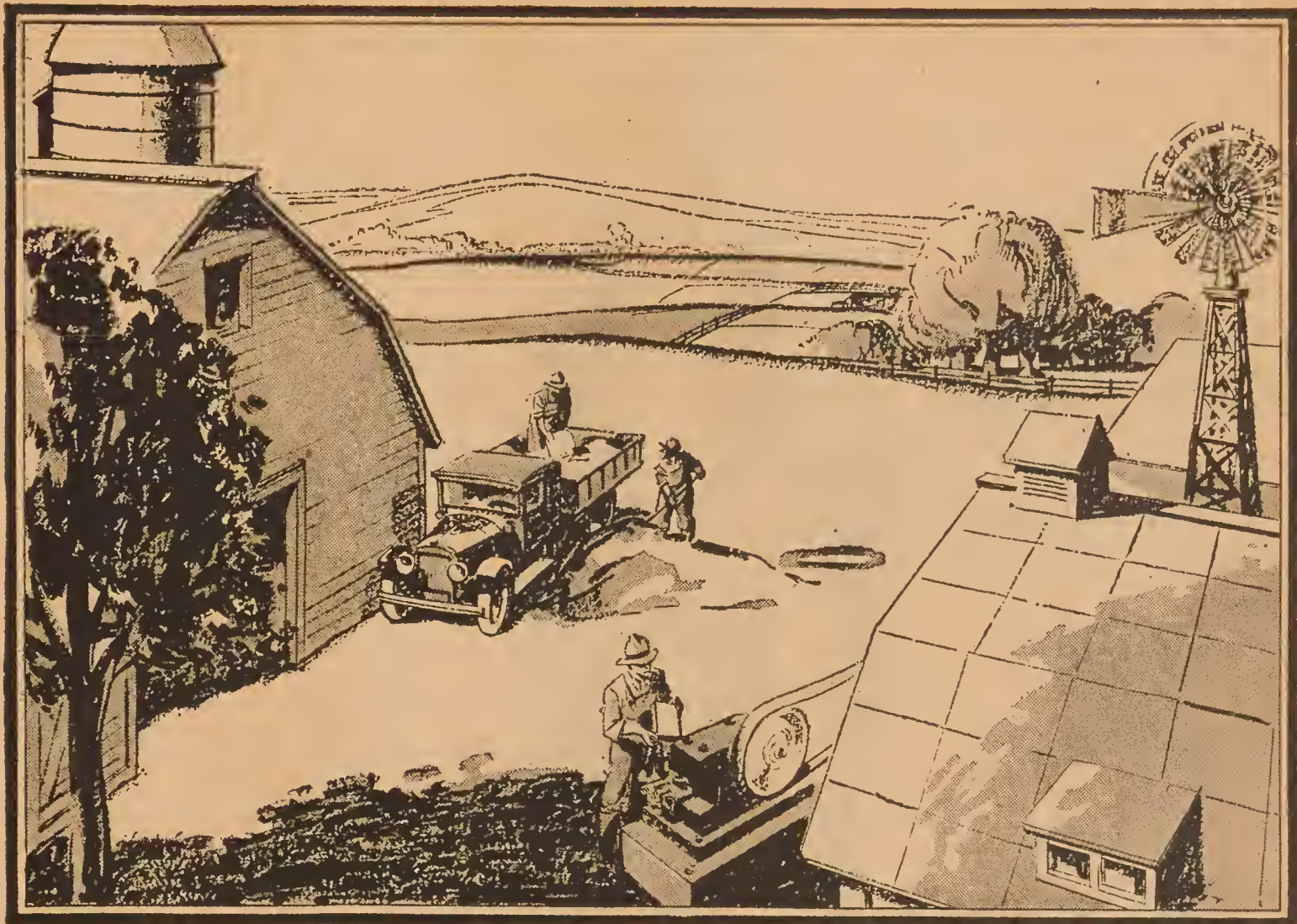
Different crops need to be handled in different ways. Early cultivation is especially important with fruit crops such as apples and grapes. The important point here is to kill weeds early in the season in order to give the fruit the entire use of the available water supply and to promote aeration of the soil in order to make nitrogen available as early as possible. Later in the season, cultivation is of little benefit and weeds do no harm; in fact, if a growth of weeds will develop they make an excellent cover crop at no cost for seed.

It is common practice in many sections to cultivate potatoes until mid-summer and then hill them up by the use of the shovelplow. In certain other crops the ridge system of cultivation is likewise followed. Under certain conditions it is probable that the ridge system is advisable, but as a general rule shallow, level cultivation gets the best results through controlling weeds without destroying the root system of the crop. It is evident that the use of a shovel plow in the potato crop cannot help but injure a large number of feeding roots. At the same time, throwing the dirt up around the plant does kill out weeds which can be killed in no other way except by hand hoeing and in heavy soil, which by the way is not well suited to potato-growing anyway, may improve the drainage and physical condition of the soil for the crop.

Heavy Sod May Reduce Available Nitrogen

It is evident, of course, that plowing is the first tillage operation, but at this time a large part of this work has already been completed. There are two points which are often unsatisfactory with late plowing. In any seed bed the furrow slice should be packed down against the subsoil in order to allow moisture to rise from the subsoil for the use of the crop. It has also been proven experimentally that the plowing under of a heavy sod late in the season, especially during dry weather, may actually reduce the supply of nitrogen available for the growth of the crop. It seems that the bacteria which works on the sod to cause its decay, are themselves large users of nitrogen and if the sod is heavy the bacteria instead of the crop, get the nitrogen. This condition is especially likely to occur where a heavy application of straw is plowed under.

Where plowing is late, the use of a roller helps to pack down the seed bed. Recently, authorities are recommending the use of a corrugated roller rather than a smooth roller as this firms the seed bed without making conditions favorable for the formation of a crust, which in certain soils may actually prevent the seed from coming up at all.



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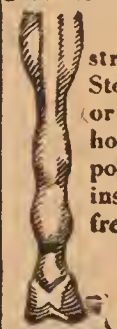
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ABSORBINE will reduce inflamed, strained, swollen tendons, or muscles. Stops the lameness and pain from a splint or soft curb. No blister, no hair gone, and horse can be used. \$2.50 at druggists, or postpaid. Describe your case for special instructions. Interesting horse-book 2-B free.

From a race horse owner: "Used Absorbine on a yearling pacer with strained tendon. Colt all over lameness, though for 3 time couldn't take a step. Great stuff!"

ABSORBINE
TRADE MARK REG. U.S. PAT. OFF.
W. F. YOUNG, Inc. 579 Lyman St. Springfield, Mass.

CAULIFLOWER and Cabbage Plants. Pedigreed free. Safe delivery. See classified column for varieties and prices. F. W. Rochelle & Sons, Chester, New Jersey



Apollo

Galvanized Roofing



Highest Rust-resistance!
Made from KEYSTONE Copper Steel
LOOK FOR APOLLO BELOW BRAND

APOLLO-KEYSTONE Galvanized Sheets (alloyed with copper) give lasting service and protection from fire, lightning and storms; strong—durable—satisfactory. APOLLO-KEYSTONE Copper Steel Galvanized Sheets are the highest quality manufactured. Unequaled for roofing, siding, gutters, culverts, flumes, tanks, grain bins and all sheet metal work. Use Keystone Roofing Tin Plates for residences and public buildings. Sold by leading dealers. Send for BETTER BUILDINGS booklet.

AMERICAN SHEET AND TIN PLATE COMPANY, General Offices; Frick Building, Pittsburgh, Pa.
SUBSIDIARY OF UNITED STATES STEEL CORPORATION

The MAN who couldn't make GOOD

Shiftless, down-at-the-heels, lazy,—
Old Straw-Tick never held a job in
his life. He just got by.

You could hire him cheap, but would
you? He'd waste time, make costly
mistakes and cost you more than a
man whose wages were bigger.

Some dairymen who wouldn't hire
Straw-Tick on a bet, make a more
expensive mistake when buying feed.
They buy solely on price—and forget
that they make money only to the
extent that their feed produces milk,
keeps cows healthy and makes veter-
inary bills unnecessary.

There are Straw-Ticks in dairy feed
as well as in men. You can't call a
dairy feed a bargain because the price
tag says it's cheap—you've got to wait
till you feed it, and let your milk pro-
duction and your herd health tell you.

For sixteen years Larro has been mak-
ing records, producing milk eco-
nomically and keeping cows healthy.
It is called the safe ration, not merely
because it was the first feed to be
passed over electro magnets to
remove dangerous iron and steel
particles, but also because it is safe
in the kind and quality of ingredients,
and in having the safe amount of
protein for all conditions.

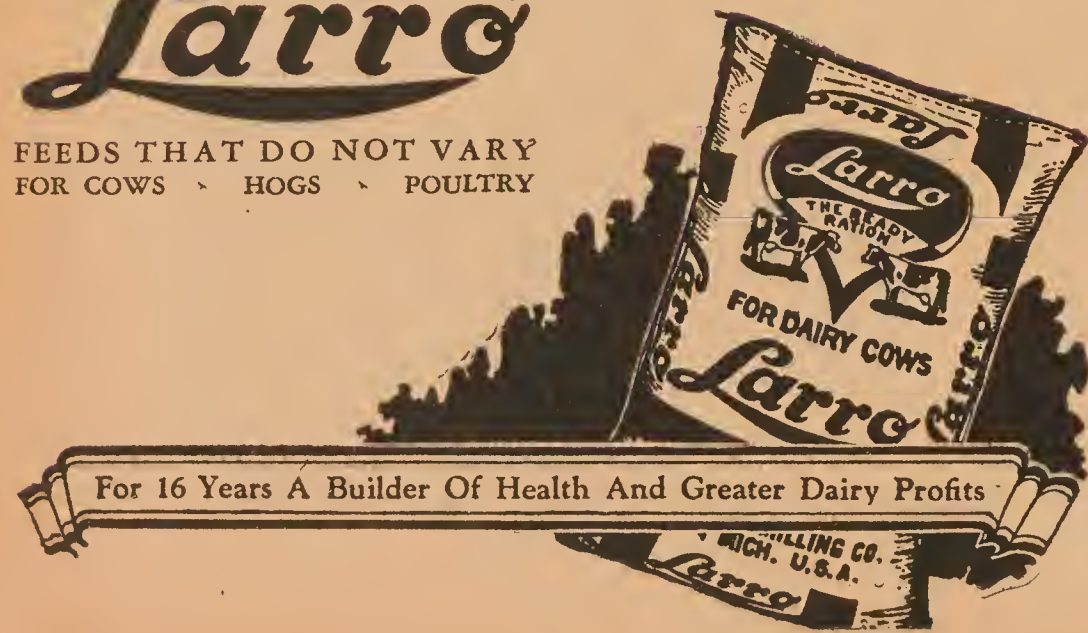
When you buy Larro you get the same
feed time after time—not merely the
same name with ingredients or
analyses shifted to suit a price or
selling condition.

When you think of the feeds that
haven't made good over these sixteen
years, and have shifted and shifted to
catch public favor—you'll understand
why experienced dairymen take no
chances, but use Larro—the feed that
does not vary—and makes the biggest
possible profit from dairying.

THE LARROWE MILLING CO.
DETROIT - MICHIGAN

Larro

FEEDS THAT DO NOT VARY
FOR COWS - HOGS - POULTRY



National Dairy Show to be Big Event

(Continued from Page 3)

so valuable to our eastern dairymen. It is one of the main reasons why American Agriculturist is organizing farmers from this section to go to St. Louis to attend the dairy show so that in addition to having a good time they can learn at first hand just what eastern and southern dairymen are doing and thinking in advancing the business of producing and selling milk and its by-products.

On page three there is an architect's picture of the splendid buildings that are now being erected to become the permanent home of the National Dairy Show. You can get some idea of the fineness of these buildings and of the belief of the builders in the dairy industry when you know that they will cost \$1,500,000. Construction is being hurried so that they will be ready for the grand opening this fall.

Premium lists for this year, totalling \$35,000, are large enough to attract some of the very best exhibits of the dairy cattle from all parts of the country.

A Lot of Fun

What is your ideal of a dairy cow? How does that ideal differ from that of farmers from other sections? Here will be a chance to study thousands of beautiful individuals and to learn from the large amount of judging and judging contests which will be conducted how near right your own ideal of a cow is.

Those who are arranging the program at the show remember that farmers need entertainment as well as instruction, and plenty of both will be provided. There will be something doing every minute for the thousands of visitors. In addition, there will be a special program of fun, entertainment, and instruction for those in our special eastern party on the excursion train going and coming, and at the show.

In the list of attractions and the good work that is being done will be the gathering of 4-H Club boys and girls from every state in the Union. These young people who have chosen farming for their life work will take part in judging contests and in the other entertainment and instruction parts of the program.

Old St. Louis the "Gateway of the West"

St. Louis itself is well worth visiting. It has a touch of both the South and the West and its climate ought to be especially fine during the middle of October. Located on the Mississippi River, you will have an opportunity to stand on the bridge which spans the river at St. Louis and perhaps reflect that within the memory of living men St. Louis was the "Gateway of the West" from which expeditions set out that conquered the West and added the mighty expanse west of the Mississippi to the Union. A few miles out from the city are the beautiful Ozark Mountains which you may have an opportunity to visit in an automobile trip if you desire.

Certainly you will never have a better chance of combining business and pleasure into a real vacation than you will if you go on this trip.

Why not plan to go now, and take your family?

American Agriculturist will see to it that you will have nothing to worry about from the time you start until you get home. Because of the large party, it will be possible to keep the expenses at a minimum. The carfare will be at the excursion rate of fare and a half from your home to St. Louis and return. The rate from Syracuse, New York, is \$46.55 for a return trip ticket. It would seem that with care one hundred dollars per person should cover the carfare, the pullman sleeping berth, hotel bills and incidental expenses. The trip will take about a week, at the show and going and coming.

American Agriculturist has no financial interest whatever in the train. We are simply organizing the excursion as a service to eastern dairymen. If interested, write American Agriculturist for further information.



UNADILLA SILOS

Are Leaders!

Many features of convenience and safety have made Unadilla Silos the leaders throughout the east.

The gambrel roof insures a silo packed full. The patented door can't stick or freeze, yet is air and water tight. The door fasteners form a wide, easy, safeladder. The continuous door opening makes it possible to shove silage out instead of lifting it over.

Attractive discounts for cash and early orders. Time payments if wanted. Write for free catalog.

Also tubs, tanks and vats

UNADILLA SILO COMPANY
Box B, Unadilla, N. Y.



Kill Rats Without Poison

A New Exterminator that
Won't Kill Livestock, Poultry,
Dogs, Cats, or even Baby Chicks

K-R-O can be used about the home, barn or poultry yard with absolute safety as it contains **no deadly poison**. K-R-O is made of Squill, as recommended by U. S. Dept. of Agriculture, under the Connable process which insures maximum strength. Two can kill 578 rats at Arkansas State Farm. Hundreds of other testimonials.

Sold on a Money-Back Guarantee. Insist upon K-R-O, the original Squill exterminator. All druggists, 75c. Large size (four times as much) \$2.00. Direct if dealer cannot supply you. K-R-O Co., Springfield, O.

K-R-O

KILLS-RATS-ONLY

"I am STILL using the Burrell Milker I purchased from you 21 YEARS AGO"

"It may interest you to learn that I am still using the Burrell Milker that I purchased from you 21 years ago, and the machine is still doing excellent work today, regardless of the fact that I use it winter and summer. Of course, I put on the late style cups and mouth-pieces, and I honestly believe that I can beat any of those new type rubber-lined test cup machines with my old Burrell Milker today."

—Henry B. Smith,
Chateaugay, N. Y.

"It Milks the Cows Clean"

Send for Catalog

Cherry-Burrell Corporation
27 Albany St., Little Falls, N. Y.



Double Unit



Single Unit

BURRELL

MILKING MACHINES AND CREAM SEPARATORS

When Writing Advertisers
Be sure to say you Saw it in
AMERICAN AGRICULTURIST

With the A. A.
DAIRYMAN



Bang Abortion—Its Cause and Treatment

By DR. R. R. BIRCH

EDITOR'S NOTE: Last week we gave our readers some excellent answers to a number of questions on contagious abortion. Following is the remainder of the questions on this important subject as answered by Dr. Birch.

Should a breeder who has had no abortion in his herd in recent years test his cattle?

Yes. The herd may contain a few chronic reactors capable of spreading the infection and which can be eliminated with little or no loss. Removing such animals from a herd may prevent very great loss in subsequent years. The modern breeder must know the condition of his herd as a basis for handling it intelligently. Even if he does not remove the reactors he at least can know where the greatest danger lies, and he can take special precautions with reacting cows at calving time.

How can a breeder maintain a clean herd when the herds of his neighbors are infected?

The danger from neighboring herds is greatly exaggerated. If fences are good, if clean and infected animals do not actually run together, and if outside bulls are not admitted to the clean herd, herd to herd infection will not usually be a serious problem.

How may a breeder dispose of reacting cows?

He may sell them for beef and we believe he should be allowed to sell them as reactors to men whose herds consist largely of reactors. The chronic reactor that will conceive, because of resistance which she has acquired, is worth more to place in a badly infected herd than is a clean cow. It is of very great advantage to the owner of a herd containing a limited number of reactors to be able to sell them, and they are worth more to the owner of a badly infected herd than clean cows are worth. The proper guidance and understanding of such sales would enable many breeders to free their herds of reacting cows and would furnish the best source of supply for the owners of reacting herds who are compelled to purchase. Selling of reacting and aborting cows for breeding purposes without informing the purchaser of the facts cannot be too strongly condemned.

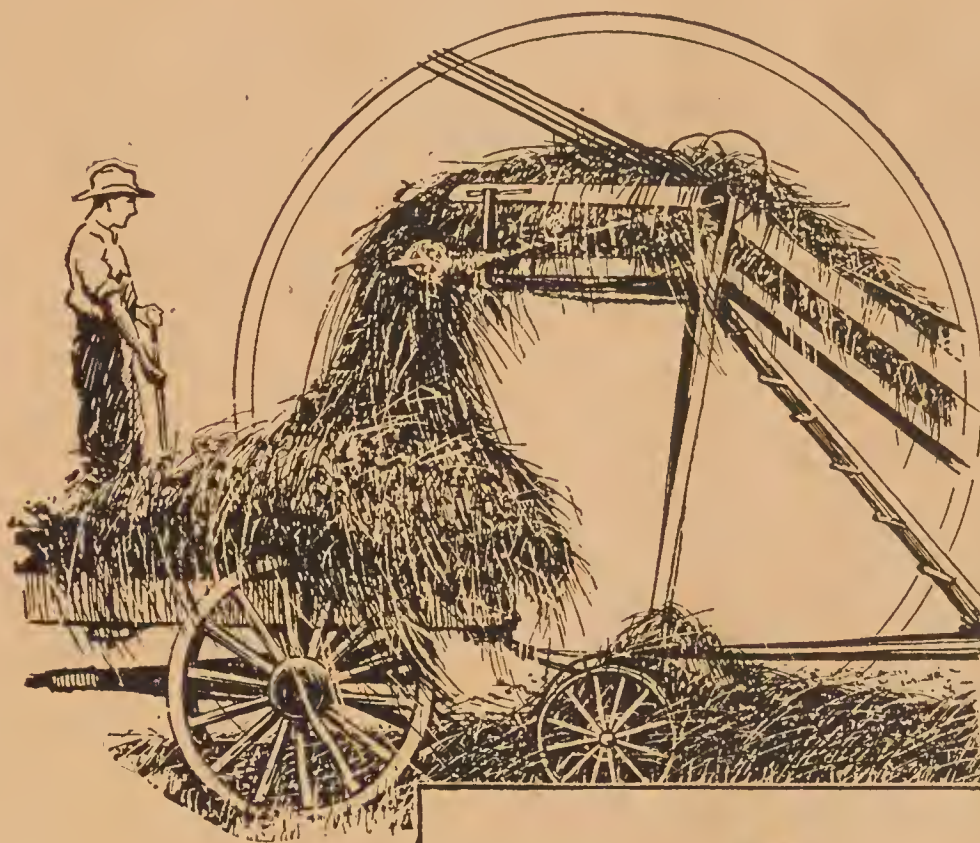
Should a breeder whose herd contains many reactors purchase clean cattle?

No. There is no object in doing so. Usually the clean cow will become infected. A chronic reactor somewhat tolerant to the disease, and one that will conceive when bred, is the safest animal to add to such a herd.

In case a breeder is not ready to test what measures may he take to protect his herd?

The primary aim of all his efforts should be to keep the susceptible animals away from the spreaders. The susceptible animal is the one not yet infected which has reached breeding age. Those which are pregnant are especially susceptible. Any reactor may become a spreader but the cow near calving time is particularly dangerous to her associates. The practice of using maternity stalls apart from the milking barn and of disinfecting the stall thoroughly after each cow vacates it will greatly limit the spread of the infection. Pasturing the heifers apart from the mature animals will often protect the former and this is an essential principle of good herd management. Calves that take raw milk from reacting cows even though they seldom acquire permanent infection often are temporary spreaders and should not be allowed the liberty of the dairy barn.

It's much easier to make good hay with these fast McCormick-Deering hay tools



MCCORMICK-DEERING Hay Loaders have an adjustable delivery section that makes it easy to start a load on windy days. With this section dropped, as shown, hay is delivered 3 feet nearer the rack.

DURING the heat of haying McCormick-Deering Hay Tools travel fast, save men's strength, and get the job done on time. Each machine is designed to lessen the work of making high-quality hay, to cut down risk and worry, and to save time and money. The McCormick-Deering dealer near you will show you the hay tools suitable for your farm.



"Good Equipment Makes a Good Farmer Better"



THE McCormick-Deering line of hay tools includes mowers for use with McCormick-Deering tractors; and horse mowers, self-dump and sweep rakes, combination side-delivery rakes and tedders, tedders, stackers, windrow and rake-type hay loaders, and baling presses. The Combination Side-Rake and

Tedder is instantly convertible for tedding or raking by merely shifting a lever. The McCormick-Deering Hay Loader, with its proved ability to save energy and time, will surely interest you if you load with forks or if you have been working under the handicap of an old-fashioned loader.

Write for a Hay Tool Catalog

INTERNATIONAL HARVESTER COMPANY
of America
606 So. Michigan Ave. (Incorporated) Chicago, Ill.



Livestock



Breeders



CATTLE

Hereford Cattle For Sale

Steers, calves, yearlings and two-year-olds. Uniform in size. Choice quality. Tested cows and heifers. Many cars. JOHN CARROW, Box 193, OTTUMWA, IOWA

FEDERAL SUPERVISION COWS

FOR SALE
I can supply your wants, one or one hundred, all dairy breeds. Call me up.
ANGUS J. BEATON, R.F.D., DANVILLE, VERMONT
TELEPHONE DANVILLE-61

HEREFORDS For Sale

4 loads weaned calves; 3 loads short yearlings; 2 loads long yearlings; 4 loads heifer calves; 3 loads springers. Well bred, the good kind. Can sort, other cattle, pasture flesh. Write or wire.
FLOYD JOHNSTON, STOCKPORT, IOWA

Pure Bred and High grade T. B. tested Canadian Holstein cows and heifers, fresh and near fresh. Car lots or less.
HUTCHINS & LEGGETT, MALONE, N. Y.

PERCHERONS Three-year gray stallion, \$400. One-year gray, \$200. One-year mare, \$125.00. Others at reasonable prices.
WM. A. REID, OXFORD, CHESTER, CO., PA.

CATTLE

QUALITY HEREFORDS

Young bulls about ready for service; also young re-bred cows. Prize winners for sale at reasonable prices.
WILLIAM J. LILLIS Owner, SCHENECTADY, N. Y.

Shetland Ponies Good ones. Special Prices for thirty days. Write your wants to A. B. PORTER PONY FARMS, Atwater, O.

SWINE

PIGS FOR SALE

OLD RELIABLE STOCK
Heavy-legged, square-backed Berkshire and Chester crossed, and Yorkshire and Poland China crossed. Barrows, boars and sows—8-10 weeks old, \$5.50 each. Also, Chester Whites and Poland China and Durocs from registered Boars—7-8 weeks old, \$7.00 each. We ship sows and unrelated boars for breeding. They are the kind that make large hogs. Shipped C.O.D. No charge for crates. If dissatisfied, return pigs and I will return your money. Yours for quality hogs.

ED. COLLINS, 35 Waltham Street, TEL. 0839-R LEXINGTON, MASS.

When writing Advertisers
Mention American Agriculturist

SWINE

228 PIGS FOR SALE

87 Handsome Yorkshire and Chester crossed; 100 Berkshire and O.L.C's; 41 Big heavy Poland China crossed with Yorkshire—Two months old. Price \$6.00 each. Express prepaid on 25 or more. These pigs have had the best of care and breeding and certainly show it. Jim Short hog-breeder from Iowa, on a visit here, remarks: "Mr. McCadden your hogs look fine." Terms: Check, money order or draft or C.O.D. on approval. Ship in lots to suit—1 or 50. Inquiries gladly answered. Orders promptly filled. McCADDEN BROS., Cambridge, Mass. Office: 16 Seven Pines Avenue.

SPRING PIGS FOR SALE

Buy where quality is never sacrificed for quantity. We sell only high grade stock from large type Boars and Sows, thrifty and rugged, having size and breeding. Will ship any amount C.O.D.

Chester & Yorkshire — Berkshire & Chester
7 TO 8 WEEKS OLD \$5.00
8 TO 10 WEEKS OLD \$5.50

Also a few Chester borrows 8 wks. old, \$6.50 each
Satisfaction guaranteed or money refunded. 10 days trial allowed. Crates supplied free. A. M. LUX, 206 Washington St., Woburn, Mass. Tel. Wob. 1415.

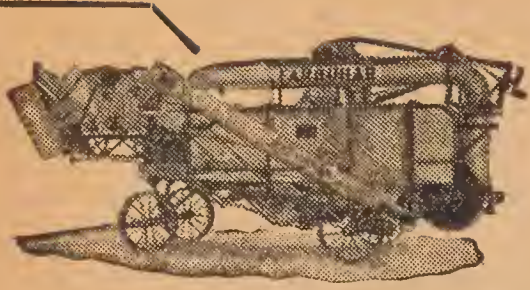
FEEDING PIGS FOR SALE

Chester and Yorkshire, 7-8 weeks old \$5.00
Berkshire and Chester, 7-8 weeks old \$5.00
8 to 9 weeks old, \$5.25

Also few Chester Whites 6 to 7 weeks old \$5.50, and some Jersey Red Durocs 7 weeks old, \$5.50. Sold C.O.D. Keep them 10 days, if not satisfied, return them and your money will be refunded. No charge for crating.

MICHAEL LUX, WOBURN, MASS.

Reviewing the Latest Eastern Markets



EASY, CLEAN and FAST THRESHING

with a

FARQUHAR "ALL-STEEL"

Here is our new, modern Thresher. Embodies all the best ideas obtained from hundreds of successful threshermen. It is so easily operated. Uses little power because equipped with Roller Bearings and Rockwood Pulleys. Does nice, clean job of threshing any kind or condition of grain. Has large capacity and built to endure the heavy strains of long, hard usage.

Write for Bulletin 529 and learn the results of both threshermen and farmers.

We also build Engines, Boilers, Saw-mills, Hay Balers, Cider Presses and Farm Implements. Country and Sub-urban Deep and Shallow Well Water Systems. Catalogs upon request.

A. B. FARQUHAR CO., Limited
Box 566 YORK, PA.

You can increase your farm crops with less labor and worry if you use a Farquhar "Non-Wrap" Manure Spreader.

CAULIFLOWER and Cabbage Plants. Pedigreed Seed. Selected Plants. Disease free. Safe delivery. See classified column for varieties and prices. F. W. Rochelle & Sons, Chester, New Jersey

NEWTON'S Compound
For horses, cattle, hogs

Heaves, Coughs, Conditioner, Worms. Most for cost. Two cans satisfactory for Heaves or money back. \$1.25 per can. Dealers or by mail. The Newton Remedy Co. Toledo, Ohio.

SHIP YOUR EGGS

WHITE AND BROWN

To R. BRENNER & SONS

Bonded Commission Merchants

358 Greenwich St., New York City

Live Broilers and Poultry Wanted

HIGHEST PRICES CHECKS SENT DAILY
Oldest Live Poultry house in New York City. Established 1883, offers you an unlimited outlet for your live poultry. Write for shipping tags and free holiday calendar folder K 27.
Krakaur Poultry Co. Inc. Bonded Commission Merchant
West Washington Market, N. Y. City

Now is the Time to Ship
FOWLS, BROILERS, CALVES, EGGS

We remit daily at top market. Write for coops, tags, information on market prices, etc. Our Mr. Berman has satisfied thousands of shippers for 25 years.
Compare our sales with others
Joseph C. Berman, Inc., West Washington Market, N. Y.

EGG CASES

Wholesale dealer and shipper of second hand egg cases. Car lots a specialty.
LOUIS OLOFSKY, 685 Greene Av., BROOKLYN, N. Y.

NOTICE TO CREDITORS OF THE FRONTIER DAIRY CO., INC., TO PRESENT CLAIMS
Any person having a claim against the FRONTIER DAIRY CO., INC., for milk or cream of his own production sold to said Frontier Dairy Co., Inc., is hereby required to file with the undersigned commissioner at 122 State Street, Albany, N. Y., a verified statement of such claim on or before July 1, 1929.
Dated: Albany, N. Y., May 4, 1929.
BERNE A. PYRKE,
Commissioner of Agriculture and Markets.

FARMS FOR SALE

Near Large Lake, 14 Cows
3 Horses, reaper, binder, hay loader, potato digger, full implements, about 40 acres crops included; 3 1/2 hour run city 100,000; good alfalfa farm, 75 acres, 50 tillage, stream, estimated \$4000 worth wood; nice home 7 rooms, large barn, silo. Yours at \$3500 for all, terms arranged. On pg 44. Strouts catalog tells where the bargains are. Get your free copy today. **STROUT AGENCY, 255-R Fourth Ave., at 20th St., N. Y. City.**

HAVING DECIDED

to quit farming, will sell my entire dairy herd.
ERNEST CANNIFF, Cedar Crest Farm, CATSKILL, N. Y.

When Writing Advertisers, Be Sure to Mention American Agriculturist

Milk Prices

The following are the June prices for milk in the basic zone of 201-210 miles from New York City.
Dairymen's League prices are based on milk testing 3.5%. Sheffield on the basis of 3%.

Class	Dairymen's League	Sheffield Producers
1 Fluid Milk...	3.37	3.17
2 Fluid Cream		1.95
2A Fluid Cream	2.16	
2B Cond. Milk..		
Soft Cheese..	2.41	
3 Evap. Cond. Milk Powder		
Hard Cheese	2.20	1.95
4 Butter and American cheese. Based on New York City Market quotations on butter and American cheese.		

The Class 1 League price for June 1928 was \$2.90 for 3.5% milk and Sheffield's \$2.70 for 3%.
The above prices in each class are not the final prices the farmer receives. The final price received from the dealer is the result of the weighted average.

Butter Remains Unchanged

CREAMERY	May 28, 1929	May 22, 1929	Last Year
SALTED			
Higher than extra...	43 1/2-44	43 1/2-44	44 1/2-45
Extra (92se).....	43 -	43 -	44 -
84-91 score.....	39 -42 1/2	39 -42 1/2	40 1/2-43 1/4
Lower Grades.....	38 -38 1/2	37 1/2-38 1/2	39 1/2-40

The butter market is substantially the same as it was a week ago, when we reported that the market was holding steady. There has been more speculative activity of late and that element in the trade will have a very decided influence in shaping the course of the market for some weeks to come. The receiving end of the trade is very well satisfied to leave matters as they are. We are getting very full receipts and it is the policy to keep stock moving.

In some quarters there has been a little talk of a slight lack of confidence, but if there is any it is certainly under cover, for the trade as a whole can be characterized as steady.

On May 24 the storage holdings in the four largest cities totaled 7,279,528 pounds of butter. On the same day a year ago the same cities reported 2,452,914 pounds of butter. The into-storage movement from May 17 to May 24 was about three times as heavy as it was during the corresponding period last year.

Fresh Cheese a Shade Higher

STATE	May 28, 1929	May 22, 1929	Last Year
FLATS			
Fresh Fancy.....	23 -	22 1/2-	23 1/2-24
Fresh Average.....			
Held Fancy.....	27 1/2-29 1/2	27 1/2-29 1/2	30 -32
Held Average.....			29 -30

The demand for fresh cheese has warranted another fractional increase, bringing fancy marks up to 23c. The make of cheese is increasing gradually but New York City has not been getting such heavy supplies to cause any reduction or revision in prices. There is nothing exciting about the trade, in fact business is rather quiet. A good demand still exists for cured cheese of fancy qualities. The storage figures in the ten cities making daily reports show very little change. From May 16 to May 23 holdings in the ten cities have been reduced 74,000 pounds. During the same period a year ago holdings were increased in the ten cities over 200,000 pounds. On May 23 the ten cities reported 9,844,000 pounds of cheese on hand, while on the same day a year ago they reported approximately 1,600,000 pounds less.

Eggs Again Higher

NEARBY WHITE ..	May 28, 1929	May 22, 1929	Last Year
Hen'y Sel. Extras....	37 1/2-39 1/2	36 -37 1/2	35 -36
Hen'y Av'ge Extras..	36 -36 1/2	35 -35 1/2	33 -34
Extra Firsts.....	34 1/2-35	34 -34 1/2	32 -32 1/2
Firsts	33 1/2-34	32 1/2-33 1/2	30 1/2-31 1/2
Undergrades	32 -33	32 -	29 -30
Pullets			
Pewees			
NEARBY BROWNS			
Hennery	36 -37 1/2	36 -37	35 -36
Gathered	32 1/2-35	32 1/2-35 1/2	29 1/2-34

Nearby egg prices have experienced another advance although at this writing there is sufficient undercurrent to make us feel a little apprehensive concerning the continued advance. Two factors present themselves. In the first place, Western advices are markedly easier, and there is a likelihood that it will give the bears a little foothold. The second factor is the extremely hot wave that struck New York the last

week in May. The hot weather is bound to become evident in interior quality. The choicest marks from Jersey and other nearby points have been enjoying a two cent premium, and unless care is exerted in the method of handling these choice eggs are going to show some shrinkage. From now on shippers have got to exert every effort to get their eggs on to the market in the quickest manner possible without subjecting the eggs to the undesirable influences of hot weather, which means holding the eggs in a cool place and timing the shipment so that the eggs will leave the farm before or after the heat of the day and make the trip to the markets when there is the least likelihood of overheating. If it is at all possible night express service is obviously to be preferred.

Live Broiler Prices Lower

FOWLS	May 28, 1929	May 22, 1929	Last Year
Colored	33-35	34-36	25-26
Leghorn	34-35	35-36	22-24
CHICKENS			
Colored			
Leghorn			
BROILERS			
Colored	30-45	35-50	30-50
Leghorn	20-37	20-40	20-35
CAPONS			
TURKEYS	25-35	25-35	
DUCKS, Nearby.....	23-27	23-27	21-24
GESE	16-17	16-17	

Heavy offerings of express broilers have forced prices downward. The market is in good shape on the fanciest birds. The lower grades, however, are the ones that are taking the grief. Under ordinary circumstances the second best birds usually sell well, but the heavy supplies are causing a lot of trouble.

Fancy Leghorn fowls have been in excellent demand and actually wanted. The call for colored fowls, especially heavy birds, is very limited. We look for good prices for the Decoration Day holiday on fancy Leghorn fowls. The freight receipts are running light. Cars generally containing a larger proportion of broilers.

Feeds and Grains

FUTURES	May 28, 1929	May 22, 1929	Year Last
(At Chicago)			
Wheat (May).....	.96 3/4	1.03	1.44 1/4
Corn (May).....	.81	.84 1/2	1.01
Oats (May).....	.41 1/2	.45 1/4	.62 1/2
CASH GRAINS			
(At New York)			
Wheat, No. 2 Red..	.98 3/4	1.30	1.98 1/4
Corn, No. 2 Yel..	.55	1.03	1.21 1/2
Oats, No. 2.....		.58	.80 1/2
FEEDS			
(At Buffalo)			
Grade Oats.....	33.00	33.00	
Spring Bran.....	25.50	26.00	37.00
Hard Bran.....	27.00	27.50	38.50
Standard Mids.....	25.50	26.00	39.50
Soft W. Mids.....	32.00	32.50	43.50
Flour Mids.....	30.00	31.00	42.00
Red Dog.....	34.50	35.00	44.00
Wh. Hominy.....	37.00	37.00	45.00
Yel. Hominy.....	37.00	37.00	
Corn Meal.....	36.50	37.00	42.00
Gluten Feed.....	38.50	38.50	45.25
Gluten Meal.....	46.00	46.00	
36% C. S. Meal.....	36.00	38.50	59.00
41% C. S. Meal.....	40.00	41.50	67.00
43% C. S. Meal.....	42.50	44.50	70.00
34% O. P. Linseed			
Meal	49.50	50.00	54.00

The above quotations are those of the local Buffalo market and are F.O.B. They are reported in the weekly letter of the N. Y. State Department of Agriculture and Markets.

Hay Market Fairly Steady

The hay market is amply supplied as May draws to a close, and trade as a whole is slow. No. 1 is scarce, and anything grading other than that is moving slowly. Prices seldom go above \$25 although No. 1 Timothy would reach \$27 if it were here.

Three-Fourths of Pennsylvania Cattle TB Tested

MORE than 900,000 cattle, almost three-fourths of the total in the Commonwealth, are now under supervision for the eradication of bovine tuberculosis, according to the Bureau of Animal Industry, Pennsylvania Department of Agriculture. These tested cattle make up 124,000 herds.

In addition to individual herds in the various counties, all the cattle in 926 townships out of a total of 1,569 townships have been tested. Approximately half of these townships are in the 20 counties which have less than one-half

of one per cent of the disease present and are now known as "modified accredited areas."

Packing Sweet Corn in Texas

Thomas F. MacGregor, inventor of the nitrogen gas method of packing fruits and vegetables that was tried out at Hammonton last year, is now working in the Rio Grand Valley of Texas on the same project. Arrangements have been completed for the packing of several cars of sweet corn for the northern markets. The plant for the marketing of this commodity is located at Mercedes in the center of an important vegetable area.

The corn is being packed in metal containers holding thirty-five dozen ears each. On the present plan one car of Texas corn is to be shipped to New York, Pittsburg, Philadelphia and Cleveland.

As soon as the sweet corn crop of Texas is out of the way, Mr. MacGregor is planning to go to the Imperial Valley, California, and ship vine-ripened cantaloupes to the Eastern markets.

Ayrshire Breeders to Have Annual Meeting

THE annual meeting of the Ayrshire Breeders Association is scheduled for June 12, at the Hotel Commodore, New York City. In addition to the annual election of officers, which is perhaps the most important item of business, there will be time to discuss the problems of interest to breeders, particularly concerning a plan for registering animals with a photographic record of color and markings. The day following the annual meeting there will be a public sale at Strathglass Farms, Port Chester, N. Y.

AMERICAN AGRICULTURIST is printed at Poughkeepsie, but our business and editorial offices are at 461 Fourth Avenue, New York City. Please direct all editorial and advertising mail to New York City. If you send it to Poughkeepsie, it will be delayed in answering.

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In use over 50 years.
SYMPTOMS OF HEAVES

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Let us suggest to you as breeders the best kind of a pig to start to raise is a good one. You save time and money. We sell all pigs with a trial of two weeks, and then if dissatisfied, return pigs and we will return your money.

6-7 wks. old, \$4.75 ea.; 8-10 wks. old, \$5.00 ea.
Breeds—Chester and Yorkshire cross, and Berkshire and Chester cross. Crating free. These prices F.O.B. our depot. Will ship any number C.O.D. or send check or money order.

MISHAWUN STOCK FARM,
MISHAWUN ROAD, WOBURN, MASS.
P. S. No pigs sold at the farm; only by appointment.

Your Money's Worth Young Quality Pigs

Chester and Yorkshire—Berkshire and Chester

7 to 8 weeks old.....	\$5.00
9 to 10 weeks old.....	5.50
10 to 12 weeks old.....	6.50

All husky, healthy, fast growing stock.
MY GUARANTEE—YOU MUST BE SATISFIED. Will ship any number C.O.D. on approval. If dissatisfied, return at my expense. Crates free of charge.
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SIZE AND QUALITY
Large type Poland China—Chester White Cross. Yorkshire and Chester Cross.
Also a few Duroc & Berkshire cross sows and Barrows.

Pigs 6 to 7 weeks old	\$5.00
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These are all good Blocky Pigs. Are weaned and will make large hogs. Will crate and ship C.O.D. for your approval. Visit us or mail your orders to
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Choice young pigs from Chester White sows sired by registered O.I.C. boar.

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All my pigs are guaranteed. Write your wants or come soon and pick yours. All visitors welcome. **JOHN PHOTON, Lowell St., W. Peabody, Mass. Tel. 139-J.**

ITS



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is just half of it

"The Wake-up Food" brings you

quick new
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HOW wonderful it is that in the delicious bowl of crisp Post Toasties you enjoy so much, there's *more* than flavor! There's energy—an abundance of it. And so easy to digest that its store of ready energy is quickly released to the body. That's why Post Toasties is called the Wake-Up Food—for wide-awake bodies—for wide-awake brains.

Mellow, golden flakes of nature's great energy-giving grain—pure white hearts of corn, deliciously seasoned and toasted to delicate crispness! Served crisp from the package with cool, fresh milk or cream, here is just the energy-breakfast those growing youngsters need. And what an ideal addition to the morning meal when the man of the family wants something delicious but wholesome, easy to digest and rich in energy!

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ANCESTRY

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TO LIVESTOCK
-AND **TIRES**



SAVE time, money and temper by driving on good tires. Remember, the tire is the foundation of your car or truck. Everything depends on it.

What is the ancestry of the tires you buy? A tire is made of rubber and cotton—but what kind of rubber, and what kind of cotton? How are they processed and put together? What manufacturer places his trade mark there, saying: "This is our product, manufactured in good faith. It carries our name, and can be depended on."

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No need to take chances. Tires that are advertised in these columns must be good or you would not find them offered here.

Why worry along
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It's more economical to buy
advertised tires.
That's the way
to pack up tire
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forget them.



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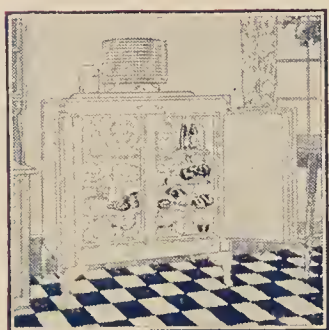


Woman's work . .

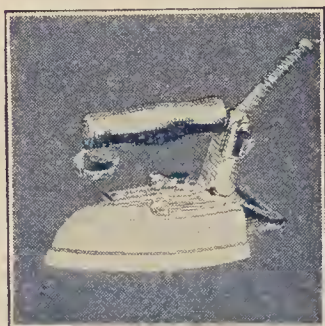
Woman's work is never done—certainly not if she lives on a farm! From early till late she cooks, cleans, and mends. In her “spare time” she is expected to take care of the chickens and the garden. Rarely has she even a few precious moments of leisure. ¶And if she sweeps and washes by main strength she is wearing herself out for three cents an hour! ¶For that slight cost, electricity will run a vacuum

cleaner, a washing machine, or a refrigerator or fan. For a little more it will operate electric cooking and heating devices. ¶Save her time and strength with electric servants which bear the G-E monogram, your assurance of economy and good service. ¶If you are located on or near an electric power line, ask your power company for complete information concerning the possible uses of electricity on your farm.

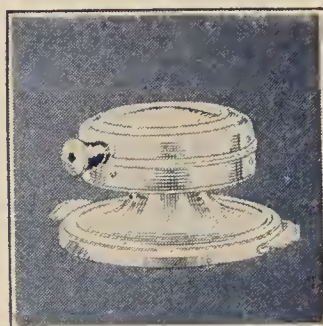
Tune in on the General Electric Special Weekly Farm Program on WGY (Schenectady), KOA (Denver), KGO (Oakland). In addition, every Saturday evening at 9 P.M. Eastern Daylight-saving Time the “General Electric Hour” is broadcast over a nation-wide chain.



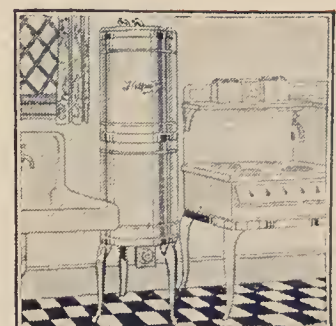
The G-E refrigerator is entirely automatic and makes it safe to be hungry



You set the throttle and this Super-Automatic Hotpoint iron maintains any desired temperature



Delicious and appetizing dishes are made on a Hotpoint waffle iron



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C.G. ROHRER, Sibley, Illinois, Manager of Burr Oaks Farms, writes: "I have used Goodyear tires for fifteen years. They are the best for heavy duty, driving through rough pastures, stubble fields, and in all kinds of weather. For last five years I have insisted on Goodyears as original equipment and for all replacements. I purchased Double Eagle Goodyears for the business car used practically every day of the year in superintending 13,674 acres of Illinois farm land."

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A BIG, HUSKY TIRE

*—combining OUTSTANDING quality and LOW price,
and backed by the greatest name in rubber!*

Pathfinder tires are now well and favorably known to a great army of American motorists.

Millions of Pathfinders have been built by Goodyear, and they have served satisfactorily and well.

Now Goodyear offers a *new* Pathfinder tire—a *vastly improved* Pathfinder—embodying all the experience gained in making the earlier Pathfinders.

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You will notice first what a big husky tire this new Pathfinder is—big and handsome and rugged.

Its wide and heavy tread is designed for slow and even wear, and it delivers exceptional traction.

Beneath that stout tread is a tough and sinewy carcass made of genuine Supertwist cord, with its matchless vitality and resistance to fatigue.

Big, strong, good-looking, dependable—*high* in value and *low* in price—this new Pathfinder is a genuine Goodyear product through and through!



PATHFINDER



Farm News from New York

Grangers to Hear National Radio Program--County Notes

On the evening of June 7 a million Grangers and their families throughout the country gather at home in their local halls to sit in on the national radio program of the Grange, will hear eight speakers of national repute. The event, sponsored by National Grange, will be broadcast from Washington, D. C., through a coast-to-coast system of NBC stations, 8:00 P. M., Eastern daylight saving time (8:00 P. M., Eastern Standard time).

The program as announced by Grange officials follows:

J. Taber, Master, National Grange, Organization and Progress; Hon. Arthur M. Hyde, Secretary of Agriculture, "The Department of Agriculture," Hon. Arthur Capper, Senator from Kansas, "The Farm Home and Enforcement," Hon. John C. Chatham, Congressman from Michigan, "Farm Legislation," Grange melodies, The Imperial Male Quartet; James Farmer, National Grange Lecturer in New Hampshire, "Community Living," Hon. Ruth Hanna McCormack, Congresswoman from Illinois, "Woman in Public Life," Hon. Marvin Jones, Congressman from Texas, "A View from Texas," and Charles M. Jones, editor of the National Grange Monthly, "A Farm Fraternity."

Grangers and their families the country over will hear this national broadcast. Many will gather in local Grange halls to sit in on the event.

Holstein Breeders Have Annual Session This Week

The eyes of the Holstein industry and of all Holstein breeders of America are turned toward Philadelphia, the city of brotherly love, this week for the annual meeting of the National Association.

Holstein breeders have had a successful year and are optimistic. The purebred business is on the upswing. Henry Morgenthau, Jr., publisher of American Agriculturist, is one of the delegates from New York. Watch our columns for a full report of the meeting.

German Fertilizer Concern Start Plant Here

A recent announcement states that a movement is on foot to combine American capital with Germany's research and scientific pioneering in a company to manufacture nitrogen carrying fertilizers in this country. The company which is to be known as the American I. G. Chemical Corporation, will make in America, products similar to those produced by the company known as the I. G. Farbenindustrie Aktiengesellschaft, more commonly known as the I. G. Dyes, of Frankfurt, Germany, such as synthetic gasoline, synthetic fertilizers, artificial silk, dyes, solvents and lacquers.

The outstanding common stock of the German company is reported to be valued at \$450,000,000 and it is stated that \$30,000,000 of capital has been obtained for the new concern which is to be started in this country. For some time the German company has held option on some property in Alabama and it is generally believed that a plant will be located there to abstract nitrogen from the air for the manufacture of fertilizer.

Farmers' Meetings

Several meetings of interest to farmers are scheduled for the near future. On June 11, the National Fertilizer Association will have its Fifth Annual Convention at the Griswold Hotel, New London, Conn.

The Long Island potato tour which has become one of the most important annual meetings in New York State, is scheduled for June 26, 27 and 28. This meeting consists mainly of a tour through the potato producing sections of Long Island with frequent stops at potato fields to discuss the various problems which affect production.

On June 14 and 15, about two hundred farmers from twenty western New York counties will take a two-day forestry tour. The trip will start near Batavia at

10 o'clock on the morning of June 14, and will end at Letchworth Park, Saturday afternoon.

Those who take the trip will stop at a 48-year-old hand-planted sugar bush, a 17-year-old black locust plantation just ready to cut into posts, the 1200 acres of Rochester's municipal forest, Genesee county's forest, the Seven Springs Country Club plantings, typical idle land in southern Livingston county, and the plantations, or arboretum, at Letchworth Park which show a wider range of species than any other plantations in the state.

Members of 4-H forestry clubs in Genesee and Wyoming counties will take part in the tour. On Friday the Genesee county boys will put on a tree-planting demonstration, place tour signs on the cars, and give other service to make the guests more comfortable. Wyoming county 4-H club boys will show how to plant trees at Letchworth Park on Saturday afternoon.

Agricultural Programs From WGY

12:00 Noon—Eastern Standard Time, daily except Saturday and Sunday—weather report, farm produce report, farm talks.

6:10 P. M.—Eastern Standard Time, daily except Saturday and Sunday—farm produce report, farm talk.

7:00 P. M.—Eastern Standard Time, (8:00 P. M. Daylight Saving Time). Thursday—Half-hour agricultural program.

Genesee and Wyoming counties will take part in the tour. On Friday the Genesee county boys will put on a tree-planting demonstration, place tour signs on the cars, and give other service to make the guests more comfortable. Wyoming county 4-H club boys will show how to plant trees at Letchworth Park on Saturday afternoon.

Wheat Prices Take Big Drop

On May 27 wheat for May delivery went below a \$1 a bushel for the first time in fourteen years. The causes given for this drop were, first, sharp break in stock prices all over the country. Second, the unusually heavy carry-over of last year's wheat crop, and third, prospects for a heavy crop this coming year.

The feeling with which this news is received will depend upon the business one is engaged in. It is naturally a severe blow to wheat growers, but may be reflected in lower prices for dairy feeds which will benefit Eastern dairymen.

Tariff Bill Passes House

On May 28 the House of Representatives passed the tariff bill by a vote of 264 to 147. There have been a few changes of interest to farmers since the bill was introduced. Hides have been put on the list with a 10% duty, leather with a duty of from 12½% to 30%.

Some of the principal increases under the bill as passed by the House are increases from 50c to .75c per hundred on potatoes; from 12c to 14c per pound on butter; from 2½c to 5½c per gallon on milk; from 20c to 48c per gallon on cream; from 8c to 10c per dozen on eggs.

New York County Notes

Allegany County—Cold wet weather continues and many farmers have been unable to get on the land at all. The canning factory company has extended the date for sowing peas to June 1. A heavy frost and freeze occurred on May 19th. Cattle are out on pasture and meadows look fine. The new county road is under construction from the Livingston County line extending to two miles south of Canaseraga. A poster campaign is on urging farmers to clean all infected fields and stalks in which corn borer larvae may be hiding before June 1. The annual meeting of the Canaseraga Dairymen's League will be held Saturday, May 26, in the town hall for election of directors and delegates.—Mrs. O. H.

Orange County—R. W. Epting has been engaged as principal of the Chester High School to succeed Prof. Ganwood, who will be district superintendent in Dutchess County in place of the late

Frank Haight. The Chester-Washingtonville highway is being paved with concrete. Middletown will spend \$57,000 on an incinerator. The State Charities Board inspected the farm near Warwick recently transferred by New York City to the State, in connection with the proposed erection of a state training school for boys. Warwick has set out 15,000 Norway spruce trees around its reservoirs.—D. C. H.

Dutchess County—The season is cold and wet. Many farmers did not try to put in oats, and many are busy with corn ground. More than ever the chicken business is taken up and many brooder houses have been erected. Many summer boarders will come to this town. Granges are active and social life is increasing. Eggs are 40c and butter 53c.—Mrs. H. H.

Saratoga County—Rain is still holding up the planting of crops. Meadows and pastures are looking fine. Eggs are 30c and butter 45c. Farmers are feeling discouraged. Pigs are not as plentiful as last year and are in good demand at \$5. Sheep and cows are in the pasture and dogs are bothering some flocks of sheep. Roads are improving. Chickens are doing well for such bad weather. We are hoping for fair weather in June.—Mrs. L. W. P.

Clinton County—Land has dried out some the last few days but still cold and wet. Some grain has been sowed. Meadows and pastures are looking good. Old hay is mostly used up. Cows are in good demand, \$150 being about the average price. Schuylar Falls and Beekman Granges have each built a new hall the past year.—R. J. M.

Franklin County—Farmers in this county are very busy working on the land which is now in shape for planting and sowing, although little seed is in the ground at this date, but with favorable weather conditions a good part of the grain and potatoes will be planted this week. Cows have been turned to pasture but pastures are not at their best as yet. Prospects for a good crop are in evidence. Potatoes are 35c to 40c, eggs 25c and hay \$15 a ton. Dairymen are making every effort to increase fall production of milk in this section.—H. T. J.

Rensselaer County—The cold wet weather of May has kept farm work back. Many fields of oats are being sowed now. Grass is making fine growth. Cows are doing well. Notwithstanding the drop in the price of milk for this month, the

price received is more satisfactory than it has been for several previous years. Some dairymen are receiving 5½c. The late frosts have not apparently injured the fruit crops. Butter is bringing 55c, eggs 30c to 35c. The potato market is weak with prices ranging from \$1.30 to \$1.40 a bushel.—E. S. R.

Madison County—It has been a good week for farm work. Some of the farmers have sown their oats. The spring is very late, however. There has been considerable excitement in a neighborhood near DeRuyter where a few weeks ago the buildings of a certain farm were wiped out by fire and one week later the barn of another neighbor suffered the same fate. In the latter case fire companies from DeRuyter and New Woodstock were summoned and the horse barn and house were saved. Circumstances point to the fact that fire must have been of incendiary origin.—Mrs. C. A. P.

Columbia County—Two days were cold and rainy last week. The Philmont Rod and Gun Club held a banquet with a speaker from the Conservation Department. 500 apples and peach trees were set out in North Claverack. L. P. Hover of Germantown, has a contract for concrete dam at Saugerties. They are building the headquarters sections of the Hudson Armory now. The Woman's Club of Claverack held an annual banquet at Grange Hall recently. Immunization treatment is being given in Union School at Stottville for all up to 10 years, for prevention of diphtheria. The quarterly extension meeting for all the poultrymen of the county was held May 16 at the Farm Bureau Office, Hudson. About 50 were present. Plans for the June picnic and tour were discussed. Professor Hurd of the State College of Agriculture spoke about growing chicks. Eggs are 30c a dozen. Mrs. C. V. H.

Warren County—The first 4-H Club to be organized in this county is at Luzerne. About 15 boys joined and elected Clayton Ramsey president. They are taking up as projects; potatoes, poultry and gardening. Twenty bushels of certified seed potatoes have been obtained. Over 200 bushels of certified seed potatoes have been supplied Warren County farmers through the Farm Bureau. All farming operations are late in this section. There was quite a freeze on May 10, with ice on the Backwater of the River. Vegetation is beginning to start. Eggs are plentiful at 35c a dozen. Butter is 55c and is scarce.—E. G.

New PAGE High Speed 4 Cow Milker

PORTABLE GAS ENGINE OR ELECTRIC POWER



Milk 4 Cows at Once

I'll Put One in Your Barn on FREE TRIAL

Just Wheel In—START MILKING

I'll put this 4-Cow Milker in your barn on Free Trial. You can use it—test it—try it on your own cows at our risk before you pay us a cent. Nothing to install—no pipe lines, no pulsator valves or vacuum tanks. Milks 4 cows all together or separately. The fastest and best milker ever invented—yet the cheapest to buy—and the most economical to own.

Write for FREE Book

So send today for our FREE Milker Catalog that tells all about it. Get all the facts—the whole story about this new wonder PORTABLE Milker. Send the Coupon today. Catalog shows our entire line of Gas Engine, Electric and Hand power milkers in sizes for herds of 6 cows and up.

Faster, Better, Easier to Clean

This special FREE TRIAL offer is good only until we have an agent or salesman in your locality. So don't wait. Here's your chance to save money and find out what this amazing new 4-Cow Milker will do for you on Free Trial. You pay nothing down. Then if you want to keep the Page Milker, you pay only \$5.00 after the FREE TRIAL and the balance on easy monthly terms. Send the coupon below for our FREE TRIAL Offer and our FREE Milker Catalog today.

BURTON PAGE CO.,
Dept. 235, 537 S. Dearborn St., Chicago, Ill.
Please send me your FREE BOOK containing the facts on milking machines and full details of your free trial, easy payment offer on the Portable Page Milkers.

Name.....
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Do you want our cream separator offer?.....
Would you like to be a USER AGENT?.....

Baby Chicks



CHICKS with vim and vigor

Hatched by men with 19 years experience, from culled flocks. 100 per cent live delivery guaranteed by Prepaid Parcel Post at the following prices:

PRICES FOR JUNE AND JULY

S. C. White Leghorns.....	9c each—\$ 80.00 per 1000
S. C. Brown Leghorns.....	9c " " 80.00 " 1000
Barred Rocks.....	10c " " 90.00 " 1000
S. C. R. I. Reds.....	12c " " 110.00 " 1000
S. C. Black Minorcas.....	12c " " 110.00 " 1000
H. B. Mixed.....	9c " " 80.00 " 1000
L. B. Mixed.....	8c " " 70.00 " 1000

\$1.00 will book your order. Catalogue free.

THE PENNSYLVANIA HATCHERY
LIVERPOOL, PA.

8 WEEK OLD WHITE LEGHORN PULLETS

\$1 EACH—F. O. B. RED BANK, N. J.

ORDER NOW for July Delivery

10% DEPOSIT BOOKS YOUR ORDER
EIGENRAUCH FARMS

DEPT. G, RED BANK, NEW JERSEY

BETTER BABY CHICKS

BARGAIN PRICES—SAFE DELIVERY	50	100	500
Wh. & Brown Leghorns—Anconas.....	\$6.50	\$12.00	\$57.50
Bd. Rocks—S.C. Reds—R.C. Reds.....	7.50	14.00	67.50
Wh. Wyandottes—Blk. Minorcas.....	8.00	15.00	72.50
Columbian Wyandottes—Jersey Giants.....	10.00	18.00	

Finest State Inspected Stock—Catalog Free.

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PENNA. CHICKS



"State Supervised" Flocks inspected by officials from the Penna. Dept. of Agriculture. S.C. Wh. & Br. Leghorns.....11c ea. Bd. Rocks & Blk. Minorcas.....12c ea. S.C. Reds 14c. Assorted 8c & 9c ea. \$1.00 books order. 100% live del. guaranteed. Our 19th yr. Catalogue free

THE KEYSTONE HATCHERY,
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SPECIAL SUMMER PRICE REDUCTION 200,000 CHICKS 1929

GOODLING'S SUPER QUALITY

White Leghorns	25	50	100	500	1000
"Barron & Tancred Strains".....	\$2.75	\$5.00	\$9.00	\$42.50	\$80.00
Bd. Rocks & S.C. Reds.....	3.00	5.50	10.00	47.50	90.00
Broilers, Heavy Breeds.....	2.75	5.00	9.00	42.50	80.00
Broilers, Light Breeds.....	2.50	4.50	8.00	37.50	70.00

Order direct. Prepaid. 100% Live arrival guaranteed. \$1.00 will book your order. Circular free.

THE VALLEY HATCHERY, Box A, R. No. 1, RICHFIELD, PA.

BARRED ROCK CHICKS

A large modern Breeding Farm and Hatchery devoted exclusively to the production of BARRED PLYMOUTH ROCKS.

MARVEL POULTRY FARM, GEORGETOWN, DEL.

BABY CHICKS

Tancred Strain W. Leg.....	\$9 per 100
Wh. Leghorns.....	8 per 100
Barred Rocks.....	10 per 100
S. C. Red.....	10 per 100
Heavy Mixed.....	9 per 100
Light Mixed.....	7 per 100

500 lots 1/2c less; 1000 lots 1c less. 100% live delivery guaranteed. Order from this ad, or write for free circular.

C. P. Leister, McAlisterville, Pa.



Klines Barred Rocks

Healthy stock, Penna. State College males, Strong chicks guaranteed. Prompt del. C.O.D. \$10.00-100. \$90.00-1,000. Write or wire.

S. W. Kline, Box 40, Middlecreek, Pa.

JUNE PRICES	100	500	1000
S. C. White Leghorns.....	\$ 8.00	\$37.50	\$75.00
Barron & Wyckoff Leghorns.....	9.00	42.50	80.00
Barred Rocks & R. I. Reds.....	10.00	47.50	90.00
Light Mixed \$8. Heavy Mixed \$9. Our chicks are properly hatched, strong and vigorous. 100% live delivery. Postpaid. Circular free giving full details of all breeds. CLEAR SPRING HATCHERY, McAlisterville, Pa. R. D. No. 2. F. B. Leister, Prop.			

BEST QUALITY CHICKS	100	500	1000
Tancred Strain White Leghorns.....	\$ 8.50	\$40.00	\$75.00
S. C. Barred Rocks.....	10.00	45.00	90.00
S. C. Brown Leghorns.....	8.50	40.00	75.00
Light Mixed \$7.00. Heavy Mixed, \$8.00 per 100 100% live delivery. P. O. paid. All free range stock. CHESTER VALLEY HATCHERY, McAlisterville, Pa. Box 51			

WYCKOFF and BARRON STRAIN, White Leghorn Chicks for June 9c each; \$80 per 1000. Prepaid and safe delivery guaranteed. Our 19th year. Circular free. \$1.00 books order. THE PENNSYLVANIA HATCHERY, Box W, Liverpool, Pa.

RHODE ISLAND REDS Vt. Certified: Tested free from B.W.D. Males from 200-300 egg hens. Pullets: Started Chicks: 3000 Baby Chicks weekly: Circular. ASCUTNEY FARMS, A10, HARTLAND, VT.

BRED TO LAY BABY CHICKS

Barred Rocks; White Leghorns \$10.00 per hundred for May and June deliveries. 25 chicks \$2.75; 50 chicks \$5.25. Scarborough Poultry Farm, Box A, Milford, Del.



With the A. A. Poultry Farmer



Growing Pullets Need Plenty of Feed

ON most poultry farms during the next few months the most important work will be growing pullets to maturity. This task daily assumes larger proportions; increased size means larger appetites; more feed must be put out, and in such a way that it always will be available.

On too many farms at this season growing chicks are sharpening their beaks on bare mash boxes, jamming into a pile over a new allotment of feed, or grubbing around the bare spots in a nearly hopeless search for an edible morsel. Such management encourages disease and upsets proper growth. Sufficient feeding space should be provided that any chick may feed at any time. Space for "half the flock" as often recommended is all right until three-quarters of the flock or more try to get at the feed at the same time.

The simplest and cheapest type of feeder is an open box, about 6 inches deep, 8 to 10 inches wide, and 4 to 6 feet long. A piece of heavy two-inch wire a trifle smaller than the inside of the box make a satisfactory "follower". It can be put on top of the feed and will prevent wasting mash. Such boxes are easily handled when it is necessary to put them inside the house in wet weather. The smaller chicks will walk on the mash, but feed is quickly cleaned up, and there is little danger of distributing disease in this way. A skeleton reel above the hopper and arranged so it will turn when the chicks try to stand on it will effectively protect open boxes from the larger chicks. The space from the corners of the reel to the sides of the box should be about three inches.

We recommend (1) keeping hoppers away from the bare spots of ground around the house; (2) feeding all the feed, including scratch grain, in the boxes; (3) keeping boxes about half full of mash to avoid wastage and to permit them to be quickly cleaned up whenever feed gets wet.—LOCKE JAMES.

Cornell To Have Poultry Judging School

THE twelfth annual poultry judging and breeding school begins at the New York state college of agriculture on June 24 and is in session during the week. About 90 persons attended the school last year and it is expected that even more will attend this year.

Persons who enter the course must be at least eighteen years of age and be professionally engaged in teaching, research, judging, or writing, or college students specializing in poultry husbandry, or persons who are managing a poultry enterprise. Further information may be obtained from the college of agriculture, Ithaca, N. Y.

Market Broilers at Earliest Possible Moment

IT is an excellent plan to separate the pullets and cockerels as soon as the sexes can be told apart. Male chicks are likely to be larger, stronger, and more vigorous than the females so the pullets have less opportunity to grow when brooded with them. It also reduces the size of the flocks and gives more feeding and drinking space for the birds left.

Keep the cockerels which develop fastest as breeding males, and start with three or four times as many of these at broiler size as will be needed for breeding. Send the broilers to market as soon as they are salable, for prices go down rapidly as the season advances.

Since chicks make the most rapid growth during the first few weeks of their lives, it costs more and takes longer to put on weight after they have reached a pound in weight. According to the college of agriculture

chicks increase their weight 54 per cent the first week, 65 per cent the second, 55 per cent the third, 44 per cent the fourth, 32 per cent the fifth, 28 per cent the sixth, 20 per cent the seventh, and 16 per cent the eighth week.

A New Jersey Boy's Poultry Project

HENRY RAMSEY is a village boy of Clinton, New Jersey, and three years ago enrolled in Vocational Agriculture, then being in his sophomore year in high school. This year he graduates and will go to college if he can get some sort of an industrial scholarship to pay his way through school. He is a poor boy, but is very ambitious and has excellent health and is robust, which means he has the will if he can find the way.

Henry has always had excellent projects, but this year he has the best ever. About five weeks ago he purchased 1000 baby chicks and the people from whom he bought them gave him 90 extras and today he has 1025 chicks as nice as you would desire to see.

Henry believes in perfect sanitation, proper temperature, dryness, light, good feed, ventilation, close observation, and lots of ambition on the part of the manager.

The local agricultural classes helped Henry make the top of his barn into a brooder house and also make a 12x14 brooder house, all being made out of nursery packing boxes. This was good shop work for the classes and helped a deserving boy.

Henry plans to start to college from the proceeds, or if he does not go to college, he plans to build a laying house 20x60 or more by fall and start in commercial laying business.—H.O.S.

Mash for Chicks

Will you please tell me where my feed is wrong if in feeding young chickens instead of buying chicken mash I take a good laying mash and mix in part wheat mixed feed?—W. M., New York.

IN our opinion you are not giving your chicks enough proteins when you take a laying mash and mix wheat mixed feed with it. If you wish to make your own mash we suggest the following which is recommended by the State College.

Mash Mixture

30 lbs. yellow corn-meal
20 lbs. wheat bran
15 lbs. flour wheat middlings
10 lbs. fine ground heavy oats
10 lbs. fine ground meat scrap (50-55% protein)
5 lbs. bone-meal
10 lbs. dried milk products (use part buttermilk)
1/2 lb. fine salt
1% high-grade unrefined cod-liver oil

The advantage of buying mixed feed is that it is always uniform and very frequently has a greater variety of ingredients than the poultryman cares to mix at home.

Poultry Houses With Attics

BY building an attic to their poultry houses, egg producers in the Vine-land section of New Jersey believe they have solved the cause of a number of ills that affect the industry. They have found a satisfactory method of using corrugated metal that gives a permanent roof and overcomes the objection to paper, besides providing a house for the layers that is warmer in winter and cooler in the summer.

A small attic, not over twenty four inches high has been built into the laying house. The floor of this improvised attic is composed of the usual roofing boards covered with a good grade of roofing paper. The floor of the attic is given the same slant as the roof to take care of any circulation of air that may arise in the building.

The metal roof is laid on a second
(Continued on Opposite Page)

Baby Chicks



FINGER LAKE REGION BABY CHICKS

with an official record. Ask for Baby Chick Book describing our bred Cornell Chicks from stock has laid from 200 to 312 eggs their pullet year and mated to birds that have averaged over 200 in their pullet year. Also describe our 144,000 egg hatchery with years' experience in hatching Baby Chicks, Leghorns, Rocks, Wyandottes, Minorcas, and G.

The home of better Chicks at lower cost
THE DERBY TAYLOR CO.
NEWARK, NEW YORK

STOP! LOOK! LISTEN

Cash or C.O.D.	25	50	100	500
Wh. Wyandottes.....	\$3.50	\$6.50	\$12.00	\$57.50
Rocks or Reds.....	3.00	5.50	10.00	47.50
Wh. Leghorns.....	3.00	4.50	8.00	37.50
Heavy Mixed.....	3.00	4.50	8.00	37.50
Light Mixed.....	2.50	4.00	7.00	32.50

From carefully selected free-range flocks. 100% arrival. Postpaid. Valuable illustrated 96 booklet FREE. Telling all about poultry.

The Commercial Hatchery

Box 75-A (The dependable plant) Richfield, Pa.

BABY CHICKS

From Heavy Laying Free Range Flocks

S.C.W. & Br. Leghorns.....	25	50	100	500
S.C.W. & Wh. Rocks.....	\$2.50	\$4.50	\$8.00	\$37.50
Buff Orpingtons & Reds.....	3.00	5.50	10.00	47.50
White Wyandottes.....	3.00	5.50	10.00	47.50
Assorted Chicks.....	2.25	4.00	7.00	32.50

100% prepaid safe delivery guaranteed.

Order from this ad. or write for circular

J. N. Nace Poultry Farm RICHFIELD, PA.

Box 161

150,000 CHICKS

June and July

TAKE NOTICE

25 50 100 500

S. C. White Leghorns.....

\$2.50 \$4.50 \$8.00 \$37.50

Barred Rocks.....

3.00 5.50 10.00 47.50

Rhode Island Reds.....

3.00 5.50 10.00 47.50

Silver Laced Wyandottes.....

3.50 6.50 12.00 47.50

Light Mixed.....

4.00 7.00 32.50

Heavy Mixed.....

4.50 8.00 37.50

From carefully selected free range flocks. 100% arrival. Postpaid. Write for illustrated catalogue.

The Richfield Hatchery, Box 80, Richfield, Pa.

BABY CHICKS

PROMPT DELIVERY—WILL SHIP C.O.D.

50 100 500

Light Mixed.....

\$4.00 \$7.00 \$33.00

Heavy Mixed.....

4.50 8.00 37.50

S. C. W. Leghorns.....

4.50 8.00 37.50

Bd. and Wh. Rocks.....

5.50 10.00 47.50

S. C. R. I. Reds.....

5.50 10.00 47.50

PINECREST POULTRY FARM & HATCHERY

Herbert Miller, Prop. Box 12, Richfield, Pa.

BABY CHICKS

100% Arrival.

25 50 100

White Leghorns.....

\$2.75 \$5.25 \$8.00

Barred Rocks and Reds.....

\$3.25 6.25 10.00

Heavy Mixed.....

2.75 5.25 8.00

Light Mixed.....

2.50 4.75 7.00

Pekin Ducks.....

7.50 14.50 28.00

Mixed Ducklings.....

6.50 13.00 25.00

John Shadel Hatchery McAlisterville, Pa. Box 2, Box

BABY CHICKS

THIS IS MY 11TH YEAR OF EXPERIENCE

25 50 100

Cash or C. O. D.

Barred Rocks.....

\$3.00 \$5.50

Tancred Strain S.C.W. Leghorns

2.75 5.00

Heavy Mixed.....

2.75 5.00

Light Mixed.....

2.25 4.00

These chicks are from free range and heavy egg producing flock. 100% live delivery guaranteed to door. Write for Special Mating prices.

FRANK NACE, Cocolamus, Pa., Box No.

Reduced Chick Prices

In effect June to October 25 50 100 500

Large Type Wh. Leghorns.....

\$2.50 \$5.00 \$10 \$47.50

Bd. & Wh. Rocks, Reds.....

3.00 6.00 12 57.50

Wyandottes, Orpingtons.....

3.25 6.50 13 62.50

Light Assorted 9c. Heavy Assorted 10c.

Live Delivery Guaranteed. Catalog Free.

LANTZ HATCHERY, Tiffin, O.

FERRIS STRAIN WHITE LEGHORN CHICKS

Our breeders are large birds; long, rectangular bodies. Selected for size and egg production.

\$8 Per 100; \$37.50, 500; \$70.00, 1000.

Juniata Poultry Farm, Box T, Richfield, Pa.

CHICKS 8 1/2 c

CLASS A CHICKS at low prices, also pullets, S. C. W. Leghorns, several varieties. No money down. Live arrival; postpaid. Catalog free.

BOS HATCHERY, R2A, ZEELAND, MI.

DUCKLINGS

\$33; EGGS \$1.00 per 100. "Duck News" ROY PARKER, Isthm, L. I., N. Y.

SPECIAL FALL

BABY



CHICKS

Continued from Opposite Page)
rafters the same as any sheet
roof. By adding a small ventilator
at the ends of the metal roof, a free
circulation of air is permitted which
carry off any surplus moisture.
instead of having to replace the usual
roof after heavy storms or at the
end of four or five years, the metal
roof with an occasional painting, last
a longer.

Keeps Temperature Even
In addition to providing a permanent
structure that requires little or no attention,
the interior of the poultry house is kept
at more even temperature through-
out the year. It prevents the excessive
heat of mid-summer in the house and
also keeps the atmosphere nearer
normal during the cold days of Jan-
uary and February.
Birds housed in buildings construct-
ed with the attics suffer less from
chicken pox and the egg pro-
duction is more easily maintained.
In order houses on the range construct-
ed in this manner will overcome the
wide range of temperatures from sea-
son to season. There is at no time the
drying of moisture so common where
open roofs are used.
The slight additional cost of the at-
tic is overbalanced in the longer life of
the roof and the increased egg pro-
duction in the flock. The paper floor in
the attic should last as long as the
roof on the outside roof and then
should serve as well as any ordi-
nary constructed roof now in use on
poultry farms.—AMOS KIRBY.

Shall We Specialize Or Diversify?

EDITOR:—The writer has been much
interested in your recent article where
you suggest that the future of farming
depends on specialization, and, like big
business, the profits must be gained from
small margins, and that the suc-
cessful farmer of the future will be one
who specializes along one line.
In my position, I am meeting farmers
every day of the year, and from
careful conclusions gathered
many years have decided to my own
satisfaction that farmers should diversi-
fy and not specialize.
However, I will say that every man
on the farms should, if he can, come to
be (or become expert) in the produc-
tion of some crop, something that he
can do better than his neighbors, or
something that he can produce at less
expense than his neighbors. This crop
may call his main crop. BUT bas-
ing my conclusions on what I see in my
county, it is the farmers who have
several different lines in operation on
their farms, who are making a little
money from year to year, or who are
at least holding their own and keeping
them.
The trouble with farmers in this part
of the state is, single cropping. Niagara
County, is famous in fact for
fruit crops, with the result that we
are producing fruit and nothing else; and
when I say fruit I mean one variety of
fruit, to the exclusion of other kinds;
when we have a fruit failure, or
when we have a price failure, we are
at a tree, and no way to get down.
The time was in the writer's memory,
when farms in this locality not only grew
apples or peaches, but they also produced
their own meat, made some of their own
things, did some of their own repair
work on farm equipment, visited their
neighbors, helped to care for each other's
crops, shared each other's sorrows and
trials. But now we have specialization,
each for himself, and we are fast get-
ting left doing it.
Our farmers, many of them, buy their
butter and milk, and do not have as
much to use as when producing it them-
selves on their own farm. They buy

their eggs, most of their vegetables and
potatoes, their berries and other small
fruits. Their grocer furnishes them with
canned goods, the village butcher their
meat, at a high retail price.
NO; we must turn about and do dif-
ferently. Niagara, from its single crop-
ping methods, has gotten itself into a
fix where it is up against it to a much
greater degree than any other county in
the State.
It takes but a little to feed a cow, and
part of that little is waste produce on
any farm. It takes only a little extra
time and effort to care for two or three
cows; the by-products of butter making
from one cow will go far in feeding two
pigs and a small flock of hens. Not so
long ago, when farming about here was
called good, every farm produced a few
hogs, one or two to be kept for home
use, and the balance sold to bring in a
cash income, and that at a time of year
when income from other sources was at
a low ebb. We each fed and fattened
a beef, and timed the slaughtering so
that four farmers, by exchanging, with
each other, were able to have fresh beef
all winter (at wholesale) not at by-the-
pound price at the village butchers. We
had a vegetable garden, where we grew
every variety of vegetable that is listed
in the seed catalogues, giving our families
an abundance of the best health giving
food known, when purchased at the
store the supply now is limited. A gar-
den on a farm is worth to the farmer's
family, in money saving, from \$75.00 to
\$200.00 a year besides the health it
brings. Berries, currants, grapes and
other small fruits are now all bought,
except on a farm where that particular
fruit is the specialty, with the result that
the family is short of the amount that
it could consume to advantage, but is
denied on account of the cash expendi-
ture necessary to have it.
Take a farm of 100 acres as an ex-
ample. Fruit (apples or peaches) can be
the main crop. Either cows, hogs, pou-
ltry or sheep can be the stock crop, and
the land is crying for the fertilizer that
the stock crop returns to the land. Po-
tatoes or cabbage or beans can be a cash
producing crop; also some of the crops
needed by the canning factory can be
grown to a reasonable extent.
Something to sell every month in the
year, to bring in a cash income makes
a farm that is self-sustaining.—W. F. T.,
New York.
THIS common sense and practical
letter shows how hard it is to lay
down absolute, hard and fast rules
about farming. The writer of this
letter is of course largely right in what
he says about diversification. You
know the old saying about "carrying
all of your eggs in one basket." We
do need to raise more of our supplies
at home. We do need more and better
gardens, more varieties of fruit for
home use, and more home grown
meats, etc.
Yet there is a happy medium. A
man who diversifies too much may
have little to sell. It is, much as we
regret it, an age of specialization, and
no one man or farm can do too many
different jobs well enough to keep up
with his competition in all of them.
"The Jack of all trades is master of
none," and there are many real trades
within the big trade of farming.
This is the age of *Division of labor*.
Once the farm and the farm home
were sufficient unto themselves, and
produced and manufactured nearly all
the shoes, clothes and food for the en-
tire family. But such a system would
be foolish under modern conditions.
Farming has changed, and we must
conform, but not to the extent, as the
writer of the above letter points out,
of depending entirely upon the markets
for everything we need.
No internal medicine or chemical
mixed with feed succeeds in keeping
poultry free from external parasites.

Hall's Chicks

Leghorns - Reds - Rocks - Wyandottes

"WELL BRED FROM WELL BREEDERS"

New England Accredited stock. All breeders 100% White Diarrhea free
Special low prices for our early-maturing stock.

	S. C. W. LEGHORNS	S. C. R. L. REDS	BARRED ROCKS	WHITE WYANDOTTE
Grade A.....	\$12.00	\$15.00	\$16.00	\$18.00
Special Matings.....	14.00	17.00	18.00	20.00

Prices are per hundred. For orders of 25 chicks add 75c. For orders of 50 chicks add \$1.00.

We ship Prepaid and guarantee safe delivery

Everyone answering this advertisement will receive FREE our suggestions for brooding, feeding and rearing chicks.

Hall Bros.

POPLAR HILL FARM
BOX 59 WALLINGFORD CONN.

National "Superbred" Chicks
100,000 CHICKS FOR DELIVERY IN JUNE

	50	100	500	1000
S. C. White, Brown, Buff Leghorns.....	\$5.75	\$11.00	\$52.50	\$100.00
Barred and White Rocks, Reds.....	6.75	13.00	62.50	120.00

Light Mixed—\$9.00 per 100. Heavy Mixed—\$10.00 per 100.
Also White Wyandottes, Black and White Minorcas, Anconas and Blue Andalusians.
Send for our Catalog and price list. We guarantee 100% live delivery. Member Inter-
national Baby Chick Association.
NATIONAL CHICK FARMS, BOX 408, Millintown, Penna.

Buy C.M.L. Chicks

C.M.L. chicks cost no more than ordinary chicks from the average Hatchery, but our Quality is far superior. For many years we have specialized in Barrows. We import direct from England. 100% Live Delivery Guaranteed. Prepaid.

	25	50	100	500	1000
Barron S.C. Wh. Leghorns.....	\$3.00	\$6.00	\$11.00	\$52.50	\$100.00
Barred & Wh. Rocks; Wh. Wyandottes & R. I. Reds.....	3.25	6.50	12.00	57.50	110.00

All stock carefully selected for size and health. C. M. L. chicks mature early and are sure to please you. Better chicks cannot be had at these low prices. Write for Free Catalog or order direct from this ad.
C. M. LONGENECKER, BOX 40, ELIZABETHOWN, PA.

Fairport Quality Chicks

are bred to make money for you. Strong, healthy, vigorous from the world's best and heaviest laying strains such as—Tancred, Ferris, Owen Farms, Daniels, Thompson, Martin, Shepard, Fishel and others. Free range flocks, scientifically culled and supervised, Smith Hatched. 100% live delivery guaranteed. 16 breeds 9c and up. Postpaid. Members International Baby Chick Association. Send now for free poultry book and prices. Buy Hatchery Chicks for Greater Profits.

FAIRPORT HATCHERIES Box 44 Fairport, N. Y.

Chix from Large Breeders

	50	100	1000
Ferris Strain White Leghorns.....	\$4.50	\$8.00	\$70.00
Everlay Brown Leghorns.....	4.50	8.00	70.00
Basom's Barred Rocks.....	5.50	10.00	90.00
Owens' R. I. Reds.....	5.50	10.00	90.00
Heavy Mixed.....	4.50	8.00	70.00
Light Mixed.....	4.00	7.00	60.00

Our breeders are selected for size, type and egg production. The kind that lay and pay. Send for literature. It's free. Tells all about our great egg machines.
CHIX JUNIATA POULTRY FARM, BOX T, RICHFIELD, PA.

CHERRY HILL CHICKS

	100	500	1000
S. C. W. Leghorns—Wyckoff Strain.....	\$9.00	\$45.00	\$90.00
S. C. Everlay Brown Leghorns.....	9.00	45.00	90.00
Barred Rocks and R. I. Reds.....	10.00	50.00	100.00
Heavy Mixed.....	9.00	45.00	90.00
Light Mixed.....	7.00	35.00	70.00

1/2c less per chick in 500 lots. 1c less in 1000 lots.
For less than 100 chicks add 2c per chick. 100% live arrival guaranteed. Parcel post prepaid. Bank reference. Order direct from this adv. or write for free circular.
CHERRY HILL POULTRY FARM, Wm. Nace, Prop., Box A, McAllisterville, Pa.

CHICKS

Purebred blood tested free range breeders. Leghorns, Anconas, 8c; Rocks, Reds, 10c; Wyandottes, Orpingtons, Minorcas, 11c; Black Giants, 16c. 100% live delivery. Valuable Chick Manual Free. Seidleton Farms, Washingtonville, Pa.

A Correction

An error on page 17 of the May 11 issue has been called to our attention. In the Wisconsin mash ration for chicks it read: "20 pounds of flour meal". This of course, should have been 20 pounds of flour mids.

BABY CHICKS hatched by the best system of incubators from high class bred-to-lay stock. White, Brown, Buff Leghorns, Anconas \$11.50 per 100; Barred, White Rocks, Minorcas, Reds \$13.50 per 100; White Wyandottes, Buff Orpingtons \$14.50 per 100; Giants \$17.00 per 100; Heavy Mixed \$10.00 per 100; Light Mixed \$8.00 per 100; Pekin Ducklings \$30.00 per 100. Add 25c on orders for less than 100. Safe delivery guaranteed by parcel post.
Nunda Poultry Farm, Desk H, Nunda, N. Y. Member of the International Baby Chick Ass'n. and the N. Y. State Co-Operative Chick Producers Ass'n.

BABY CHICKS ORDER DIRECT from this ad. and save time.

	25	50	100	500	1000
Free Range Bred.....	\$2.25	\$4.25	\$8.00	\$39.00	\$75.00
Wh. & Brown Leghorns.....	2.25	4.25	8.00	39.00	75.00
Anconas & Black Leghorns.....	2.75	5.25	10.00	49.00	95.00
White & Barred Rocks.....	2.75	5.25	10.00	49.00	95.00
Col. Wyan. & R. I. Reds.....	2.75	5.25	10.00	49.00	95.00
Heavy Mixed Broilers.....	2.50	4.75	9.00	44.00	85.00
Light Mixed Broilers.....	2.00	3.50	6.50	31.50	60.00

Full count and quality guaranteed. Catalogue free.
Hatchery Chicks ULSH POULTRY FARM & HATCHERY For Greater Profit Port Trevorton, Penna. Box A

WANTED

Your old and new address if you are moving this Spring.

AMERICAN AGRICULTURIST
461 Fourth Ave. New York

What We Can Do With Color

Colors Behave According to Certain Laws, No Matter Where Used

NOT a great many families can afford the luxury of having an interior decorator. Yet every home-maker wants her house to be as nearly right as she can make it. Since so much depends on choosing the right colors, the following facts about color will prove most helpful.

In their effect colors are cheering or depressing, warm or cold, light or dark in value, and have varying degrees of

green and lavender with a border of violet around the edge. The rug should be of mixed tan, green and lavender or it may be a solid gold or violet in color.

In using a two-color scheme it is quite usual to combine complementary colors, two on opposite points of the color wheel, such as red and green or blue and orange. In such cases, one color must be subdued, that is made lighter or darker. For instance, apricot, salmon or peach are subdued variations of orange. The popular cream and ivory are light, greyed yellow. Bright yellows are used only for accent, as in striping furniture or in stencils or in accessories.

Walls, woodwork and floors are only background after all and should not be too conspicuous. Floors should be dark-

daring schemes can be used. Anyhow, the new vogue for color has introduced bright colors into places hitherto unaccustomed to them. But whether it be the daintiest tints which are combined or the brightest possible shades, the color rules remain the same. And it is a great comfort to know that even the less expensive wall papers, drapery and upholstery fabrics may be had in good colors and designs. As said elsewhere, "Good taste is not a matter of dollars, but of sense!"

five parts of cold milk and beat mixture well, with an egg beater be served hot or cold.

Flavor this with vanilla and you have a delicious drink for either winter or summer. We like it ice cold in summer.—MRS. C.D.W., Ill.

A larger quantity of milk may be added to the paste as the proportion of one to five makes a rich mixture.

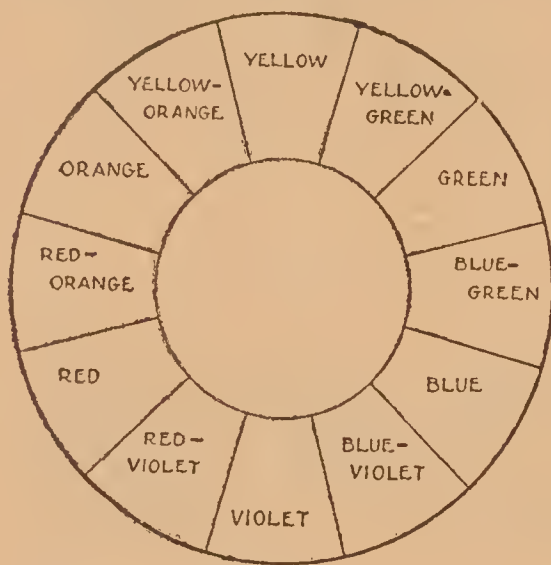


Chart showing how other colors, called secondary, may be obtained from the three primary colors, red, yellow and blue.

intensity. Then there are the three primary colors, red, yellow and blue. From these and their combinations, all other colors are obtained. By looking at the color chart, one sees that these three colors also form a sort of triangle within the circle. When any two of these colors are mixed another color is formed: for instance, red and yellow make orange, yellow and blue make green, blue and red make violet. If more of one primary color is added than another, then the mixture swings in that direction. To illustrate: if red and yellow are being combined to form orange, an excess of red will give what is called a red-orange while more yellow would result in yellow-orange.

As to value, this is obtained by adding white or black to any color. Pink and red are the same color, but red has the darker value. The values of red may vary from a rich, dark red up to a barely perceptible flesh tint. Violet varies from dark purple to the most delicate of the orchid shades. And so with all the colors may different values be obtained.

When we wish to change the intensity of a color, to it we add its complementary color: that is the color directly opposite it on the chart. Yellow and violet are complementary, red and green, blue and orange, yellow-green and red-violet, blue-green and red-orange and so on.

That part of the color chart from yellow-green through blue to blue-violet represents the cooler colors which make a room look large: the remainder are warm colors. A north room or one that is cheerless in appearance is improved by the use of warm coloring, whether on walls or in drapes. However, the warm colors make a room appear smaller. Green, containing both yellow and blue is a sort of compromise of the warm and cool tones.

In modern decorating, three colors at equal distances on the color wheel (a triad) are often used. For instance, in a young girl's room where everything bespeaks youth and lightness, green, violet and orange could be combined to form the color triad. A sage green which is both warm and quiet could form the background, walls, woodwork, and furniture. The brighter colors should be used in smaller quantities for trim or accessories, such as bands on dresser scarf, chair cushions or a bright vase or bowl. The floor could be stained a light brown which is really a dark orange. Then use gold-colored voile draperies with over drapes of cream with splashing figures in

est in value, walls next and the ceiling lightest of all. A dead white ceiling although good for lighting purposes, is not so good artistically. The palest tinge of the wall color can be used, with just enough color to take the curse off the white. Woodwork the same color as the walls makes a room look larger and if the openings are badly placed it helps to cover that defect. Adjoining rooms look more spacious when finished alike.

Colors should be selected according to the use of the rooms. A delicate lot of colors such as sea-green, apricot and orchid might be stunning for a bedroom but altogether inappropriate for a living-room. Warm, neutral tones, such as putty color, are good for living or dining rooms. Then a few good pictures, a tapestry, a bright jar or pot of flowers, lamps or books give the colorful note of interest needed against such a background.

For sun-rooms, bathrooms, or kitchens, more colorful backgrounds may be used, thus saving on the cost of draperies. If one understands the underlying principles of color combinations, more

of cherries for both of us. I could hardly wait for a taste of the finished product but the first mouthful was pronounced delicious and I was very glad I had tried the experiment. The flavor is quite similar to currant and cranberry butter.

This is the way I prepared them:

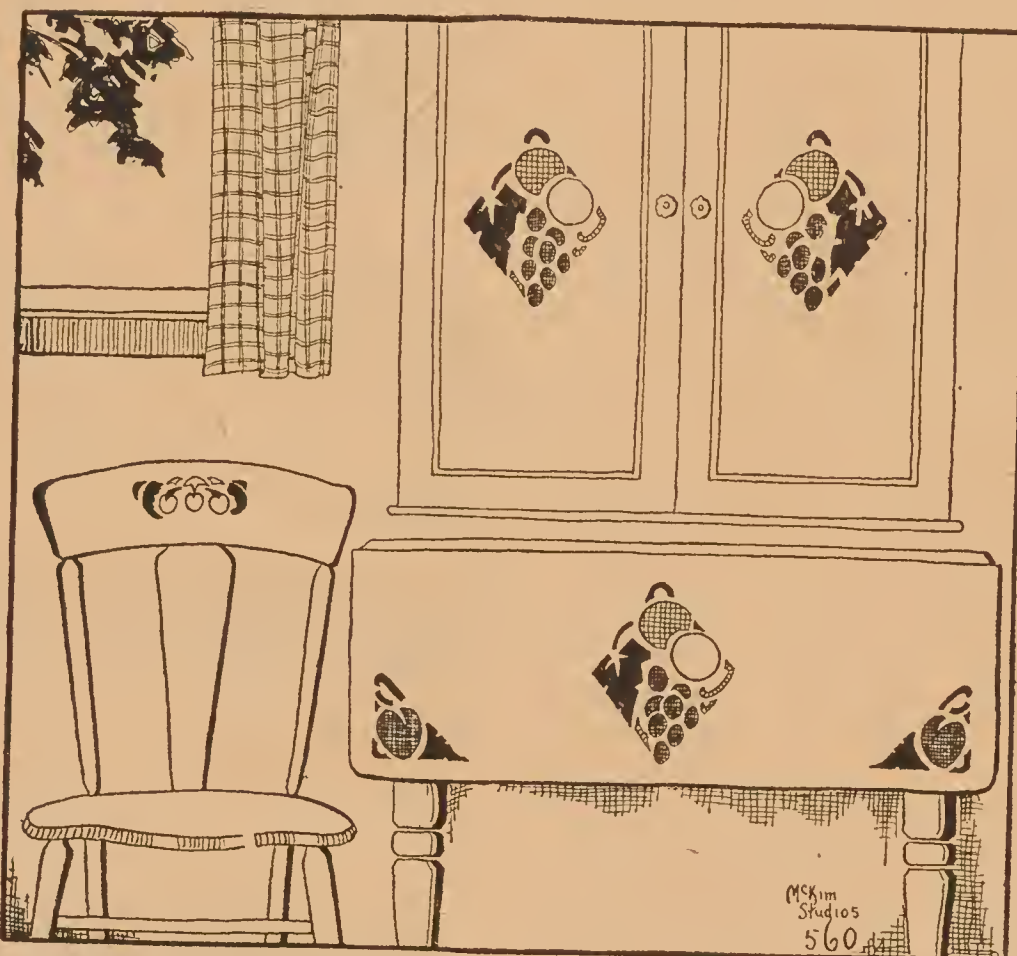
Stem and wash the cherries, put into granite kettle with enough water to prevent burning and cook until soft. Put through a fine sieve, measure the pulp and juice, add an equal amount of sugar, stir well, cook a few minutes until it hardens like jelly, then pour into glasses and seal or eat soon.—L.A.C., New York.

Cocoa Milk Shake

1 cup of cocoa. 2 cups of granulated sugar and 2 cups of hot water. Mix cocoa and sugar together, then add enough hot water to make a thick paste. Add balance of hot water slowly. Boil one minute and add a pinch of salt. Boil two minutes longer, then pour up into a glass jar.

Add one part of this cocoa syrup to

Stencils for the Kitchen



NO. 560 40 CENTS

Stenciling is the easiest of handicrafts. It is done by simply holding the stencil in place and painting over the holes in the colors called for by our instruction chart. Number 560 especially designed for kitchen and breakfast room decoration, provides a diamond-shaped motif of fruits about 5 by 8 inches for cupboard door panels, or for a table center or oilcloth window drapes. Combined with the corner motifs it is suitable for a wall border, dropleaf table or oilcloth runner. These corners may of course be used wherever a color spot is needed in this shape.

There is included also a small stencil 1½ by 4 inches of cherries, designed especially for chair backs, small drawers, or a narrow border. The same stencil can be used over and over. Number 560 is priced at 40 cents postpaid. You can use oil paints, enamels or lacquer with this, but we have prepared a paint kit consisting of two cans of enamels, a brush and tubes of paint so that by following our simple directions you can get all the colors required without difficulty. This is number 598 and costs \$1.25 postpaid. Address Embroidery Department, AMERICAN AGRICULTURIST, 461 Fourth Ave., New York City.

Summer Salads

Combination Salad

- | | |
|------------------------------|-----------------------|
| 2 medium sized cucumbers | 1 stalk crisp celery |
| 2 medium sized green peppers | 4 sound ripe tomatoes |
| | 1 medium white onion |

Soak vegetables in cold water one hour to crisp. Peel tomatoes, onions and cucumbers. Rid peppers of seed and parts, clean and cut celery fine. All, and combine with dressing preferred. Serve cold on lettuce.

Since the tomatoes are apt to be watery when chopped you can prevent this condition by cutting them fine and combining with the other materials after they have been chopped.

Tomato and Sauerkraut Salad

- | | |
|-----------------------------|---------------------------|
| 6 firm round, ripe tomatoes | 2 tablespoons lemon juice |
| 2½ cups sauerkraut | 1 tablespoon sugar |
| 4 tablespoons salad oil | ½ teaspoon paprika |
| | Lettuce |

Peel tomatoes with sharp knife or scissor and slip off skins. Chill on ice. Cut stem end and remove centers. With egg beater mix the oil, lemon juice, sugar, salt, and paprika. Add sauerkraut and fill tomatoes with mixture. Serve cold on crisp lettuce.—ROBERTA SYMM

The sauerkraut may be chopped slightly before using to aid in convenience of eating.

Useful Pamphlets

The following booklets can be secured by addressing Household Department, AMERICAN AGRICULTURIST, 461 Fourth Ave., New York City.

How to Make Crepe Paper Costumes—10c.

How to Make Crepe Paper Flowers—10c.

How to Decorate Halls, Booths and Automobiles—10c.

Weaving with Paper Rope—10c.

Sealing Wax Craft—10c.

Betty's Scrapbook of Recipes for Little Cooks—10c.

Fashion Catalogue—12c.

Art of Embroidery, teaching all the important stitches used in embroidery—10c.

Yarncraft—directions for making many kinds of sweaters, caps, afghans, etc.

coolie coats, both knitted and crocheted—25c plus 5c for mailing.

The following can be secured by sending 2c postage.

Old-fashioned recipes.

Reviving in case of drowning or poisoning.

Learning to crochet and knit.

Knitting the new sweaters.

Free pamphlets:

Health Pamphlets for Mothers and Young Children.

Talks on sex to older children.



NO. B2357 is a charming interpretation of the sampler idea which goes so well with the room furnished with old-fashioned furniture. This comes stamped in the colors on oyster white linen to show how the cross-stitch design should be worked. Stamped linen 65c. Stamped linen with silk rayon floss for working \$1.00. Address Embroidery Department, American Agriculturist, 461 Fourth Ave., New York City.

Aunt Janet's Counsel Corner

A. A. Brings Coveted Opportunity to All Its Readers

WHEN you hear someone sigh and say regretfully she never had a chance to take a course in home-making there is a good chance to speak up and say that right now any reader of American Agriculturist is having a good opportunity to take a course in home-making, or "foods" as it is called in home-making classes. Betty's Recipes for Little Cooks which appear every month in the American Agriculturist were written by a graduate home economics and the whole series planned out just as a course in foods planned.

Although each lesson is explained in the simplest words possible, and was planned especially for teaching children, the reasons and explanations given are the same as would be given in any foods course for beginners of home-making. Even if all our readers were graduates of home-making courses—there are only comparatively few are—there would find new points of interest in these lessons.

So far the lessons have been simple, as they go on and on, the little girls gain confidence and experience and therefore can handle more difficult recipes. By the time the course is finished, the learner will know some very important facts about good cooking. On our farms we have the best food

materials to be found anywhere, but when handled incorrectly the best food-stuffs are spoiled. Even the simplest dishes can be delicious—there is a right way for them all. These lessons are intended to teach the RIGHT way. So even for the cooks of many years' experience, these Little Recipes can be a guide to right cooking.

It is over such homely tasks as learn-

quito is inside the net, and net is free from holes and tears).

2. Mosquito traps—home-made, same as for flies.

3. Repellent oil: (a) Oil of cit-

Smart Sleeveless Vogue



2810



2789



PATTERN NO. 2810 is a very popular mode this season because it is sleeveless. Other details of finish, the bands in the arm's-eye, the scalloped front and the belt are all indicative of the season's trend. Such a pattern is ideal for using the charming new printed cottons and linens. The pattern cuts in sizes 14, 16, 18 years, 36, 38, 40 and 42 inches bust measure. Size 36 requires 2½ yards of 39 inch material with ¾ yards of 39 inch contrasting. PRICE 13c.

ing to cook that mothers have their best opportunity to gain the respect and confidence of their little folks.—Aunt Janet.

To Control Pests

Mosquitoes

Carriers of malaria, yellow fever, and several other fevers.

Prevention:—By treatment of breeding places.

1. Drain or fill up ponds, pools, etc., or if this is not possible—spread kerosene oil over surface every two weeks during summer.

2. Remove old tin cans, pails, bottles and other possible containers of water.

3. Cover rain barrels and tanks with fine wire netting.

4. Screens at all windows and doors.

Extermination.

1. Bed nets at night (have net large enough to allow free circulation of air; be sure no mos-

LITTLE TOTS' APRON NO. 1845 is a wonderful design for the little one. It is stamped on good quality small checked gingham and can be had in blue, lavender, tangerine, green and pink. Enough material is included for the applique patch for the pocket. The apron in any of the colors specified and in size 3 years old, will be sent postpaid on receipt of 50 cents. Address Embroidery Department, American Agriculturist, 461 Fourth Ave., New York City.

ronella (apply to screens if badly infested). (b) Repellent mixture: Oil of citronella, 1 oz.; spirit of camphor, 1 oz.; oil of cedar, ½ oz. A few drops of this mixture on a cloth hung on the bed at night is effective.

4. Smudges: Anything that will make a dense smoke will drive away mosquitoes.

5. Fumigants. Sulphur is burned in case of disease-causing mosquitoes.

The latter must not be burned where people can inhale the fumes too closely.

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Prepaid To You



Write to-day for our latest Catalog.

In it you will find unheard of Bargains—and every garment is guaranteed. Read about our liberal club offering. Do not delay send for it today.

Two piece washable Pique Ensemble pictured here is offered you at the amazing low price of \$2.49—Postpaid. Dress is actually worth \$4.49. Coat of printed Pique, while sleeveless dress is made of plain Pique, trimmed with the figured material. Sizes 34 to 42. State bust measure. 1XS118—White with Blue or Rose.

SALE PRICE \$2.49 Prepaid

CLINTON WILLIAMS CO., Inc., 35 W. 32nd St., N. Y. City. Dept. 101

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PATTERN NO. 2789 has a very French look with its brief fluttering skirt shirred at the long-waisted bodice. Sprigged with tiny trimmed with plain organdie, voile, tulle, gingham or chambray would look up nicely in this design. The pattern cuts in sizes 2, 4 and 6 years. Size 4 requires 1½ yards of 32 or 36 inch material with ¾ yards of 36-inch contrasting. PRICE 13c.

TO ORDER: Write name, address, pattern sizes and numbers clearly and correctly and enclose with correct remittance in stamps or coin (although cash is sent at own risk). Add 12c for each of the new summer catalogues and send to Pattern Department, American Agriculturist, 461 Fourth Ave., New York City.

The Plains of Abraham

By James Oliver Curwood

"Fools — innocents!" her brother growled. "I tell you neither George nor Louis will have anything to do with the running of this war until every mile of woods between our Colonies and your city of Quebec is red with fire and blood."

(This prophecy of Hepsibah Adams came strictly true. England and France did not declare war upon each other until May and June of 1756, although for several years preceding this date many wilderness massacres and bloody battles occurred, including Braddock's defeat and the battle of Lake George.)

God love me, it has already begun! French and English traders are fighting wherever they come together along the frontiers, and the hired Indians of one are taking scalps for t'other. Even white men have joined in that pretty game, for Massachusetts has sent out Lovewell and his fifty men to hunt the heads of Indians and French—it makes no difference which, though the order says redskins only!—at a price of five shillings a day plus a bounty for every scalp that is taken; and down in New York country Sir William Johnson counts out English money for human hair, while the French—and you know it, Henri!—are paying a hundred crowns apiece for white scalps as well as red. It's hair the Indians are bringing in instead o' fur, because the prices are bigger and the market surer, and our own blood, both French and English, is working harder each day with whisky and money and guns to turn them into devils. And here you sit like a couple of foolish doves with a young one in the nest, your scalps worth fifty pounds apiece, your windows open, your door unlocked, your senses gone, while over the hill a few miles away this Tonteur neighbor of yours loopholes his houses, trains his farmers with guns, barricades his windows, builds his doors of oak, and makes a fort of his meeting house. *He* knows what is coming up from the Mohawk country and is preparing himself for it as well as he can."

"His business is soldiering," replied Henri, his serenity still undisturbed by the grim and forbidding future which Hepsibah had drawn in his argument, "and it is stipulated in his grant from the King that he fortress his place whether it be in peace or war."

"And besides," said Catherine, "he keeps his women folk with him, and surely, if danger were threatening, he would send them away." She rose from her seat and came around to her brother so that she stood behind him with her arms about his shoulders. "Hepsibah, we know this you have told us is true," she said, pressing her cheek against his face. "There is terrible murder along the frontiers from which you have come, and that is why Henri has brought Jeems and me into this country of his where are only peace and friendship and no thought of the hideous killings and ugly traffickings you speak about. You have argued against yourself, Brother, for it is you who should move out of strife and danger and come to live with us. Then our happiness would be complete. I have prayed for many years that you would come—and never go away again!"

"Together we will have a paradise here," urged Henri.

"And I will find you a wife," added Catherine. "A wife who will love you greatly, and until you have children of your own we will give you half of Jeems."

Hepsibah rose gently out of her arms.

"For Jeems you should change your home to a place where there is a schoolmaster and more for him to learn," he said, catching desperately at

a last argument where all others had failed.

"In all of New France and the English Colonies there is no better teacher than our Catherine," answered Henri proudly. "In English and French she has given to Jeems more than he could ever have learned in your town of Albany or our college in Quebec; for there, in one place, he would have been English, and in the other, French, while here he is both, like his father and mother, and will never strike at either of the two bloods that are in his veins."

"Of that I'm sure," agreed Catherine.

Bringing the Story Up to Date

JEEMS BULAIN with his French father and his English mother lived in colonial times near the border between Canada and the English colonies. Their neighbor, Tonteur, is their friend but Madam Tonteur hates Catherine Bulain because of her beauty and her English blood and tries in every possible way to teach her daughter Toinette to hate Jeems Bulain.

Jeems admires Toinette and is deeply hurt by her disdain. He hates Paul Tache, Toinette's cousin from Quebec, because Paul assumes a superior air and because he is in the good graces of Toinette.

Catherine Bulain sees and understands the situation to which her husband is blind. Jeems is brooding over the situation as he, his mother and father and Odd, his dog, walk home from a visit to Tonteur Manor.

As the four of them descend the slope to the Bulain home, they hear a blood-curdling cry. Almost immediately their alarm is changed to joy by the discovery that the cry comes from Hepsibah, Catherine's brother, a trader who visits the Bulain family at long intervals. Jeems waits the conclusion of the evening meal with great impatience and casts longing eyes at Hepsibah's pack.

ine. "I pray God my Jeems will never be a fighting man."

When Hepsibah went to his cot in the loft, he stood for a moment with his lighted candle beside Jeems's bed where the boy lay sleeping with the cloth of velvet close to his hands, a smile on his lips. Jeems was dreaming, and the dream took the smile away and put a grimmer thing in its place, and looking down on it Hepsibah thought of Henri Bulain's last words and his sister's prayer, and his lips moved whisperingly to himself, "They can't keep it from you, lad—hope nor prayer nor all their faith. It's coming, and when it comes you'll strike and strike hard, and it's then you'll be what you're bound t'be, Jeems—a fighting man!"

In the candle glow the piece of red velvet seemed to answer Hepsibah Adams, but seeing no farther with his eyes, and going no deeper with his thoughts, the trader undressed himself quietly, snuffed his candle, and went to bed.

* * *

Catherine's breakfast was on the table with the break of sunrise, and Jeems was even ahead of that, helping his father with the chores. The ox was fed and the cart ready for a day's rough travel before his Uncle Hepsibah came down from his sleep. Talk of war and massacre and death had left no shadow in Catherine's heart, and Hepsibah could hear her singing as he went with naked arms and shoulders to the spring near the cabin and doused himself in its ice-cold water. The sound of her voice made him pause and face the south, where the dusk and mists of early morning were lifting quickly over the wilderness. His wide shoulders twitched as if the chill of the water had sent a shock through them, and he marked the swellings and dips of the timbered solitudes of Forbidden Valley, and saw where the Mohawks would enter it and where they would come out if his prediction and his fears came true. Then he heard Henri and Jeems laughing near the barn as if one or the other had turned a joke or found something humorous in his work. With the shiver still in his blood, he turned to the water of the spring again and found Odd standing close behind him, also facing the stillness and mystery of

the valley, his nose sniffing the air, and his eyes—as the man's had been a moment before—filled with a steadiness and tenseness of look which had in it a sombre and voiceless foreboding. Hepsibah stared, for about them birds were singing, gray wings of pigeons were whirring through the air, crows were cawing in the edge of the woods, and cheerful voices were coming from the barn—all with the red glow of day breaking over the forests in the east—yet the dog was stiffly alert and unresponsive, looking past him into Forbidden Valley.

At the touch of Hepsibah's hand, the

strain seemed to leave Odd's body.

"It'll bear watching, boy," commended the man. "It'll bear watching day and night, but 'specially in that hour of darkness which comes just before the crack o' dawn. Not now, *but soon!*"—and he turned to his bath again.

* * *

When Jeems went ahead of his father and uncle to Lussan's place, he did not burden himself with unnecessary habiliments of either peace or war. He wore his old suit of brown homespun cloth, with Indian-made moccasins and leggings of doeskin, and on his head was a frontiersman's cap with an eagle feather in it. From under this cap his blond hair fell with its ends touching his shoulders, and with only his bow for a weapon his slim young body was free and buoyant and much handsomer than it had been the previous day with its carefully chosen raiment and warlike accoutrements.

This morning Jeems had brought his bow and quiver of arrows only because they were as much a part of him as the clothes he wore and he had no desire to inflict his might upon bird or beast. He was filled with exultation mingled with a determined eagerness. He knew he would fight if Paul Tache was at Lussan's place, and what was going to happen in that fight was as definitely fixed in his mind. He was on his way to elevate himself to supreme heights in the opinion of Marie Antoinette Tonteur—after he had given her the piece of velvet. The glory of the morning itself was in his blood. The sweetness of the hills and opens, the song of birds, the beauty of blue sky and green earth all combined in a responsive chord to the song that was in his heart, a song of emancipation almost—of deliverance from the oppression of a mind bullied and subdued until this hour. And now that he was on the point of achieving the fulfilment of a positively settled act, he wondered why it had not happened before.

No one was ahead of him when he arrived at Lussan's place. It was nine o'clock, and the sale was not until eleven. Lussan and his wife and daughter and two sons, and the three slaves who were to be sold, had been busy since dawn, and Jeems immediately found ways in which to help them. Half

of a young ox was already spit-roasted on a long iron bar and slowly roasting. A red-hot mass of hickory coals outside Dutch oven was filled with huge baking of bread, and benches were set with pewter and snow-dishes of poplar wood. Lussan, a famous maker of whiskey and flip beer, and three barrels were hoisted on chunks of wood with spigots down, waiting for the hands of his friends and neighbors to turn them. His brewing apparatus still, for which there was bound to be high bidding, lay close behind the reles, all polished and bright in the light to tempt the eyes and purse the buyers. About his prosperous were the things to be sold, and three slaves were working among these, their uneasy and aching hands strengthened by their master's promise that they would be sold together, not singly.

After a time Jeems found himself with nothing to do and hunted out a plough and kettle and loom which his father wanted to buy. While occupied in this way, he came upon a table with a hotchpot of articles, and his heart gave a jump when he saw a number of books printed in English. Lussan had come into possession of them, reading only French as he had. Jeems did not try to conjecture, for his mind was filled with the thought of his mother's joy if he could take these treasures home to her. There were five of the books, *Malvern Dale*, *Lincoln*, *Telemachus*, *Etoiza*, and *John Andrews*, a thrilling list of titles seemed to him, and as quickly as he could he approached Lussan upon the subject of their worth and purchase. Seeing no merit in printed English, Lussan gave him a small chance for their sale, and as well a free-hearted man and always warmed by his own excellent beer, Lussan gave them to Jeems in return for the hour of service he had rendered.

Overjoyed by this unexpected fall of fortune, Jeems began to walk anxiously for the coming of his father and Uncle Hepsibah and for the appearance of the seigneur Tonteur, whoever might be with him. Neighbours arrived before his father and uncle came out of the forest, and he lost no time in depositing his books in the cart, after which he fastened Odd with a buckskin thong one of its wheels. He did not have to guess what Odd would do if free when it came to his fight with Paul Tache.

The hour for the sale drew near, fully half a hundred men and women and a score of children had gathered yet Toinette and her father had not arrived. Jeems placed himself where he could see down the road that came from the Tonteur seigneurie, and at last he heard the auctioneer's bellowing forth his announcement that the sale was about to begin, he felt a sombre sinking of his hopes. They ended instantly when three figures on horseback appeared at the end of half mile of road. The foremost was Tonteur, the second Paul Tache, and in the third saddle rode a wide-hatted little person who was other than Marie Antoinette Tonteur herself.

Concealing himself behind the bole of a tree, Jeems watched them as they passed, so near that a pebble flung from a hoof of one of the horses fell at his side. His courage almost failed then, for while his hands clenched at the sight of Paul Tache, his heart melted in its beating as his attention turned from his enemy to Toinette. She had become, all at once, a young woman whom he could easily believe he had never seen before, and the change she held him for a few moments so

(Continued on Page 22)

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COOK'S CERTIFIED POTATOES. Cobblers and Russets. Better than ever. Attractive prices. We pay freight. IRVING E. COOK, Munsville, N. Y.

SEND \$1 for 12 Labeled Dahlias, flowers of marvelous beauty, all colors, regular value \$3.50. BOLTS DAHLIA FARM, Stepaney Depot, Conn.

SEED CORN—West Branch Sweepstakes for sale. Greatest ensilage corn grown. Germination 98% when tested. \$3.00 per bushel. A. L. WINTER & SON, Montoursville, Pa.

FINE OUTDOOR GROWN Cabbage Plants—300, 75c; 500, \$1.00; 1000, \$1.50 prepaid. 5,000, \$5.00 expressed. Tomato & Onion Plants \$1.50 thousand. Pepper and Sweet Potato Plants \$2.50 expressed. All now ready. Prompt shipments, good delivery guaranteed. OLD DOMINION PLANT COMPANY, Franklin, Va.

100 ACRES VEGETABLE PLANTS, Cabbage, \$1.00 thousand; Onion, \$1.50; Pepper, \$2.00; Sweet Potato, \$2.50; 10,000, \$20.00. Tomato, \$1.25; 10,000, \$10.00. Prompt shipments. Good plant guaranteed. FARMERS SUPPLY COMPANY, Franklin, Va.

20 MILLION TOMATO PLANTS—Large, stalky, well rooted, open field grown, packed with damp moss to roots. Greater Baltimore, Stone, Earliana, Ponderosa. By mail postpaid; 500-\$1.25; 1,000-\$2.25. Express prepaid; 5,000-\$8.00; 10,000-\$15.00. Late Cabbage plants same price. Prompt shipment, safe arrival guaranteed or money refunded. KENTUCKY PLANT CO., Hawesville, Ky.

SEED CORN—Genuine West Branch Sweepstakes, Cornell No. 11, and early maturing 8-row flints. Grown from tested disease-free ears. Thoroughly cleaned and graded. Passed corn borer inspection. \$3 per bushel. 10 bushels, \$2.80, bags free. Ninety per cent or better germination and satisfactory condition guaranteed. K. C. LIVERMORE, Box A, Honeoye Falls, N. Y.

SEED POTATOES. Certified Green Mountain from Prince Edward Island, finest obtainable. Michigan and New York Certified Russets, none better. Write for closing out prices. QUAKER HILL FARM, Box A, Honeoye Falls, N. Y.

SEEDS—NURSERY STOCK

FIELD PEAS with oats, cut for green feed will keep up the summer milk flow, but be sure to use disease free peas. Write for explanation and prices of our tested seed. QUAKER HILL FARM, Box A, Honeoye Falls, N. Y.

PLANTS POSTPAID. All varieties; Beet, Cauliflower, Mangle, Lettuce, 3 dozen, 25c; 100, 50c; 1,000, \$3; 5,000, \$10. Cabbage, 3 doz., 25c; 8 doz., 40c; 400, \$1; 1,000, \$2. Sweet Potato, Asters, 3 doz., 25c; 100, 65c. Celery, Tomato, Pepper, Zinnia, 3 doz., 40c; 100, 85c; 1,000, \$6.75. Egg Plant, Coleus, Coreopsis, English and Shasta Daisies, Pansies, Dianthus, Snapdragons, Salvia, Verbenia, doz., 40c; 3 doz., \$1; 100, \$2. ROHRER'S PLANT FARM, Smoketown, Pa.

MILLIONS CABBAGE PLANTS, Copenhagen, Wakefield, Succession, Flatdutch, Danish Ballhead, 300, \$1.00; 500, \$1.25; 1000, \$2.00 postpaid. Express \$1.25. 1000. Tomato plants—Baltimore, Matchless Stone, same price. Sweet Potato and Pepper, 500, \$2.00; 1000, \$3.50 postpaid. Satisfaction guaranteed or money refunded. IDEAL PLANT COMPANY, Franklin, Va.

MILLIONS CABBAGE PLANTS—Copenhagen, Wakefield, Danish Ballhead, Succession, Flatdutch, 300, \$1.00; 500, \$1.25; 1000, \$2.25 postpaid. Express \$1.25. 1000. Tomato Plants—Baltimore, Stone, Matchless, Bonny Best, same price as Cabbage. Sweet Potato and Pepper plants, 500, \$2.00; 1000, \$3.25 postpaid. Quick and good service. GUARANTEED SERVICE PLANT COMPANY, Franklin, Va.

SEND NO MONEY: Frost proof Cabbage plants including Copenhagen and Golden Acre, Bermuda Onion plants, 500, 65c; 1000, \$1.00 plus postage. EUREKA FARMS, Tifton, Ga.

CABBAGE PLANTS, best kinds \$1.25 per 1000. Lettuce, Onion, Beets \$1.00, 1000. Peppers all kinds \$3.00, 1000. Cauliflower \$3.50, 1000. Egg Plants \$4.00, 1000. Tomato all varieties \$2.00, 1000. All ready for field. Send for list. J. C. SCHMIDT, Bristol, Pa.

MILLIONS OF OPEN field tomato plants, Baltimore, Stone, Marglobe, Bonnie Best, \$1.00-1000; 5000, \$4.50. Ruby king Pepper plants \$1.50-1000. Cabbage plants 75c-1000 roots. Mossed, safe arrival guaranteed. SINS POTATO PLANT CO., Pembroke, Ga.

TOMATO PLANTS: Six varieties. By express \$1.50 thousand. By prepaid mail 500, \$1.50; 1000, \$2.50. Sweet Peppers by prepaid mail 100, 75c; 200, \$1.25; 500, \$2.50; 1000, \$4.50. By express \$3.00 thousand. Also Cabbage plants: All varieties, including Copenhagen and Golden Acre, \$1.00 thousand and charges. COLEMAN PLANT FARMS, Tifton, Ga.

DANISH BALLHEAD, Early Copenhagen Market and Red Cabbage plants, \$2.00 thousand. C. R. STAFFORD, Route 3, Cortland, N. Y.

VERY LARGE ASPARAGUS roots, 6 years old; bearing size, Washington, \$2.75 per dozen; \$16.00 per 100. HARRY E. SQUIRES, Hampton Bays, N. Y.

4,000,000 SWEET POTATO PLANTS, Yellow Jersey Big Leaf, and Up River \$1.50 per 1000, shipping paid. Canna Bulbs seven kinds \$1.25 per 100. C. E. BROWN, Bridgeville, Del.

GLADIOLUS BULBS—My famous beautiful Rainbow Collection of thirty all different, blooming size, \$1 postpaid. Plant now. 36 page illustrated catalog free. HOWARD GILLET, Specialist, Box J, New Lebanon, N. Y.

Additional Classified Advertising

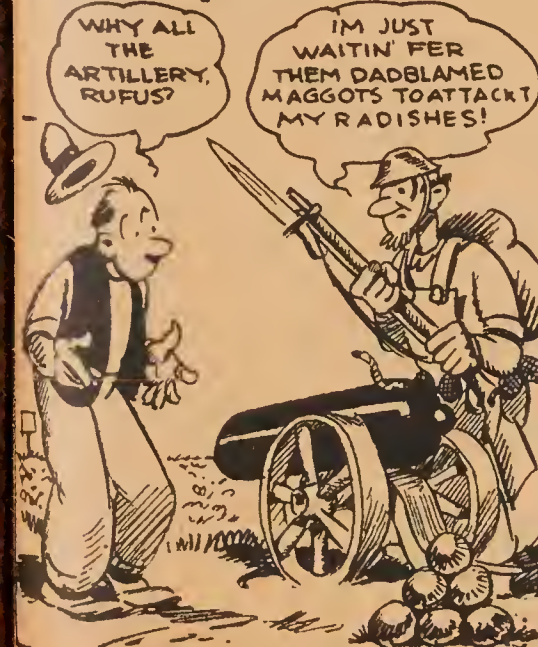
On Page 22

ANDY ANDY Says "Here's How"

To Control Cabbage Maggots

By Ray Inman

attack cabbage maggots before they attack your cabbage, radish, and lettuce plants.



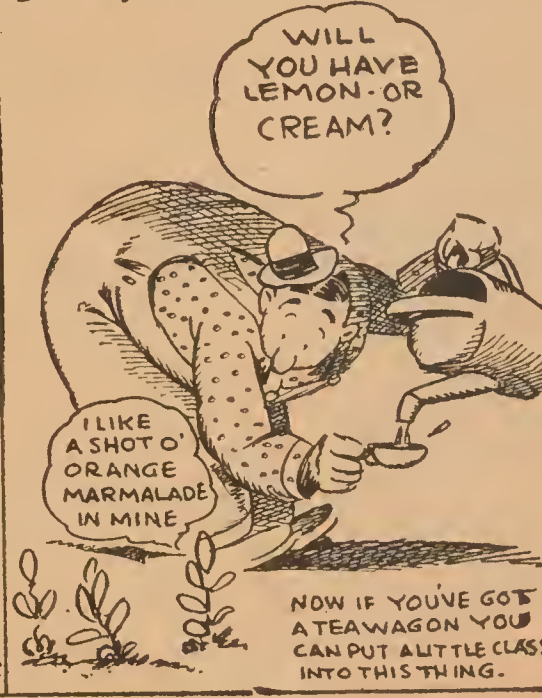
dissolve 1 ounce of corrosive sublimate in 9 gallons of water. (USE HOT WATER AND A WOODEN OR EARTHENWARE VESSEL)



take "sprinkler" off of your sprinkling can — and apply this mixture to ground around young plants



apply about a teacupful to each plant every 5 days for a month.



Additional Classified Advertising

SEEDS—NURSERY STOCK

50 MILLION out door grown vegetable plants—Cabbage: Copenhagen, Ballhead, Wakefield, etc., 300, \$1.00; 500, \$1.25; 1000, \$2.00 prepaid. 10,000, \$10.00 expressed. Tomato Plants: Marglobe, Bonnybest, Baltimore, Stone and Matchless, 300, \$1.50; 500, \$2.00; 1000, \$3.00 prepaid. 10,000, \$15.00 expressed. Sweet Potato and Pepper Plants: 300, \$1.25; 500, \$2.00; 1000, \$3.25 prepaid. 10,000, \$20.00 expressed. Shipping capacity 1/2 million daily. Day and Night service. Our plants must please you or money cheerfully refunded. J. P. COUNCIL COMPANY, Franklin, Va.

GOLD SKIN SWEET Potato Plants 60c per 100; 500 for \$2.00; 1000 for \$3.50 postpaid. BASIL A. PERRY, Georgetown, Del.

CAULIFLOWER AND CABBAGE Plants 100, 40c; 1000, \$2.50 prepaid. Satisfaction guaranteed or money refunded. E. FETTER, Lewisburg, Pa.

QUICK SALE of surplus dahlia bulbs, many blooms of which measure from 7 to 9 inches across. All colors, also a few Pompons included, while they last. 15 for \$1.00. Unlabeled. MRS. B. D. BAILEY, Dahlia Specialist, Litchfield, Conn.

FROSTPROOF CABBAGE PLANTS, 75c-1000; Col-lards, 75c; Tomato, \$1.00; Ruby King Pepper, \$2.00; Porto Rico Potato Plants, \$1.50. QUITMAN PLANT CO., Quitman, Ga.

MILLIONS NORTHERN GROWN Cabbage, Cauli-flower Plants. Best strains, Danish seed, chemically treated. Good delivery or money refunded. Golden Aere, Jersey, Copenhagen, Enkhinzen, Surehead, Succession, Savoy, Flatdutch Ballhead, Postpaid: 200-65c; 500-\$1.25; 1000-\$2.25. Collect: 5000-\$7.50. Snowball Cauli-flower: 50-40c; 200-\$1.00; 500-\$2.25; 1000-\$3.75. Trans-planted Tomatoes: 36-45c; 100-\$1.00. Yellow Yams: 100-60c. List free. PORT MELLINGER, Dept. A.A., North Lima, Ohio.

CAULIFLOWER PLANTS. Ready. Finest strains for seed. We grow only first grade plants. Catskill Moun-tain Snowball, Long Island Snowball, Extra Early Erfurt, \$4.50 per 1000; 500, \$2.50; 300, \$2.00; 5000, \$20.00. Cabbage Plants. Ready. Copenhagen Market, Danish Ballhead, Early Jersey Wakefield, Golden Aere, Enkhinzen Glory, Summer Danish Ballhead, Succession, Early and Late Flat Dutch \$2.00 per 1000; 500, \$1.50; 5000, \$9.00. Millions of plants. 31 years select-ing strains of seed. Safe delivery guaranteed. No business done on Sunday. F. W. ROCHELLE & SONS, Chester, N. J.

VEGETABLE PLANTS. Ready Now. Potted Earliana, Marglobe, Jewel, Bonny Best, John Baer, Stone, Dwarf Stone tomatoes, Ruby King, Chinese Giant, World-beater and Bull Nose Peppers, Black Beauty Egg Plant, All \$3.50 per 100; \$30 per 1000. Transplanted tomato and Pepper plants. All varieties, \$8.00 per 1000. Potted Salvia, Asters and Calendulas \$4.00 per 100. Field Grown Cabbage plants, Copenhagen Market, Succession, All Seasons, Early Flat Dutch, Enkhinzen Glory, Danish Ballhead and Danish Roundhead \$2.00 per 1000; 5000, \$9.00. Rerooted Cabbage plants \$2.25 per 1000. Cauliflower, Early and Late Snowball and Erfurt, \$4.50 per 1000; 5000, \$20.00. Tomato Plants (Field Grown) ready June 15th all varieties \$3.00 per 1000. Celery plants July 1st. Send for free list of all plants. PAUL F. ROCHELLE, Morristown, N. J.

FARMS FOR SALE

FOR SALE—Ideal Dairy Farm in Excellent old dairy section near Greene, Chenango County, N. Y., 150 acres, some equipment, price low to quick buyer to settle estate. Address MISS BERTHA CARTER, care Postoffice, Greene, N. Y.

SACRIFICE 6 ACRE FARM in chicken belt. Vine-land, N. J. Information JACKSON, 522 W. 112 St., N. Y.

DEL-MAR-VA—THE MARKET BASKET OF THE EAST. Three to ten hours by motor truck to New York, Philadelphia, Baltimore and Washington markets. Pennsylvania Railroad permeates Peninsula. Splendid productive land, farms, town and waterfront homes. Low prices. Good schools, low taxes. Very little snow and freezing. Handsome descriptive booklet. FREE. Ad-dress 164 Del-Mar-Va Building, Salisbury, Md.

IDEAL FARM 47 acres, 2 miles from state road, 15 miles from Troy. Trout stream runs through farm. Fine summer home. Only \$1,000. BOX 50, American Agriculturist.

OLD AGE NECESSITATES sale of 235 acre river farm on main auto thoroughfare, near high school, and railroad. 50 head stock, team, full equipment, tools, modern buildings. \$8,000.00 cash required or will accept smaller improved farm as part payment. THEO. FULLER, Unadilla, N. Y.

HERE IS THE PLACE TO SELL YOUR FARM

Reach over 150,000 interested people at a cost of only 7c per word. Write now to the Farm Dept.

CORN HARVESTER

RICH MAN'S Corn Harvester, poor man's price—only \$25.00 with bundle tying attachment. Free catalog showing pictures of harvester. PROCESS CO., Salina, Kans.

Buy the Advertised Article!

You will find it pays to buy standard, trademarked goods. Let The AMERICAN AGRICULTURIST advertising columns serve as your shopping guide. They contain the latest information regarding farm machinery, household helps, work, clothing and other merchandise of interest to farmers.

The American Agriculturist Advertisers Are Reliable!

HELP WANTED

SINGLE MAN WANTED for farm, must be first class milker and quick and willing worker. \$75 per month and board. State age, nationality, when avail-able. CHESTER SMITH, Cold Spring, N. Y.

SITUATIONS WANTED

DO YOU NEED FARM HELP. We have Jewish young men, able-bodied, some with, but mostly with-out experience, who want farm work. If you need a good, steady man, write for an order blank. Ours is not a commercial agency. We make no charge. THE JEWISH AGRICULTURAL SOCIETY, Inc., Box A, 301 E. 14th Street, New York City.

LET THE AMERICAN AGRICULTURIST HELP YOU

sell that farm. Just write us giving details and we will write your copy. Do it this week.

PRINTING—STATIONERY

250 BUSINESS ENVELOPES printed postpaid \$1. 50 calling cards 10c. WALTER G. COLLINS, Co-hocton, N. Y.

TOBACCO

GUARANTEED HOMESPUN TOBACCO. Chewing, 5 lbs. \$1.50; 10-\$2.50. Smoking, 10, \$1.75. Pipe Free. Pay Postman. UNITED FARMERS, Bardwell, Ky.

WOMEN'S WANTS

PATCHWORK 7 POUNDS Pereaes, Gingham \$1.00. 3 pounds silks \$1.00. 4 pounds cretonne samples \$1.00. 3 pounds Corduroy remnants \$1.00. Nile Green, Pay Postman plus postage. Silks or Velvets Large Package 25c postpaid. NATIONAL TEXTILE CO., 93 B St., South Boston, Mass.

LADIES' FINE LISLE STOCKINGS 3 pair \$1.00. Black, grey, beige, nude, French nude; sizes 8 1/4-10. Good openings for agents. A. H. TALBOT SALES COMPANY, Norwood, Mass.

CLIPPING MACHINES

CLIPPED COWS mean clean milk.—Improve the health of cattle, horses, mules, etc.—use a "Gillette" Portable Electric Clipping Machine. A postcard will bring you prices and interesting information. GIL-LETTE CLIPPING MACHINE CO., Dept. A-1, 129-131 W. 31st Street, New York City.

MISCELLANEOUS

WANTED USED BAGS any quantity and grade. Highest prices and freight paid. HOFFMAN BROS. BAG CO., 39 Gorham St., Rochester, N. Y.

USED CIVIL WAR ENVELOPES with flags, de-signs, etc., \$1 to \$15 paid. Other stamps on en-velopes before 1871 bought. Three-face lamps, and old glassware bought. W. RICHMOND, Cold Spring, N. Y.

COTTON DISCS for your milk strainer, 300 steril-ized 6 inch discs at \$1.30, postage prepaid. HOWARD SUPPLY CO., Box 30, Canton, Maine.

RUBBER TUBING for all makes of milkers. Attractive prices. Cotton strainer discs (sterilized) 300 in package 6 inch \$1.40, 6 1/2 inch \$1.60 Postpaid prepaid. Tubing and cotton discs very highest quality obtainable anywhere. ANDERSON MILKER CO., Jamestown, N. Y.

KODAK FILMS DEVELOPED 5c roll. Prints 3c each. Trial offer. Beautifully mounted 8x10 enlargement 40c. Overnight service. YOUNG PHOTO SERVICE, 409 Bertha St., Albany, N. Y.

KEOUGH'S—Foul remedy. For fouls or hoof rot. Used by farmers for over 25 years. Satisfaction or money back. Get a bottle at your druggist or feed dealer or send one dollar for a bottle. KEOUGH PHARMACAL COMPANY, Box A, New Berlin, N. Y.

BARN EQUIPMENT

CRUMB'S STANCHIONS are shipped subject to trial in the buyer's stable. Also steel stalls, stanchions, and partitions. Water bowls, manure carriers and other stable equipment. Tell me what you are most inter-ested in, and I will save you money. WALLACE B. CRUMB, Box A, Forestville, Conn.

A MERICAN AGRICULTUR-IST Classified Ads get re-sults. Try one.

The Question Box



Electricity from Water Power

What power can I get from an inch stream of water with a hundred foot drop? Is there power enough to run a generator?—W. B., Pennsylvania.

IT is rather hard to estimate the amount of water flowing when you say an inch stream, as it will depend so much on the velocity of the stream.

Assuming that the stream delivers 15 gallons of water per minute and that each gallon weighs 8 1/3 lbs., this would be a total of 125 lbs. per min. If this falls 100 ft., the potential horsepower is 100 times 125 or 12,500 ft. lbs. per min. As a horsepower equals 33,000 ft. lbs. per min., this would be approximately one-third horsepower, after deducting say 15 per cent loss in the water wheel. There will be a further loss in the generator and transmission, so that about two-fifths of a horsepower or about 300 watts is about all that could be counted on. You would want a Pelton type of wheel for this height of head, and I suggest you take the matter up with the Pelton Water Wheel Co., 90 West Street, New York City, who will be glad to advise you how to measure the exact discharge, and what the approxi-mate cost will be. I rather doubt, however, whether it will pay to develop so small an amount of power, although the rather high head runs into power pretty fast.—I. W. D.

Wiring Farm Buildings For Electricity

"What kind of wiring should I use in my stables and barns?"

WIRING should be entirely in rigid or flexible metal conduit in all such places. Without such protection the wiring might become dangerous from deterioration of the insulation by moisture, ammonia fumes, or gnawing animals. Again, without such protec-tion nails might be driven through the insulation if installed behind boards or walls. Have the wiring and fixtures installed by a reliable contractor. Use heavy entrance wire and switch so that motors can be operated in the future without overloading the system or re-wiring. Provide at the start an ade-quate number of outlets for lights and power. They cost little to install, and they will be appreciated later.

How Much Grain?

Can you give us a rough rule to be used to determine the amount of grain to feed each individual cow?

FEED one pound of grain per day for each three or four pounds of milk produced or feed one pound of grain for each pound of butterfat produced per week.

Probably a better rule is to increase the grain fed so long as the cow con-tinues to increase in milk production at the rate of three or four pounds for each pound of grain. In this way the good cow gets all the feed she can use to advantage.

Pigs Have Fits

Please give me advice on what is wrong with my pigs. They are young pigs and are fat and nice. They were doing very well until this trouble came on them. When we feed the little pigs as soon as they take a mouthful of feed they drop over and sometimes they run around and then drop. They groan and breathe hard just as if they had a fit.—MRS. A.G.M., Pennsylvania.

THE symptoms which you give sug-gest two possibilities. The first is that they are infected with cholera. If this is the case, some of them will probably die, but the only thing to do is to get in touch with your local vet-erinarian at your earliest possible con-venience and have the pigs treated.

The other possibility is that they are

suffering from indigestion, such caused by internal parasites. It to me that in view of the sym which you mentioned you will be advised to call your local veteri-narian at once. If these pigs are suf-fering from cholera it is possible that they are treated.—R. B. HINMAN

Apple Varieties for One County

What varieties of apples would recommend to set out here in On-tario County—H. C., New York.

PROBABLY the best commercial varieties would be McIntosh, Greening and Wealthy. The Beauty might be planted for pol-linating the Northern Spy and Cortland.

Profit in Spraying Muskmelons

Have you any figures as to what would be profitable to spray muskmelons?—C. D., New Jersey.

THE New Jersey State College reports that only 8 per cent of Jersey melon growers spray with deaux mixture. However, the co-states that it would undoubtedly the other 92 per cent to spray sys-tematically.

Feeding Value of Alsike Red Clover

What is the comparative feeding value of alsike and red clover?

ALSIKE clover is fully equal to red clover—in feeding value. It fraction higher in protein, but ordi-narily produces less tonnage per acre. Alsike clover does not make second growth, although it some-times does on wet land.

The Plains of Abraham

(Continued from Page 20)

getful of his own existence that would have been discovered had the three happened to glance in his rection. Toinette was equally un-suspecting of a certain ten-year-old mis-take yesterday, for one of her dearest an-ticipations had become reality, and she was wearing her first riding suit, a geous blue camlet trimmed with sil-ver just arrived from Quebec. With she wore a smartly cocked beaver which bore a rakish feather, and under this hat her long dark hair in a cascade of carefully made or partially restrained in their freedom two or three red ribbons enmeshed among them. She was superbly aware of the lovely figure she made, every inch of her body was at a di-fined tension as she rode past the place where Jeems was hidden.

After she had gone, Jeems felt an overwhelming sense of littleness and unimportance. For Toinette was no longer Toinette, but a real princess grown up. And Paul Tache, riding close beside her, with hair powder and tied and with a red velvet hat that could be seen a mile away, seemed now to be infinitely removed from the plottings which he had conceived against him. He stepped from behind the tree and stooped to pick up a pebble which Toinette's horse flung at him. He could hear the pioneer's voice, and others bidding Lussan's properties. Then came a burst of laughter which rose with restrained abandon above all other sound, a blast of merriment which would have recognized anywhere in the world. Only his Uncle Hepsibah could laugh like that.

(To be Continued Next Week)

The Service Bureau

A Department Devoted to the Interests, Welfare and Protection of A. A. Readers

New York Acts to Curb Reckless Drivers

NUMBER of letters inquire as to the exact provisions of Article 6, of Vehicle and Traffic Law, referring the financial responsibility of a vehicle operator. Judging from the letters, it is generally believed this new law requires that every

states and where it has not worked out just as expected. Although it does not prevent the first accident, it may well serve as a deterrent to reckless drivers.

Does George A. Blank Owe You Money?

IF you shipped farm produce to the above individual to be sold on commission and have not received your pay for same you can file a claim with the Commissioner of Agriculture and Markets, Albany, N. Y. against her commission merchant's bond. The bond is issued in the name of Lillian A. Blank and she has recently discontinued business. Blank form of complaint can be obtained from the Commissioner of Agriculture and Markets, Albany, N. Y. and must be filed with him on or before August 15, 1929 to receive consideration.

Tropical Service Bureau Cannot Use Mails

Can you give me any information on the Tropical Service Bureau, who advertises to supply jobs in South America.

WE have already commented on this fake. Those who answered the ad of this concern were asked for \$3.00 to pay for the supposed services rendered. Now we learn that the Postmaster General has issued a fraud order against the Tropical Service Bureau. This concern was operated by N. C. Hainsworth, Jr., and it is estimated by

A "Thank You" Is Our Pay

I RECEIVED a refund of \$22.50 from the ——— three days after you wrote to them for me. I do not believe I would have received my money so promptly if you did not help me, as I could get no satisfaction from them. Please accept my thanks for your help.

the Post Office Department that his income from this scheme amounted to about a thousand dollars a month. Needless to say, those who sent him \$3.00 received absolutely nothing for their money. This concern submitted an

Sales Method is Close to Begging

YOUNG chap recently came to our door and stated in ingratiating manner that we could help him to complete his college education by merely paying two cents postage a week on a magazine. Needless to say his college career was not furthered by us and although we run a risk of being called heartless we believe that we were justified. In the first place, the sales methods suggested by the young gentleman were, in our opinion, close to begging. The price of the magazine was not even mentioned nor was a sample copy offered for our inspection. The whole emphasis was that we would "help him to college" by taking the magazine. We may be a bit skeptical, but we have serious doubts whether this fellow ever got inside of a college or ever expects to attend. It is right in the middle of the college year and it has been our experience that college men do not attempt this sort of tactics in earning their way. We also feel that stating that we merely to pay the postage is misleading. Everyone of course, knows the subscription price of any magazine does not begin to cover the cost of it and that the principal source

of income of all magazines is advertising. At the same time, the subscription price of the magazine offered was one dollar a year and we prefer to have it stated so rather than to say that we are merely paying postage on it. In several similar cases our friends have "helped out" young men only to find later that no magazine arrived and that the receipt which was given them contained not even a street address.

The principal reason why we object to this kind of selling is that frequently, although not always, the class of magazines sold by this group who are so thirsty for knowledge, is decidedly poor. The person who lets his sympathy get the best of him and subscribes, often finds a magazine coming to the house which contains advertisements of a class which he certainly would not care to patronize or even to have his boys and girls read. What we have said is in no sense a criticism of any college lad who may wish to earn a part of his way by selling subscriptions to any good, reputable magazine so long as he sells it on its merits, does not misrepresent the facts and is willing and able to furnish credentials showing that he is authorized to represent the publishers.—H.L.C.

Fair Play

in Sport and Business

WHETHER you are playing baseball or operating a business the spirit of fair play is the only one that makes the game successful and satisfactory. "Farm Service" Hardware Stores are operated on the fair play basis—giving you the utmost value for the least money, as much personal help as possible, and conscientious service, for we know that in thus playing fair with you that you will appreciate these things and in return give us more and more of your business.



Visit our Sports Department

And in speaking of fair play, let us not forget to mix a little play with the daily business of farming and hardware. Right now is a good time to get a couple of gloves, a ball and bat and get out in the cool of the evening for a baseball game. Try tennis and golf, too, for they are wonderful sports. Visit our sports department for equipment you need for these games. There is no other place where you can select them more pleasantly or cheaply.

Look for this tag in their window,



Your Farm Service HARDWARE STORES

Where prices are lower because you get personal help in the selection and maintenance of your purchases.

ad to American Agriculturist, but naturally following an investigation of their reliability, it was refused.

More Complaints Against Charles Brown

SOME time ago, we commented in our Service Bureau Columns, concerning a number of complaints against Mr. Charles Brown, of Mannsville, N. Y. According to the complaints, Mr. Brown deals in carbide and acetylene fixtures, and the nature of the complaints was that the material ordered from him, and paid for, was not delivered. Following a lengthy correspondence on the complaints, some of them were settled to the satisfaction of our subscribers.

We are continuing, however, to get similar complaints, and we are giving the facts of the case for the information of our readers.

Federal Trade Commission Acts Against "Marmola"

THE Federal Trade Commission has issued a warning that an application for complaint will be filed against any publication which allows advertisements of Marmola to appear in its columns. Marmola is one of a number of products advertised to reduce weight and which have been found fraudulent. We are heartily in sympathy with the good work the government is doing to suppress harmful products of this sort.

AMERICAN AGRICULTURIST is printed at Poughkeepsie, but our business and editorial offices are at 461 Fourth Avenue, New York City. Please direct all editorial and advertising mail to New York City. If you send it to Poughkeepsie, it will be delayed in answering.

Quality Supreme Then Low Price



The "Royal" Modern Bathroom includes Bathtub, Porcelain Toilet and enameled Wash Basin. Complete with all Fittings and Five-Year Guaranteed Materials..... \$52.50

We Pay The Freight on Everything Write for FREE Catalog 20 J. M. SEIDENBERG CO., Inc. 254 West 34th St. New York

SCHOOL BOARDS-ATTENTION! SAVE HALF Your Paint Bills USE INGERSOLL PAINT

PROVED BEST by 87 years' use. Made in all colors for all purposes at WHOLESALE FACTORY PRICES INGERSOLL PAINT BOOK tells all about Paint and Painting for Durability. FREE TO YOU with Sample Cards and our PREPAID FREIGHT OFFER. WRITE US. DO IT NOW and SAVE MONEY. PATRONS' PAINT WORKS, Inc. Oldest Ready-Mixed Paint Factory in America. Est. 1842 252 Plymouth Street, Brooklyn, N. Y.

When Writing Advertisers, Be Sure to Mention American Agriculturist

Hats Off! The Scouts Are Coming

(Continued from Page 5)

knowledge. For instance, he may obtain badges for completing courses in every kind of farming, beekeeping, blacksmithing, book binding, carpentry, cementing, gardening, horsemanship, leather working, masonry, photography, printing, etc.

The best thing, however, that can be said for scouting is the fine training it gives in character building. Few First Class Boy Scouts have ever been convicted of crime. Evil doing and the principles of scouting just naturally do not team up. The First Class Scout does not have time to get into mischief. Read the Scout Oath and the Scout Law given on this page which every good scout takes and follows religiously and you will begin to get some idea of what scouting does for the character of boys.

How Farm Boys Can Be Scouts

There are two ways by which a farm boy may become a Scout. One way is to join a Scout troop in some nearby village or city. These troops are part of a great national organization, and each troop is under the guidance and control of a Scoutmaster. But not all farm boys are located so that they can join a troop or go to the village or city to attend the evening meetings, so the Boy Scouts of America have created a Department of Rural Scouting and in this department is a Lone Scout Division for farm boys who cannot join Rural Boy Scout troops or Farm Patrols.

The Lone Scout plan makes it possible for any country boy to get practically all the benefits of scouting and to work up to become an Eagle Scout. Incidentally, I personally believe in a high school education for every boy and girl, but if a boy came to me for a job I would rather he would be an Eagle Scout than a high school graduate.

The merit badge work for Lone Scouts is adapted particularly to the country and emphasis is put on farm subjects in working for these badges. Also, on this page you will find a statement giving the steps in Lone Scout work.

If, after reading this article and thinking about it, you as a boy would like to become a Lone Scout, or join a Boy Scout troop, and would like to know more about it, I would be glad to have you write me and I shall give you the information and tell you how to become a Boy Scout.

In an early number of AMERICAN AGRICULTURIST we will also tell you about the great work that the 4-H Clubs are doing for boys and girls.

What This Country Needs

THE *Prairie Farmer*, a Standard Farm Paper, recently conducted an interesting contest for their subscribers. The contest was called "What This Country Needs" and subscribers were asked to send the answer to this question in a sentence of not more than ten words. Following are a few of the answers from subscribers:

More patches on knees and fewer on seats.

More backbone and less wishbone.

Less cranks and more self-starters.

More paint on the old place and less on the young face.

A law to compel every lawmaker to have at least one brain.

More attention to home cooking and less to home brewing.

More farmers who farm from the nose up.

A few good funerals.

Fewer laws and more respect for those we now have.

More judges who refuse to release criminals on technicalities.

More baptismal water and less moonshine.

We believe that our subscribers have as good if not better ideas on what the country needs than the subscribers of the *Prairie Farmer*. Send in your ideas and we will print them in an early issue.

A barn protected by lightning rods can laugh at a thunder storm.



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June 15, 1929

Published Weekly

Where the Dairy Cow Reigns Supreme

A Story of Farm Prosperity in Delaware County, New York

THE history of Delaware County, New York, practically begins with the War of the Revolution. Previous to the war, settlements had been made on the east branch of the Delaware river, also near Sidney and at Harpersfield. When the war began the most of the scattered colonists cast their lot with the cause of liberty and escaped massacre at the hands of the English sympathizing Indians by retreating to the older settlements in Cherry Valley and New England. That all Indians are not bad Indians is illustrated by the tale of old Teunis, who after the Revolution dwelt alone by the little lake near Andes which still bears his name. When the Indians were planning destruction of the colonists upon the east branch of the Delaware, old Teunis, in time to give the people an opportunity to escape, told one of the families of the proposed massacre. For this, Teunis was boycotted by his tribe and was evidently the only permanent Indian dweller in the county. The other Indians had summer camps, especially along the river, but disliking the severe winters, each fall left for warmer climes before cold weather set in, only a comparative few remaining to trap for furs. Old Teunis was known to disappear for a few days and then to return with lead which he used for the making of bullets. He kept the source from which he secured the metal a secret and the settlers who had returned to their homes after the Revolution, not knowing that lead is not found in the free state, spent days in fruitless search for this mineral in the mountains. It is probable that the old Indian secured his bullet material from lead hidden by his tribe.

Delaware County without the Scotch would be like the mountain pine without much of its sturdiness. It may be the valleys were mostly settled before the Scotch came, but I like to think that these people from

By C. O. DuBOIS
Director, Delhi State School of Agriculture

hardy Scotland invaded the hills of Bovina, of Roses Brook, of Cabin Hill and of Scotch Mountain because of their highland home across the sea, and I can imagine a Scotchman, standing on the rocky hillside and looking toward the mountain peaks of the Catskills, shouting

"Ye Craigs and Peaks, I'm with you once again."

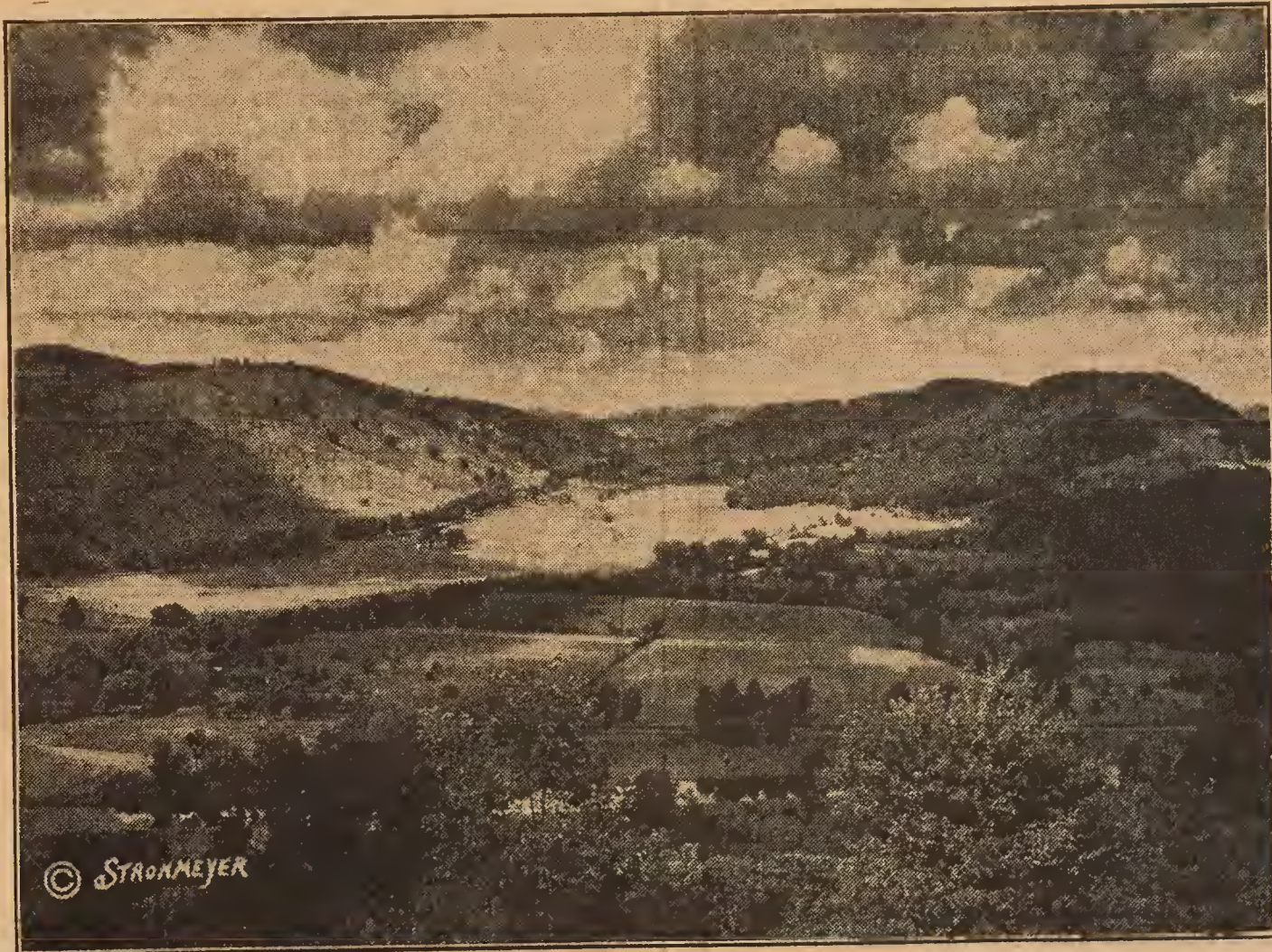
Scotch neighbors were good neighbors and we can think of the new immigrant from Scotland, aided by the former pioneers as, coming in over Pine Hill and through Andes, he approached the Bovina Promised Land. Probably the mother of Delaware County cows came into this vicinity by some such route. Arriving at the log cabin which had been built by the father, who had selected his new home the summer before, the first work was to clear the land. I hope they came in the springtime, as some wooden spiles and buckets together with an iron kettle were all the capital needed to make sugar from the abundant maple trees,

and surely the bitter austere life of the early pioneers of Delaware County needed some sweetness. Next came the clearings, made by taking the axe to the trees. Cross cut saws were then unknown and I question whether those expert choppers would have considered a saw worthy to take up the time of two men. The early settlers had to make their farms from the forests which to them seemed their worst enemies. The Centennial History of Delaware County states that one of the settlers defined Heaven as an ethereal plain in which there were "no Roots or Bushes and he hoped there never would be." This statement had a double meaning applying both to unfriendly neighbors by these names and to the more unfriendly roots and bushes which lay between him and actual farming. How few today have seen the burning fallows, as the setting fire to the cut brush and fallen timber was called. The remaining partially burned black logs were piled into heaps at the logging bees where men, boys and ox teams from all the country round strove to see who could make the highest log pile in the shortest time. Even the most respectable families would not

have thought of having a logging bee without something to drink and things may have occurred which were not just in line with the present Volstead Act.

In those early days a bowl shaped hole in the top of a green stump was the mill in which the corn was pounded to make the coarse Johnny Cake, their only bread. But afterwards when wheat was grown, when cows became at least as plentiful as babies, when grain could be carried to the Arkville grist mill twenty-five miles distant, when neighbors became more plentiful, when there were husking bees with the red ears of corn, when there were barn dances and apple paring meetings, where all the young peo-

(Continued on Page 18)



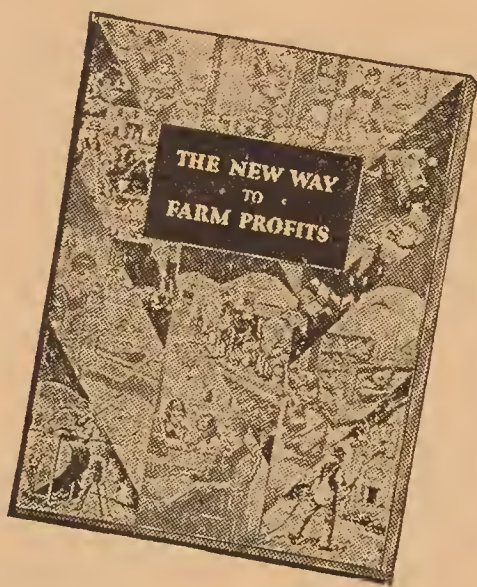
The hills and vales of old Delaware County, showing Federal Hill near Meridale, one of the greatest dairy sections in the world.

See Page 8 for November Milk Production Estimates

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A New Way of Making Hay

Curing in the Windrow Saves the Leaves

IT has been suggested that one reason for the shortage of milk every year in November is the fact that the late cut hay is usually put on top of the mow, and that it is fed to dairy herds all over the New York milk shed just at a time when the best quality hay should be fed.

If the early cut hay, instead of being dumped on the bottom of the mow this summer should be put in a separate mow, it could be fed out during the short period next fall. The following figures give some idea of the value of timothy hay, cut at different stages of growth.

	Dry matter per acre lbs.	Digestible proteins lbs.	Tot. Dig. matter lbs.
Coming into blossom.....	3,411	135	1,908
Full bloom.....	3,964	147	2,113
Seed formed.....	4,089	113	2,030
Seed in dough.....	4,038	98	1,914
Seed ripe.....	3,747	92	1,754

With alfalfa, the problem is different. Here the question is largely whether to make two or three cuttings. L. F. Graber, an authority on alfalfa, concludes that, all things considered, two cuttings are usually preferable. In his opinion, the higher feeding value of early cut alfalfa is overbalanced by the better labor distribution, less winter killing, and better weather for curing when the crop is cut only twice. With alfalfa, and also clover, it is extremely important to get it in the barn with the lowest possible loss of leaves.

When Should Hay Be Cut?

If all timothy and mixed hay could be cut early it would be fine, but in spite of recommendations to this effect, the majority of dairymen continue to wait until July to do the bulk of their haying. As a matter of fact, we are not prepared to state that they are wrong in this action. One of the big advantages of cutting later in the season is that the work involved is considerably less, particularly when hay can be cut in the morning and raked up and drawn in, in the afternoon. Then again, the weather is usually catchy during June which greatly increases the amount of work required to harvest hay. It is a discouraging proposition to cut green hay and have it rained on several times before it can be finally put into the barn. There is no question concerning the advantage of having the equipment needed to put the hay crop in the barn in ten days rather than taking a month or more to do the job.

The ideal which would be desirable if it could be reached, would be to get the hay in at the earliest possible moment in order to get the benefit of its high protein content and at the same time to harvest the hay with the least possible amount of labor.

Along with frequent recommendations to cut hay early, the advice has been given that better hay can be made by putting it up in cocks and allowing it to cure rather than to allow it to cure in the swath. Here again the question of labor cuts quite a figure. Bunching up hay is largely hand work

which is slow business. Unless hay caps are used (which by the way are rather expensive), hay must be spread out to dry in case there is any appreciable amount of rainfall.

As a result of all these factors it is fairly common practice to delay the start of haying until close to July 1, allow it to lay in the swath until cured and then rake it up and draw it into the barn.

A Left-Handed Rake

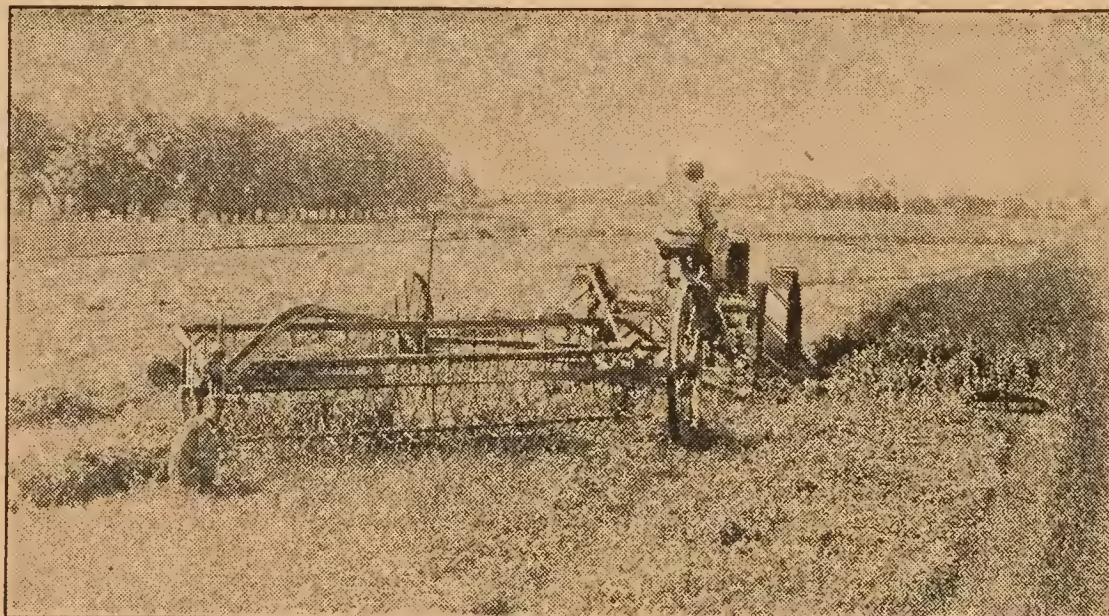
Recently a new method of making hay has been developed and tried out to a sufficient degree to at least state that it has great possibilities. This method consists of cutting the hay, usually in the morning, and raking it up with a side delivery rake either just as soon as it is cut or within two or three hours while it is still green. To follow this method successfully it is necessary to use a side delivery rake which delivers the hay at the left side of the rake. Some of the older machines were right-handed rakes but we understand that practically all of those now manufactured are left-handed.

This left-handed rake follows around the field in the same direction that the mowing machine goes and puts up a light, loose windrow with most of the leaves in the middle and most of the stems on the outside. After the hay is well dried on top, the rake is used to turn the windrow over one-half, putting the dry hay at the bottom and the green hay at the top. As soon as it is dry it is ready to put in the barn.

Leaves Are the Most Valuable

The principal advantage claimed for this method is that the leaves do not become dry and shatter off before the hay is put into the barn or when it is thrown down to be fed to the cows. It is claimed that 65 per cent of the feeding value of alfalfa is in the leaves and that there is as much protein in a ton of cured alfalfa leaves as there is in 2600 pounds of wheat bran. In a general way the statement holds true with other hay crops. It is evident that any method which will prevent the loss of these leaves is well worth trying, particularly as in this case the method is a labor-saving method rather than a method which tends to increase the cost of harvesting hay. It is also claimed that this method works well early in the season. If the hay gets wet the windrow can be turned over with the rake in a short time, and hay of excellent quality can be made even though it may get wet several times.

As already stated, it seems to us that the problem is to get the hay in the barn with the least possible labor and at the same time to get it in, in the best possible condition. We believe this subject is one which is worthy of considerable discussion and we will be glad to hear from any of our readers as to the method they use in harvesting hay. We plan to print a number of those which may prove of help.



Cutting and raking hay in one operation. Drying in the windrow saves the leaves

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The Effect of Prices on Milk Production

Practical Suggestions for Equalizing the Milk Supply

IN June, 1924, when the Dairyman's League Class 1 (\$1.86 for 3% milk in the 201-210 milk zone) and Class 2 prices were about the same—and scarcely half a cent a quart higher than Class 3 prices and but a cent a quart over the Class 4 value of milk made into butter and cheese, there was little pressure to sell milk in the New York market. It made little difference to the buyer whether he shipped or manufactured his milk. It did not pay additional producers or shippers to produce a higher grade of milk for that high grade market. City dealers requiring extra milk above their contracted supplies had to offer inducements to their shippers to divert milk from manufactured markets. Temporary shortages occurred when production was greatest because it was more profitable to manufacture rather than ship. The New York farmer received manufacturing prices for his milk. The dairy region was not prosperous. Milk prices in the New York Market were low, no new sources of supply sought that market, and there was no price cutting.

Prices in 1925

In June, 1925, the Dairyman's League Class 1 price was \$2.33 for 3% milk in the 201-210 mile zone. This price was about one cent a quart above the Class 2 cream prices—about a cent and a quarter above the Class 3 price of milk for case goods and about two cents a quart above the Class 4 value of milk for manufacture into butter and cheese. The price the farmer received this

By MORGAN GARLOCK

month was about the Class 2 price and about a cent a quart over the value of milk for manufacture into butter and cheese. The comparatively high price of Class 1 milk attracted some milk from approved manufacturing plants into the

zone, about two cents a quart over the Class 2 and Class 3 prices and about two and a half cents a quart over the value of milk for manufacturing into butter and cheese. In June 1926 the farmer received but little of the cent raise in Class 1.

In June 1927 and 1928 the Class 1 price of milk was \$2.75 and \$2.70, about a cent and a half over the Class 2 and Class 3 prices and two and a half cents over the Class 4 prices. The June 1927 and 1928 prices to the farmer were from a quarter to a half cent higher than in 1926. The spread between Class 1 and the lower classes, coupled with the higher prices paid the farmers and the attractive prices in New York City furnished a real incentive for milk buyers to move a large percentage of their milk in the New York market, new sources of supply sought the market and there was more price cutting than in the preceding years.

What is the situation in the spring of 1929? The League

Class 1 price in May and June is \$3.17 for 3% milk in the 201-210 mile zone, and will probably remain unchanged during June. This price is a cent a quart higher than last year, nearly two cents higher than in June, 1925, and nearly three cents higher than in 1924 when the price was \$1.86. The spread between the Class 1 fluid price (which represents the value of milk in the most desirable market in the world) and the Class 2 cream and Class 3 condensed and Class 4 butter and cheese prices is the greatest it has ever been during the flush. The retail bottle milk

(Continued on Page 7)

Encourage Winter Dairymen More

EVERY dairyman in the New York milk shed will be interested in the article on this page. It agrees with the idea that American Agriculturist has always had, that the most practical way to equalize milk production and get milk enough during the short periods is to pay better prices for winter milk. In such equalization, we do not believe that the prices in the spring should be less but rather that those in November should be more.

More and more producers of every kind of farm product must learn to suit the quantity and quality of their products to what the market wants, and the market demands a nearly equal supply of milk the year around. Therefore, there is the need of equalizing milk production.

The prices should be such that the man who produces nearly as much milk in November as he does in June will reap the benefit for his good dairy management.

New York market. The price paid the patrons of shipping companies induced some farmers formerly going to cheese factories to equip themselves for the New York market. The farmers having a fluid market received nearly a cent a quart more than in 1925. Milk prices in the New York market were higher than in preceding years thus attracting new milk into that market and there was some price cutting.

The Situation in 1927-28-29

In June 1926 the Dairyman's League Class 1 price was \$2.75 for 3% milk in the 201-210 mile

A Little Trip to Norfolk, Virginia

Growing Vegetables in Dixie for the Yankee Market

By PAUL WORK

NORFOLK, Virginia, is only an over-night run from New York City, but it ships cabbage in May, snap beans in June, and spinach in December and March. Long Island sometimes pays as much as \$5 a day for labor, but Norfolk pays around \$2. The growers claim this advantage, however, is minimized because the labor is not so good.



Paul Work

A little trip to Norfolk can be made in very short order. Easter is a good time as is May and June. One may drive down the Eastern Shore to Cape Charles and ferry across to Hampton roads. Another way is to drive to Baltimore or Washington and take the night boat, car and all. An automobile is carried for 25c a 100 pounds which is cheaper than you can drive. In this way you can spend a day or two amid summer trucking and get acquainted with southern people with no more than two days spent on the journey to and fro.

Norfolk soils are sandy and must be handled in their own way. Fertilizers are lavishly used and top dressing is common. Analyses run high in nitrogen and potash and relatively low in phosphorus, often ranging around the 1-1-1 ratio. Growers commonly cultivate the cabbage deeply to keep the roots broken during early growth and then they cease stirring the soil when they want the plants to head up.

The Cabbage Crop

Cabbage plants are started in outdoor field beds in the fall, and early in

the winter they are set on the south side of furrows so that they will be ready for vigorous growth with the first warm weather of spring. Early Jersey Wakefield is the leading variety and the crop is harvested in May. Cabbage set out in the fall shows a marked tendency to run to seed in the spring. Good breeding of seed stocks is necessary to minimize this difficulty. J. C. Miller, working at Cornell, has found that starting plants too early in the fall also tends to increase the trouble.

The barrel was formerly Norfolk's leading shipping package. This container is fast disappearing and cabbage, for a number of years, has been packed chiefly in 100-pound divided crates. More recently, half crates carrying 50 pounds

have come into use. These are more easily handled and well adapted for the grocer who uses but a small amount each day. In cutting, the darkies follow a one-horse cart thru the field taking 6 or 8 rows at a time. The cart is dumped in the shade of trees or in a shed and the heads are packed butts to the side in orderly layers. A liberal amount of wrapper leaves is included to protect the heads. The number per 50-pound crate varies widely, but 30 is usual at the beginning of the season.

Norfolk has long been famous for its spinach crop, but Texas has far out-stripped it and Louisiana is a close third. Virginia spinach is grown in slightly raised beds with three or four rows each. A special cultivator is drawn by a horse which walks in the furrow and which takes care of two beds at a time. Two workers are required, one handling the cultivator for each bed.

Years ago serious trouble from spinach blight or mosaic developed. The Virginia Truck Experiment Station made a thorough study of the problem and finally made a cross between a Manchurian spinach and the old Bloomsdale which has proved resistant to this disease. It is also a very well bred spinach, but goes to seed very quickly in the spring. They are now working on a new strain which is decidedly more long standing.

Spinach is cut and basketed in the field, trimming off yellow leaves. It is not ordinarily washed, but at the barn or loading station each basket is opened and a shovelful representing 5 to 7 pounds of ice is slipped in, about one-

(Continued on Page 13)



Icing Norfolk Spinach Before Sending It To Market

Editorial Page of the American Agriculturist

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Vol. 123 June 15, 1929 No. 24

How the New School Law May Help Your District

A MEMBER of the A. A. staff has just returned after several days spent visiting rural schools and talking with district superintendents and other rural school officers and patrons. We always make it a point to try to get our information from actual, practical conditions. We wanted to see if we were wrong in any part of our advice suggesting to school trustees and patrons that now is the time to put their one-room schoolhouse and equipment into better condition without any extra local taxation.

We find that this advice was correct in every particular. Thousands of one-room schools have the opportunity between now and August 1 to spend from one to two hundred dollars for better equipment or for painting the schoolhouse at State expense, and thousands of these schoolhouses certainly need this attention.

AMERICAN AGRICULTURIST has never been for actual consolidation of the one-room schools where they were giving good service to the boys and girls. But we are in favor of giving country children every possible opportunity and right now is the best chance in a generation, probably right in your own district, to make your school a better place for your children to attend.

In the table given below you will see what our representative found about how the new school law will help district schools in one town. This is typical of many other towns. If you study this table, you will see that most of the districts in this town are going to get a large amount of public money from the State next year for this year's expenses. What is the situation in your district?

Here is the table:

District	Assessed Valuation	True Valuation	Raised by Four-mill Local Tax	State Aid
1	\$ 59,405	\$ 99,008	\$ 396.03	\$ 903.97
3	138,751	231,252	925.01	425.00
4	36,100	60,167	240.67	1,059.33
5	90,553	150,922	603.69	696.31
6	43,059	71,765	287.06	1,012.94
7	153,380	255,633	1,022.53	425.00
9	87,340	145,566	582.26	717.74
10	69,558	115,930	463.72	836.28

You will note that districts No. 3 and No. 7 each get \$425. The new law provides that no matter how rich a district is or how high its valuation, it shall receive at least \$425 from the State, even though the difference between the

\$1300 and the local four-mill tax is less than \$425.

In this particular town, the rate of assessment was 60 per cent. Therefore, the true valuation is found by dividing the assessed valuation by 60 per cent. The law provides that a four-mill tax on the true valuation shall be raised locally, and that the State shall pay all of the rest expended for school expenses up to \$1300. Therefore, \$1300 less the amount raised by the four-mill tax gives the amount of State aid for each district.

But remember that your district will only get from the State what it actually expends, less the four-mill tax. For instance, if district No. 1 spends only \$1100 instead of the full \$1300, then it will get only \$703.97 instead of the full \$903.97.

Most of the schools of the State will only spend from \$1100 to \$1200 this year. This means that if you do not get busy you are probably losing an opportunity to receive from one to two hundred dollars more from the State which can be spent for repairing your schoolhouse or adding new equipment without a cent extra of local taxes.

Should Oats and Peas Be Put Into Silo?

THIS summer there will be more oats and peas and other crops for green feeding grown than ever before in this section. Dairy men in general are making more plans than ever before to keep up the summer production of milk in order that there will be enough to prevent a shortage next fall. So the question has come up as to how best to use this green feed.

Should the oats and peas be run into the silo, or should they be fed green?

The Publisher of AMERICAN AGRICULTURIST put this question up to Professor Warren of the New York State College of Agriculture and he answered as follows:

"I think it would be best to feed as much as you need of the peas and oats green and run the balance of the crop into the silo whenever it is at the right stage to put in. A single sowing of oats and peas can be used only for a limited number of days before they become too ripe."

We would be glad to have readers' experience in this matter.

Relief From Farm Relief

FRUIT growers of the Northwest have gone on record as opposed to the farm relief legislation now before Congress. The Yakima Fruit Growers' Association and the Skookum Packers' Association, both of the State of Washington, are opposed to the farm relief bills. These organizations last year produced 23 per cent of the entire apple crop of the nation.

"More than 90 per cent of the fruit industry in this region is opposed to the stabilization plan being applied to fruit," said Harry L. Miller, manager of the Skookum Packers' Association. "Practically all of the fruit interests of the Yakima, Wenatchee and Hood River districts, including every large cooperative organization, has gone on record as asking Congress to exclude apples and pears from the plan."

"Our product is perishable, unlike cotton and wheat. * * * World-wide markets for our fruit have been won. Incalculable damage is bound to result to this industry if the farm relief provisions relating to stabilization are put into effect."

"Congress can legislate a thousand cooperatives into temporary existence, but it cannot make them succeed even with the wealth of the United States government behind them. Too much credit is often as destructive to economic endeavor as too little. Experience and a trained personnel and the adoption of sound business principles are as essential in cooperative marketing as in corporation systems."

"The existing successful cooperative organizations, which have become strong only as a result of long years of experience and painstaking work and after many trials and tribulations, have cause to watch the trend of farm relief legislation now pending with no little concern, lest we have another 'surplus' of cooperatives, so-called, whose uncertain tenure of life may prove a menace to the great economic agricultural movement of which they are the pioneers."

"The government virtually washes its hands of all responsibility and passes the buck to the cooperative

associations by giving them \$500,000,000 with which to stabilize the industry. If they fail, as probably they will, for the provisions of the law go against established economic laws, the cooperative movement will bear the odium of that failure. * * *

"The ridiculous feature of the law is the provision that prices shall not be fixed so high as to be objectionable to the consumer and yet high enough to return a profit to the producer. If the trouble is over-production brought about by extensive use of farm machinery, then to increase credits on a wholesale basis will simply act to further increase production and aggravate the situation. The whole scheme is in effect an attempt to have the farmer pull himself out of the mire by his boot straps."

We believe the above are fair statements not only for the fruit situation but probably for the marketing of most other farm products, especially for those produced here in the East. We are not pessimistic generally, but we predict if the legislation now before Congress finally passes and is put into effect, it will be only a short time before farmers will be asking relief from farm relief.

Results From Lime

SINCE 1918 studies have been conducted on DeKalk, Volusia and Westmoreland soils to determine the comparative crop producing value of limestone, hydrated lime and ground burnt lime. Three rates of application have been compared in a four-year grain rotation of corn, wheat, oats, and hay (clover and timothy). The following summary shows some of the results secured at the end of eight years:

1. Pulverized limestone (20-mesh), hydrated lime, and ground burnt lime have given similar yields when applied to the soil on the basis of equivalent amounts of lime oxides (CaO and MgO).

2. The annual net return per acre from the use of limestone, as a general average, has been \$11.57 as compared to \$10.91 for hydrated lime.

3. On the basis of the heavy applications (in amounts sufficient to correct soil acidity) limestone has given an annual net return per acre of \$12.67 compared to \$12.31 for hydrated lime.

4. The profit from the investment in limestone, as a general average, has been 576 per cent compared to 436 per cent for hydrated lime.

5. On the basis of the data accumulated during eight years of field study, we may conclude that the differences in yields and annual net returns derived from the use of limestone and hydrated lime are not significantly different.

The above statements are taken from Bulletin No. 213, the same being the Fortieth Annual Report of the Pennsylvania Agricultural Experiment Station. It is interesting to note that there is little difference in profits between the different kinds of lime used, but the important point, and the chief reason why we are calling your attention to these lime experiments, is the value of the lime itself and the big returns that farmers almost always get from its use. On an acid soil, and sometimes even on a soil not so acid, for most crops lime is certainly magic. If it pays to farm such land at all, it generally pays to use lime.

Eastman's Chestnut

HERE is an old story that I have heard a good many times; but in spite of its age it always makes me laugh:

Two farmers, noted for not wasting any speech, passed on the road one morning going to the milk station and "conversed" as follows:

"Mornin'."

"Mornin'."

"My horse has colic. What did you say you gave yours?"

"Turpentine."

"Mornin'."

"Mornin'."

The next day they met again.

"Mornin'."

"Mornin'."

"I gave my horse turpentine like you said and it died."

"So did mine."

"Mornin'."

"Mornin'."

Master Farmers Are Real Citizens

Worthy Candidates Can be Found in Every Neighborhood

NOMINATIONS for New York State Master Farmers in 1929 have been closed and the entire editorial staff of AMERICAN AGRICULTURIST, during the next two or three months, will be busy examining worksheets sent in by candidates and finally in visiting many of those whose work-



Mr. Julius Gordon and the farm team

sheets show that they have the necessary qualifications in the highest degree. Later in the summer the Board of Judges will select those who will be named as Master Farmers this year.

Recently we have published short accounts of the achievements of a number of Master Farmers who were honored last year. On this page we are giving you intimate stories of a few more of the 1928 Master Farmers. In an early issue we plan to tell you about the others.

* * *

Julius C. Gordon,

Lawyersville, Schoharie County, N. Y.

OUR Schoharie County Master Farmer doesn't run a one-track business nor have a distinct specialty. In fact, so he himself says, the farm proposition is more like a railroad switch-yard. He has a stable full of Holstein cows

added thereto. These holdings lie in the fertile limestone region of northern Schoharie County.

The crops of the farm include much grain, some potatoes, and a large acreage of alfalfa.

Mr. Gordon has been a school teacher for about 20 years of his life and resigned from that vocation only recently when the management of his many farm enterprises demanded his whole time.

He is an all-round man on the farm and equally so in his community; being a devoted member of the Grange, the Farm Bureau, the Church, and several cooperative organizations.

Mrs. Gordon is actively interested in every activity of farm and community, and finds time to lend a hand to many enterprises outside the home.

There are three children in the family. The older girl, Ruth, is in the College of Arts and Sciences at Cornell University. The other children, Chester and Nellie, are in High School. All three are accustomed to stand at the head of their classes.

This Master Farmer and his family are mastering the problems of life by putting unusual physical and mental effort into their daily tasks.—RAY POLLARD.

* * *

Fred DuBois,

New Paltz, Ulster County, N. Y.

THE principal source of income on the DuBois farm in Ulster County is milk. The milk is marketed at retail in New Paltz and this end of the business is taken care of by one of the older boys. In addition to the dairy, there is a good sized flock of poultry and an orchard to add diversity to the business.

After all, aside from the fact that Master Farmers are engaged in different types of farming, a recital of their farm activities is rather similar. They all follow good farming methods, otherwise they would not be Master Farmers. One who wishes to get enthusiastic about their accomplishments may do so by turning to a record of their community and family activities.

Mr. and Mrs. DuBois have five children. Harold, the oldest boy, who is married; Fred, Jr., Anna, Clarence and Gerald. As will be noted in the picture, there is also a grandson who, we anticipate, is by no means the least important member of the family.

Mr. DuBois has been Master of the local Grange for some time, has been active in the County Farm Bureau and is on the New York State Council of Agriculture and Markets.

* * *

Henry R. Talmage,

Riverhead, Suffolk County, N. Y.

THERE are few activities in Suffolk County in any way connected with agriculture that have not been helped along by the influence of Mr. Talmage. He is known as a man of immense energy and excellent judgment. The farm, like most of them in that vicinity, depends primarily upon two products, potatoes and cauliflower, for its income.

Mr. Talmage and his son, Nat, who

is a graduate of the State College of Agriculture at Ithaca, are working two farms in partnership and in addition, Mr. Talmage has several farms which are under his active supervision. Mr. and Mrs. Talmage have one daughter, Christine, who is finishing college this year.

Although potatoes and cauliflower are grown extensively, Mr. Talmage and his son do not hesitate to experiment. A few years ago they became interested in growing bulbs for the flower market and have continued to experiment along this line for several years.

The Talmage home is modern in every respect and just across the drive is the home of Nat, who is married and has two children. Mr. Talmage has been very active in County Farm Bureau activities and also in the Long Island Cauliflower Association, which markets, cooperatively, a large part of the cauliflower grown in the county.

* * *

Fred N. Smith,

Trumansburg,

Tompkins Co., N. Y.

BEFORE we went up to Mr. Smith's place, we stopped at a garage and inquired about the directions. The man gave them to us and then added, "You are going to call on the best man in this community, the kind of man who believes in giving a square deal to everybody."

Mr. Smith has reached the age where he has earned the right to rest and take it easy, but we found him in the hot barnyard pitching on manure, and setting a good pace to the hired man.

Of all the men we have met, this one's life is the best example of the possibilities of growing well-to-do in the farm business. He started with little or nothing. Today he owns 400 acres of as good land as there is in New York State, with over 300 acres of it under cultivation. His income is

chiefly from potatoes, beans, milk, wheat and hay.

Mr. Smith is a director in a bank, a



Mr. Fred N. Smith with his two sons and his grandson.

leader in cooperative enterprises, a member of various farm and fraternal organizations, and justice of the peace. Mr. and Mrs. Smith have raised and educated a family of five children. All of them have finished high school and several have gone to college. That in itself is an answer to what kind of parents these folks are.

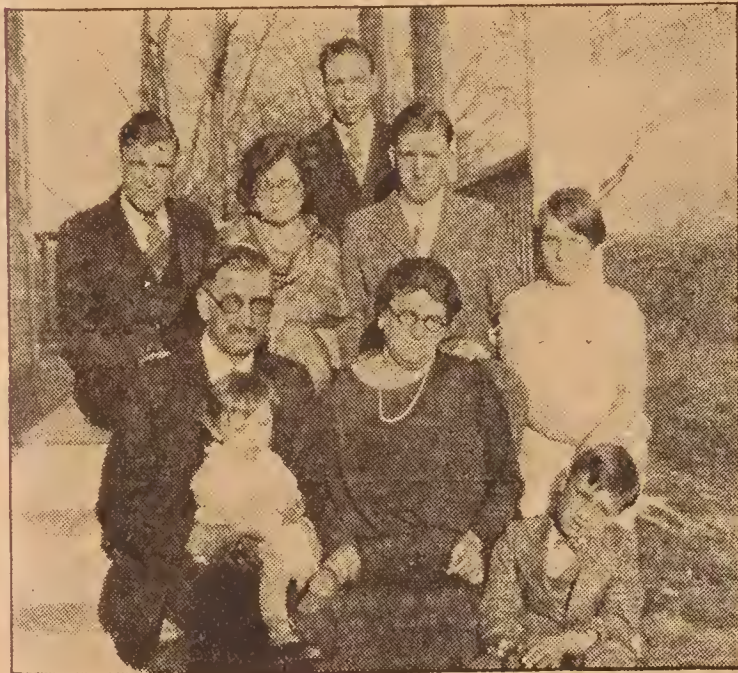
Here we have another example of people who may be old in years but who in spite of all the troubles and disappointments of the world have been able to keep their spirits young and a dauntless outlook on life.

* * *

Ed. Heinaman,

Bath, Steuben County, N. Y.

THE writer was told when visiting Steuben County that few people realized the extent to which Mr. Heinaman has influenced farming in his County. He was one of the first men to take an interest in the Farm Bureau. The office rent of this organization was for a time, paid by a local organization, (Continued on Page 8)



Mr. and Mrs. DuBois and family

which produce well and make for him a substantial and regular income.

A flock of Shropshire sheep make a tidy return from wool, lambs, Fair prizes and surplus sales. Mr. Gordon has kept a drove of purebred hogs for many years, and has sold hundreds of them to breeders both far and near.

Honey is produced in retail and wholesale quantities from an apiary that has been a part of the business for 20 years. The "yard" would not be complete without a flock of hens; and so the poultry is included.

Mr. and Mrs. Gordon moved from a smaller farm to the good sized one they now occupy a little over a decade ago. It is the century-old homestead of Mrs. Gordon's parents. And now a neighboring farm has been purchased and

Have Your Favorite Song Or Poem Broadcast

EVERY Thursday, at noon, eastern standard time, there will be broadcast over WGY, General Electric Company's station at Schenectady, a series of readings prepared by me entitled "Visits with the Poets of the Farm and Home".

I have heard people say that farmers do not care for poetry. But I know better. Those who get something out of life besides hard work are always interested in these higher, finer things of the spirit.

In these talks, there will be time only for a brief glimpse of some of the best farm and home poems, but I hope it will be enough so that you will make an effort to get the complete volume of poems from the library and read the best of them aloud in the family circle.

The management of WGY informs me that this is something of an experiment to see if farm people do care for something besides straight farm talks, so if you like these poems, won't you write in to WGY and tell them so, and at the same time tell us what your favorite song or poem is. Later, I shall make up a program or two of request numbers, that is, songs and poems consisting entirely of your favorites. Those having the largest number of requests will be broadcast and will also be printed in AMERICAN AGRICULTURIST, so be sure to let us hear from you. Remember that I shall be glad to have either your favorite song or your favorite poem, or both, if you prefer.

Just as a little experiment, I asked the folks here in the A. A. office to tell me what their favorite songs were, and I got what I think is a fine list. Sing or play them over and I think you will agree. Here they are:

Battle Hymn of the Republic
Love's Old Sweet Song
Carry Me Back to Old Virginny
Home Sweet Home
Believe Me of All Those Endearing Young Charms
Lead Kindly Light
Silver Threads Among the Gold
Lullaby Lane
After the Ball
Let Me Call You Sweetheart
Abide With Me
Auld Lang Syne
Let the Rest of the World Go By
Keep the Home Fires Burning
Indian Love Call
End of A Perfect Day

E. R. EASTMAN.

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"FARM Service"
Hardware Stores, the leading individual stores in each rural community, have two reasons for existence. One is to supply you with the highest quality hardware of all kinds on a price basis that will give you the utmost value for your money.

The other is to give you conscientious, honest help in the selection of the right kind of hardware to exactly fit your needs. This personal service, which costs you nothing, is the biggest money-saver and time-saver that you could get at any price. Why not make greater use of it?

NOW don't let the flies get a start. Come to us for sprayers and good fly dopes that you can safely use in the barns and in the house. Kill the flies now and enjoy a greater summer comfort.

Look for this tag in their window.



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Where prices are lower because you get personal help in the selection and maintenance of your purchases.



SLUG-SHOT

USED FROM OCEAN TO OCEAN FOR 50 YEARS
Destroys Mexican Bean Beetle and Army Worm

Saves Currants, Potatoes, Cabbage, Melons, Flowers, Trees and Shrubs from Insects. Put up in popular packages at popular prices. Write for free pamphlet on Bugs and Blights, etc. to

Hammond's Paint and Slug Shot Works Beacon, New York

an EXTRA truckload of POTATOES from one acre sprayed with **Pyrox**



Mr. C. S. Newcomer, of Chambersburg, Pa., got an extra truckload of potatoes (seventy bushels) from one acre sprayed with PYROX. This seventy bushel EXTRA YIELD amounted to a 22% increase over his yield from potatoes sprayed with a home-made mixture.

PYROX, the scientifically prepared plant spray does three things at once. That is why it is so economical, and helps produce bigger and better crops. PYROX kills bugs, prevents the development of blight and disease, and stimulates plant growth. Does away with the costly labor of home-made spray mixtures, and eliminates the danger of improperly mixed chemicals. Safe and easy to use. Will not wash off. Does not clog sprayer nozzle. Use PYROX this year for BIGGER PROFITS. Now priced lowest in 30 years' successful use. Write us or ask your dealer for the new Spray Guide—free. Bowker Chemical Company, 419 Fourth Avenue, New York.

CAULIFLOWER and Cabbage Plants. Pedigreed Seed. Selected Plants. Disease free. Safe delivery. See classified column for varieties and prices. F. W. Rochelle & Sons, Chester, New Jersey

Walter A. Wood

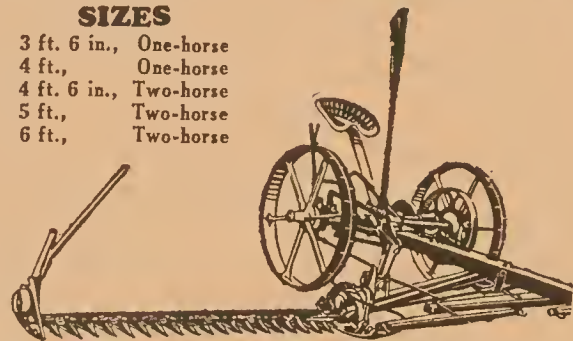
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5 ft., Two-horse
6 ft., Two-horse



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A.A.'s Western New York Farm and Home Talk



Busy Days

By M. C. BURRITT

THE weather, director of farmers' productive destinies, gave us something new during the last week in May,—a whole dry week without rain and plenty of heat.



M. C. Burritt

Warm, bright, beautiful days helped to finish up the pollination period in fine shape. It came a little too late for most varieties, but should help the late ones to set better. Temperatures went almost to record points for May—90° to 92°. But now on the second day of June we are back again to 50° and cold north winds.

At last spring grain is in the ground. A good many fields were sown after Memorial Day—too late for a good crop. The early sown fields are up and away to a good start. Not much plowing for corn, beans and cabbage has been done yet and I have heard of no planting in the Lake Ontario belt, although I know of fields farther south in western New York planted to potatoes and beans already. We have all our spring plowing done and hope to plant a field of beans this week.

During the past week the calyx or after-the-petals-fall spray has been applied. Most growers who spray regularly have finished although some will require a day or two longer. I think it has been more generally applied than the pre-blossom sprays. The bloom has been very heavy throughout the region—probably 80 to 90 per cent of a full bloom. But there are quite a percentage of Baldwins—I estimate 25 or 30 per cent of the trees in my own orchard—which did not bloom. Kings also bloomed lightly—40 to 50 per cent.

Of course, it is too early yet to forecast a crop. Already there are indications of a failure of many blossoms, especially of early varieties to set. Twenty-Ounce appears to be one of these. In general, the later blooming varieties should set better than the early sorts because temperatures were higher and there was more sunshine. There is also the question of the extent of frost injury. There were several white frosts during the early part of the blossom period with temperatures close to 32°. This may have destroyed some fruits outright. Others may have been so injured that they will fall later or develop imperfect one-sided fruits. Some frost curled and burned leaves are apparent. There is every reason to expect a good crop of fruit in western New York this year, however.

There will be a real problem to mar-

ket fruit at a profit this fall. I have

seen no reports from the Northwest as yet but a reliable report from Virginia puts that state's crop at 70 to 80 per cent of last year or about 3,000,000 barrels. Early varieties are reported as heavy. Winesaps and Staymens lighter, and Yorks good. Quality will count more than ever. If buyers will only discount poor quality still more than formerly, it will help to raise our standards and to eliminate the unnecessary surplus.

School Will Soon Be Finished

These are the last of school days for the year. They are busy ones. Either the courses are harder and heavier, or extra curricula activities have multiplied, for the children seldom seem to have any time to work at home or do anything else. Unless my memory fails me, boys and girls of other generations used to help a lot with the work at home before and after school and on Saturdays. Now the school work, music, outside activities such as scouting, baseball and tennis absorb the whole time and energy of the children. Is it better this way? They think they are having a better time. What will the result be? But times have changed. New situations demand new methods and activities. Few of us realize how the automobile and good roads with their possibilities for quick and easy transportation have speeded up our lives, introduced new possibilities and changed the whole situation. The farms will be—being—adjusted to meet these new problems. And, unfortunately, in many ways, they are being adjusted to city and small town standards and ways. We are losing our distinctly rural outlook.—Hilton, N. Y., June 2, 1929.

Predicting Ripening Dates For Peaches

PROFESSOR M. A. BLAKE of the New Jersey State College, has done some interesting work on predicting the ripening dates of Elberta peaches. Prof. Blake states that when Elbertas bloom about April 18 at New Brunswick it will be from 135 to 145 days until they are ripe, but where the blooming period is delayed until about May 1st the bulk of the harvest will occur from the 130th to the 135th day after blossoming.

Trees that set only a few fruits ripen earlier than those set heavily. Cool weather at time of maturity slows the ripening process. The fertilizer used also has a considerable effect on the date of ripening.



The chain store ruins another independent retailer.—Life.

The Effect of Prices on Milk Production

(Continued from Page 1)

price of milk at 16 cents a quart and 12 cents a quart for loose milk in the New York City stores furnish an attractive market for approved manufacturing plants and new sources of supply. The farmer who is approved for New York City in May and June of this year will receive the most he has ever received except in war times and this of itself will attract more producers into that market. The pressure on the part of the milk buyer to sell as much fluid milk as possible will be the greatest it has ever been.

Market Is Healthy Now

The combination of a greater spread between the fluid and manufactured markets, greater profits on milk diverted from manufacturing to fluid markets, greater losses to the fluid milk dealer on manufactured surplus, higher prices in New York City and higher prices paid the farmer will inevitably attract new milk to that market and some price cutting will result. The mere existence of price cutting is proof that the New York price is attracting milk from lower priced markets. It indicates a desirable market and fair prices in that market.

Any milk buyer who has a valuable business requires a steady daily supply of milk throughout the year and will pay during the flush a substantial premium over the value of milk for manufacturing to one who will supply him the year round. Few are tempted to buy cheap surplus milk for a few months in the flush and gamble with their businesses during the shortage. Some surplus is sold cheap but it is generally sold by shippers who have poor facilities for manufacturing and who ship it to New York City for about manufactured or cream prices to dealers having better Class 2 and Class 3 markets who have plants of their own, in which they make up a corresponding amount of milk. In effect this means that one plant trades its milk for about the value of a same amount of milk manufactured or made into cream at another dealer's plant, who ships a corresponding amount less from his own plants. A large part of what might be termed price cutting is done in this way. The novice who endeavors to sell surplus milk or cream to an established dealer will be surprised at his reluctance to give up a dependable year round source of supply to take advantage

of the price cutting on a few months cheap milk or cream.

A dealer having a large surplus during the flush will gladly expand his business with his cheap flush milk, if he knows where he can get additional new supplies to care for his extra trade when the seasonal shortage comes. It is exceedingly profitable to buy cheap flush milk, and when fall comes open up new cheap sources of supply from farmers who have had only manufacturing markets. Where this is possible dealers can be readily induced to buy surplus milk at cut prices.

Price cutting is the growing pains of a healthy market. Its existence indicates new supplies seeking a better market. Its extent indicates high prices and an irregular, unequalized supply. The better that market the more it will attract new milk. The more serious the seasonal shortage the easier it will be for new supplies to share that market.

Steps to Protect Market

What must the New York Dairyman do to protect and hold his markets if the existence of price cutting indicates new supplies seeking a share in his markets?

(1) He must be able to produce milk profitably at the price his market pays and this price must not be high enough to attract new cheap supplies which are not needed prematurely into his market.

(2) He must furnish an adequate milk supply to his markets at all times.

Is it a matter of Price and Milk Supply; or is it a matter of Milk Supply and Price; or is it a matter of Milk Supply and Price and Price and Milk Supply? In other words, which comes first, the hen or the egg—Price or Milk Supply? Or should both come first?

The farmer will at once say, "Price and milk supply—pay us the price and we will give you the milk supply." And by milk supply he means milk. He thinks of his milk merely as a commodity he takes to his milk plant, not as a part of a continuous series of deliveries needed to satisfy a steady daily demand which can only be cared for by a regular steady milk supply. Milk is one thing—a milk supply is milk plus regularity of production, uniformity of quality, so dependable that a dealer can

(Continued on Page 9)



Boy Farmer Sells Cow for \$2800.—Seven years ago young Gail Heifner bought a Guernsey cow with a calf by her side for \$600;—he raised the calf put 3 official records on her, started her on a 4th then sold her for \$2800 at the National Guernsey sale. At thirteen years of age Gail went into partnership with his father and the two have built up a herd of seventy good Guernseys on their farm at Sullivan, Ohio. The \$2800 cow, Ruby of Cedar Lane, is just completing a record of more than 16,000 pounds of milk and 800 pounds of butterfat in Class A of the American Guernsey Cattle Club advanced register. As a senior four year old she made 8359.8 pounds of milk and 431.1 pounds of butterfat in ten months on twice a day milking; as a two year old she produced 8232.7 pounds of milk and 419.1 pounds of butterfat.



WHO gets the profits?

JOHN JONES must get a profit in greater health and increased enjoyment from the eggs, poultry, milk and beef he consumes.

If everybody doesn't get a profit, business stops

a commercial feed, packed for shipment. Then the costs are established. But the profit is the essential point—if the feed can show a reasonable profit to everybody, the cost does not matter.

You must get a profit from the products you supply to him. The fowl and cattle you keep must get a profit from the feed they eat. The dealer must get a profit from the feed he sells. The railroads must get a profit from the feed they haul. The manufacturer must get a profit from the feed he mixes—and he must mix and price his feed in such a way that it will give profit to everybody, right back to the ultimate consumer.

The feed manufacturer's laboratory creates the formula. His experimental farms test it. The mill transmutes it into

body, the cost does not matter. It is on the experimental farms that the profits of Park and Pollard feeds are really proven. There the feeds are tested in terms of eggs and milk. If the feed can produce in sufficient quantity to yield the farmer more than he would ordinarily expect, it can be considered a success. And it must be proven capable of earning greater profits or it will not be offered to the farmer. For if he benefits everybody shares—the ultimate consumer, the dealer and The Park and Pollard Company.

The Park & Pollard Co.
Boston, Mass.—Buffalo, N. Y.

Dairy and Poultry Feeds

To be sure of profit-making feeds—look for a Park & Pollard dealer

Poultry Feeds: Lay or Bust Dry Mash / Red Ribbon Scratch / Growing Feed / Intermediate Chick Feed / P & P Chick Scratch / P & P Chick Starter—Dairy Rations: Overall 24% / Milk-Maid, 24% / Bet-R-Milk 20% / Herdhealth 16% / Milkade Calf Meal—Other Feeds: P & P Stock Feed / Bison Stock Feed / Go-Tu-It Pig and Hog Ration / Pigeon Feed / P & P Horse Feed / Pocahontas Table Corn Meal.



Livestock



Breeders



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FISHKILL FARMS

offer the following

Yearling Bulls

FISHKILL COLANTHA PONTIAC

Born April 14, 1928

FISHKILL PRIDE HENGERVELD

Born May 23, 1928

FISHKILL SIR MAY BEAUTY

Born April 28, 1928

FISHKILL MAID HENGERVELD

Born June 6, 1928

These four fine specimens of the Holstein breed are sired by FISHKILL SIR MAY HENGERVELD DE KOL. His sire is out of JENNY LINN COLANTHA (30.95 lbs. butter in 7 days at 4 years), she being a grand-daughter of that greatest of all milk sires COLANTHA JOHANNA LAD, through his best son, our former herd sire, DUTCHLAND COLANTHA SIR INKA. On his dam's side FISHKILL SIR MAY HENGERVELD DEKOL's ancestry is just as impressive. His dam WINANA SEGIS MAY 2nd (27.42 lbs. butter in 7 days at 3 years, 11 months, 14 days), is a daughter of a full brother to that "Marvel of all Sires" KING SEGIS PONTIAC COUNT whose daughters have broken over 100 world's records.

Sons of "Dutch" Daughters

The dams of these young bulls we are offering are all daughters of the great DUTCHLAND COLANTHA SIR INKA mentioned above, making these youngsters strong in the blood of the greatest of all milk sires, COLANTHA JOHANNA LAD. Read each individual's accomplishments.

FISHKILL PONTIAC DE KOL INKA—dam of FISHKILL COLANTHA PONTIAC, made record of over 20 lbs. butter in 7 days as a 2 year old and 493.72 lbs. butter and 11,012.20 lbs. milk in 365 days at the age of 2 years, 11 months and 15 days.

FISHKILL BEAUTY INKA COLANTHA—dam of FISHKILL SIR MAY BEAUTY, at the age of 2 years, 9 months, 24 days produced 482.51 lbs. of butter and 12,861.30 lbs. milk in 305 days (Class C).

FISHKILL BESSIE PRIDE INKA—dam of FISHKILL PRIDE HENGERVELD, as a 4 year old made a record (Class B) of 810.53 lbs. butter and 17,707.50 lbs. milk in 365 days. As stated above she is a Dutch daughter out of Bessie Pride Polkadot Fayne, she having a record of 1,079.83 lbs. butter in 365 days at the age of 5½ years, and a 7 day record of 35.10 lbs. butter.

DUTCHLAND INKA COLANTHA MAID—dam of FISHKILL MAID HENGERVELD has a fine list of daughters including 18 over 30 lbs. and 2 over 1,000 lbs. Her dam's sire is by a \$5,000 son of the noted \$8,000 cow PONTIAC RAG APPLE.

For pedigrees, prices, terms, etc., write

FISHKILL FARMS

HENRY MORGENTHAU, JR., Owner

Hopewell Junction

Dutchess County, N. Y.



HOLSTEINS FOR PROFIT!

More Dollars per Cow per Year

The Farmer's Cow Holsteins are large and hardy, yield the most milk and butterfat, consume great quantities of cheap roughages, and produce big, strong calves which are easily raised.

Extension Service

The **HOLSTEIN-FRIESIAN ASSOCIATION OF AMERICA**
230 East Ohio Street, Chicago, Illinois 6

NATICK FARM

Milking Shorthorns

We are now offering a few choice young bulls, mostly roans.

Prices reasonable

Write, or better still, come and see them.

Frank Dale, Webster Knight,
Herdsman. Natick, R. I.

Hereford Cattle For Sale

Steers, calves, yearlings and two-year-olds. Uniform in size. Choice quality. Tested cows and heifers. Many cars.

JOHN CARROW, Box 193, OTTUMWA, IOWA

FEDERAL SUPERVISION COWS

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I can supply your wants, one or one hundred, all dairy breeds. Call me up.
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4 loads weaned calves; 3 loads short yearlings; 2 loads long yearlings; 4 loads heifer calves; 3 loads springers. Well bred, the good kind. Can sort, other cattle, pasture flesh. Write or wire.

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THIRTY PURE BRED HOLSTEIN COWS, bred heifers, calves, and bulls for sale.
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REGISTERED SHROPSHIRE AND DORSET RAMS
Shipped on approval. \$25 to \$35 each. No money required. Send for photographs.
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FOR SALE 100 young ewes; 150 goats; 80 steers; 90 beef grade yearlings; 45 bred Guernsey and Jersey heifers.
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FOR SALE: Two registered Jersey bull calves, five and seven months old, respectively. Excellent "Sophie Tormentor" breeding, good individuals. Write for particulars.
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Quality Herefords Bulls, heifers & cows. One or a carload.
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100 HEAD of T.B. tested Canadian Holstein and Ayrshire cows and heifers, to freshen in Summer and Fall months. Pure bred and high grade cows a specialty. HUTCHINS & LEGGETT, Malone, N. Y.

FOR SALE: Carload of classy young shorn Delaine ewes and their lambs, also a large stock farm in Central Pennsylvania.
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November Milk Production Estimates

DAIRYMEN all over the New York Milk Shed will be intensely interested in the results of a survey recently conducted to determine the probable milk production during the short period next November. Figures were secured by the Dairymen's League for its own members, by the Sheffield Producers from its members and by the New York State College of Agriculture for independent dairymen.

Figures secured by the Sheffield Producers from 70 per cent of their members, show an estimated increase in production of 33 pounds of milk per day per dairy next November over the production secured last November. The Dairymen's League reports from over 36,000 dairies, show an estimated increase over last year's November figures of 22.4 pounds per day per dairy. The returns from independent dairymen secured by the New York State College, indicate a probable increase of 44 pounds of milk per day per dairy next November as compared with last November.

Estimates May Be Too Optimistic

It is only fair to state that many who have studied the situation closely feel that these estimates must be discounted because of over optimism on the part of producers and incomplete returns. It is evident to anyone who has studied the situation that many things can happen to upset these predictions and it would certainly be unwise at this stage of the game to assume that the whole problem has been solved and that there will be no shortage next November. If, however, the predictions as to the increase are finally realized, it is estimated that the increased production will be enough to take care of the market next fall.

At the same time, figures were secured on young stock on farms. For every one hundred producing cows owned by Sheffield producers, there are 19 calves under one year of age, 17 yearlings and 11 two-year-olds not yet producing. For every one hundred cows owned by League members there are over 21 calves, about 20 yearlings and approximately 15 two-year-olds. The 36,933 League dairies reporting have 38,881 more calves than were raised by them two years ago. At this writing we do not have reports on young stock on farms of independent producers.

These figures can be interpreted in two ways. The natural conclusion is that if producers in the New York Milk Shed can worry through next November without having the milk shed extended that there will be no danger of shortage in 1930 and for several years thereafter. The other angle is that when all these two-year-old yearlings and calves come into production that we will not only be able to supply the metropolitan market, but that there will be an actual over production which may result in a decrease in returns.

The survey of Sheffield producers indicates that there is a decided tendency to swing over to fall freshening of cows. The following figures show the situation among League members:

Months	Number of cows that have freshened or will freshen
March, April, May.....	165,430
June, July, August.....	54,140
September, October, November.....	158,156
December, January, February....	88,580
	466,306

Leaders in Dairy Improvement Herds

TWO cows belonging to New York State dairy improvement associations were very close in the race for honors in butterfat production during the month of March. The Holstein cow

owned by George Weaver of Jefferson County came under the wire first with a production of 104.7 pounds of fat for the month. Second place went to a Holstein owned by George True of Monroe County with 104.2 pounds. Third place went to a Holstein owned by W. J. Smith & Company of Madison County with a production of 99.3 pounds.

First place in milk production went to a Holstein owned by Francis E. Gates of Madison County with a production of 2604 pounds for the month. Second place went to a Holstein owned by C. L. Schenck of Steuben County with a production of 2551 pounds and third place went to a Holstein owned by N. D. Brown of Otsego County with production of 2440 pounds.

The following are the ten high herds for butterfat dairy improvement associations for the month of March:

TEN HIGH HERDS FOR BUTTERFAT FOR THE MONTH OF MARCH 1929

Owner	County	Average production	
		Breed per cow in milk.	Milk (lbs.) Fat (lbs.)
Geo. L. True.....	Monroe	H.F.	1563 69.7
A. J. Williams.....	Otsego	H.F.	1807 57.8
R. B. Dodds.....	Clinton	Ayr.	1420 53.7
A. J. Harper.....	Chautauqua	H.F.	1524 53.0
A. T. Personius.....	Cayuga	H.F.	1486 52.5
Geo. Weaver.....	Jefferson	H.F.	1406 52.1
A. Murphy.....	Steuben	H.F.	1644 50.6
W. W. Fortune.....	Essex	H.F.	1374 49.9
C. M. Randall.....	St. Lawrence	H.F.	1515 48.5
J. H. Shaw.....	Wyoming	G.H.	1257 48.3

Master Farmers Are Real Citizens

(Continued from Page 5)

following which the bills were personally paid by Mr. Heinaman for several years.

From a business angle, the principal income from the farm comes from a herd of pure bred Holstein cattle, al-



Mr. Ed. Heinaman

though there are some cash sales of wheat and beans and a medium-sized farm poultry flock.

It is interesting to note that Mr. Heinaman, who is nearing his 72nd birthday, is active on his farm every day. He believes in building for permanency. A few years ago when he needed new silos, two tile silos were constructed, although many people would have felt that silos of a cheaper construction would have lasted for years.

Mr. and Mrs. Heinaman have one daughter who has made a name for herself as a trained nurse.

Pasture improvement is an important question with many Pennsylvania dairymen. Fifty-one Wyoming county farmers attended a recent meeting for the discussion of this important subject. These men prefer to have blue grass instead of weeds in their pastures.

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AMERICAN AGRICULTURIST

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alternates-
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natural milker

Fills Your Silo Grinds Your Feed



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Blizzard Hammer Type Cutter Mill



Roughage is cut into 3/16 inch lengths before ground. This and the larger cylinder used results in an amazing volume of work. Roughage and grain are ground and mixed in one operation (see picture). A really wonderful machine with far greater capacity than other hammer-mills. Write for full particulars.
The Jos. Dick Mfg. Co.
Dept. 85
Canton, Ohio

We continue to make the old-reliable Blizard Ensilage Cutter. Catalog on request.

THE UNADILLA is the most practical silo



It represents the highest development in woodstavesilos. Cures and keeps silage perfectly. Provides greatest safety and convenience in use. Gives owners largest return on their money.

Send for free catalog and ask about discounts for cash and early orders. Time payments if wanted. Also makers of tubs, tanks, vats.

UNADILLA SILO CO.
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Buy now. Pay later

MORE MILK With a Ross SILO

A. L. Haacker, an authority on silos, states that clean, sweet ensilage increases milk yield, averaging 150 gallons a year per cow. A Ross Silo soon pays for itself. Convincing booklet free, "Users' Own Words"—Write for it and our special offer.

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Check items wanted.



Silos ☐ Mills ☐
Cutters ☐ Cribs ☐
Hog Houses ☐ Brooder Houses ☐

The Effect of Prices on Milk Production

(Continued from Page 7)

contract to sell or use that milk over a period of months.

A milk buyer will say "Milk supply comes first. Guarantee us the milk supply and we will be able to pay you the price." And when he speaks of milk supply he means supply. He thinks of the trade which he must supply every day in the year. He knows how readily that trade will be lost if for one or two days he is unable to serve it. And his business—worth thousands of dollars—can become valueless if he loses his customers to those dealers who have a regular dependable milk supply. He is buying regularity and uniformity of supply plus milk.

Price or Milk—Milk or Price?

What is MILK supply to the farmer is milk SUPPLY to the dealer. A MILK SUPPLY is always worth more than the same amount of MILK.

Instead of thinking in terms of milk the producer should think in terms of milk supply. He should realize that equalized production throughout the year adds to the value of his milk and that what the dealer must have and can pay a premium on is an equalized year round milk supply. Price and equalized milk supply are closely related. The buyer will pay a higher price for an equalized milk supply and the equalized milk supply will always bring a higher price.

* * *

If the New York dairyman is to adequately serve his year round markets and prevent the unnecessary extension of the milk shed, he must increase his fall production and equalize his year production.

Present sources can adequately supply the Metropolitan market during the flush for years to come. The milk shed will inevitably be extended when shortage threatens.

The present policy of paying all a plant's patrons or an organization's patrons the same price for the same grade of milk at the same point of delivery, tends to stimulate flush production unless it is understood and agreed well in advance that a low price will be paid during the flush and a higher price to stimulate fall production will be paid later on. Otherwise, in the absence of a real obligation or incentive to produce an agreed amount or percentage later on the producer may be tempted to produce the largest percentage of his milk when the price makes it appear most profitable for him to do so, to his ultimate disadvantage.

The more nearly a milk supply approximates the fluid milk market's seasonal demands the more valuable that supply is, and the higher price it will bring in the market. This is true whether it be the output of a single dairy, a single shipping plant, or a group of plants.

A Bonus for Winter Milk

Paying a bonus or premium for equalized year round production, thus giving a producer a share in the higher class markets, in proportion to his value in those markets, and giving those who find it most profitable to produce surplus milk a larger share of the surplus markets, furnishes a direct incentive for equalized production. It is just as practical to pay a differential based on equalized production as it is to pay one based on butter fat, freight rates, bacteria count or proximity to local markets. Producer organizations which have adopted such plans have generally found them effective and satisfactory.

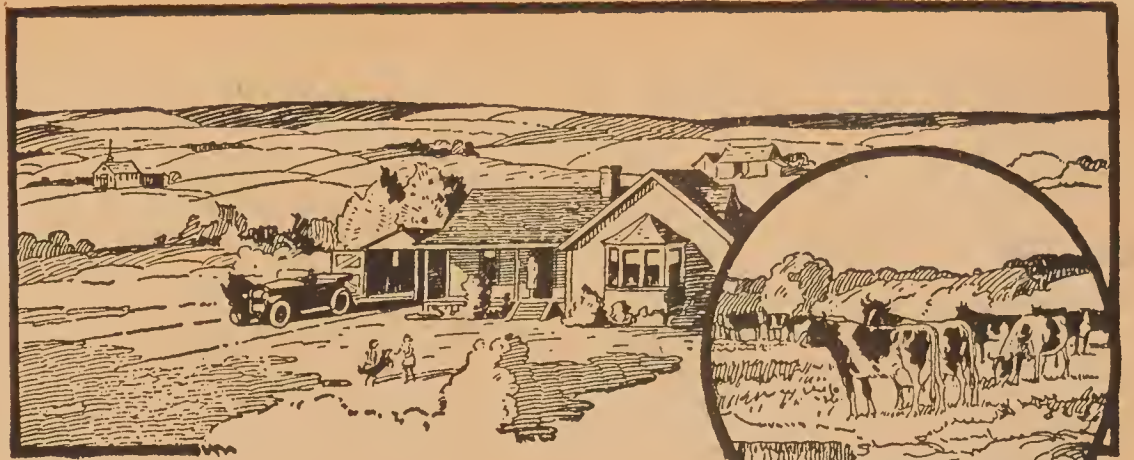
* * *

Equalized production will result in:

A. Production of a larger percentage of milk in fall and winter, thus relieving the shortage and rendering unnecessary the premature extension of the milk shed.

B. More economical handling of milk in plants enabling them to operate at a more uniform capacity, and by reducing the surplus lessen the loss on that surplus.

C. Enabling the milk buyer—or far-



CANADA— the new Homeland

Canada offers the man with a family the best means of starting his sons out for themselves. With the finest farm land priced at \$15 to \$25 an acre, close to railways and all community conveniences, the purchase of a farm or two for "the boys" is not out of reach. If capital is limited, free government homesteads may be taken further back.

Smaller Capital Needed— Larger Results Assured

Farmers with even a little capital may settle and quickly increase their assets in any branch of farming in Canada. They have the advantage of low freight rates—controlled by the Canadian Government—high average yields, good market facilities and low taxes. For the family man there are free schools, churches, farm organizations, and a highly developed community life. Nearby towns have up-to-date stores, shops, theaters and hospitals. Opportunities in Canada are at present abundant, but population is flowing in, development is proceeding, and those who start first go furthest. If the low cost of fertile virgin soil with all the advantages of well established communities appeals to you write at once to the Canadian

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38 Niagara St., Buffalo, N. Y.

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Please send me free booklet on Farm Opportunities in Canada.
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Address

mer organization—by selling a larger percentage of the year's output in the highest priced markets, to receive a higher average price, and because of the decreased cost of operation through equalized production—to pay a higher average price to the producer.

Each producer's share in the spring and summer Class 1 market is about 115% of his November production. He should share in that market to about that extent and be paid on a Class 2, 3 or 4 basis for the surplus. Such a plan for allocating the surplus would tend to minimize it by equalizing production; would make the present multiple price plan more beneficial to the market milk producers; and would compensate those who add to their milk that intangible yet substantial value which comes from equalized year round production.

The Effect of Tuberculin on Milk Production

It has frequently been stated that the TB test has no effect on milk production. Is there any proof of these statements?

THE Wisconsin Experiment Station made experimental tests several years ago and report that tuberculin tests did not influence milk production.

Silage for the Herd Sire

Is there any basis for the idea that silage should not be given to the herd sire?

THERE is no direct evidence that silage is harmful but it is generally recommended that a bull should not get over 12 to 15 pounds of silage a day.

"It is EASY to produce CLEAN MILK"

"In 1925 we installed a Burrell Milker. It is easy to produce clean milk and requires but little attention. Because the teat cup has no inflation, it is easier to clean and cheaper to care for. It has never been necessary to have a man here to fix it."—Earl M. Willis, Assistant Superintendent, Oswego Co. Home Dairy, Mexico, New York.

"It Milks the Cows Clean"

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MILKING MACHINES AND CREAM SEPARATORS

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This insures prompt change.

Reviewing the Latest Eastern Markets

Milk Prices

The following are the June prices for milk in the basic zone of 201-210 miles from New York City.

Dairymen's League prices are based on milk testing 3.5%. Sheffield on the basis of 3%.

Class	Dairymen's League	Sheffield Producers
1 Fluid Milk.....	3.37	3.17
2 Fluid Cream		1.95
2A Fluid Cream	2.16	
2B Cond. Milk.....		
Soft Cheese.....	2.41	
3 Evap. Cond. Milk Powder		
Hard Cheese	2.20	1.95
4 Butter and American cheese, Based on New York City Market quotations on butter and American cheese.		

The Class 1 League price for June 1928 was \$2.90 for 3.5% milk and Sheffield's \$2.70 for 3%.

The above prices in each class are not the final prices the farmer receives. The final price received from the dealer is the result of the weighted average.

Butter Market Holding Steady

CREAMERY	June 5, 1929	May 28, 1929	Last Year
SALTED			
Higher than extra.....	43 1/2-44	43 1/2-44	44 1/2-45
Extra (92c).....	43	43	43 1/2-44
84-91 score.....	39 -42 1/2	39 -42 1/2	43 -43 1/2
Lower Grades.....	38 -38 1/2	38 -38 1/2	39 -39 1/2

The butter market has been an extremely firm one during the past week. Operators are so well satisfied with the position of the market that there is strong opposition to any talk of price changes. Active trading is keeping floors well cleared for this season of the year and the undertone shows firmness. In spite of the heavy receipts and prospects for heavy production during June the trade as a whole seems to have a fair degree of confidence at present levels. An abundance of butter is going into consuming channels. At the same time there is a heavy into storage movement which brings holdings up to an excess of 10,000,000 pounds in the four largest cities compared with barely 4,000,000 pounds the same time a year ago, these figures be-

ing for May 31. During the last week of May receipts brought in a record for the month of May which confirms all reports regarding the heavy make of butter throughout the country. Advances indicate continued large production, weather conditions being unusually favorable. Considering the statistical condition therefore it is not surprising that the trade is satisfied to let well enough alone.

Fresh Cheese Gains Another Fraction

STATE	June 5, 1929	May 28, 1929	Last Year
FLATS			
Fresh Fancy.....	23 1/2	23	24 -25 1/2
Fresh Average.....			
Held Fancy.....	27 1/2-29 1/2	27 1/2-29 1/2	30 -32
Held Average.....			29 -30

The higher cost of fresh New York State flats arriving of late has caused a slight upward revision on the fancy marks of that product. At the higher

feature to be taken into consideration that may result in a revision of values, namely, a light supply of freight goods. If the supplies from the West are as limited as indications now appear the market will undoubtedly strengthen before the week is over.

Once more we urge that shippers hold back small, scabby, poorly feathered stock which is only depressing to the entire market.

Feeds and Grains

FUTURES	June 5, 1929	May 29, 1929	Last Year
(At Chicago)			
Wheat (Sept.).....	1.11	1.04	1.46 1/4
Corn (Sept.).....	.89 3/4	.83 3/4	1.05
Oats (Sept.).....	.43 3/4	.41	.46 5/8
CASH GRAINS			
(At New York)			
Wheat, No. 2 Red.....	1.31	1.24 1/2	1.85
Corn, No. 2 Yel.....	1.04 1/4	.98 1/2	1.26 1/4
Oats, No. 2.....	.56 3/4	.55	.82
FEEDS			
(At Buffalo)			
Grade Oats.....	30.00	33.00	1928
Spring Bran.....	25.00	25.50	44.50
Hard Bran.....	26.50	27.00	34.00
Standard Mids.....	25.00	25.50	37.00
Soft W. Mids.....	32.00	32.00	38.00
Flour Mids.....	30.00	30.00	42.00
Red Dog.....	34.00	34.50	40.50
Wh. Hominy.....	35.25	37.00	44.50
Yel. Hominy.....	35.25	37.00	43.00
Corn Meal.....	35.00	36.50	45.00
Gluten Feed.....	38.50	38.50	42.00
Gluten Meal.....	46.00	46.00	44.75
36% C. S. Meal.....	35.00	36.00	58.00
41% C. S. Meal.....	39.00	40.00	67.00
43% C. S. Meal.....	41.50	42.50	69.00
34% O. P. Linseed			
Meal.....	49.50	49.50	53.00

The above quotations are those of the local Buffalo market and are F.O.B. They are reported in the weekly letter of the N. Y. State Department of Agriculture and Markets.

Egg Prices Swing to Higher Levels As Peak of Season is Over

By AMOS KIRBY

There is no question now in the mind of the average egg speculator or dealer over the future of the 1929 deal. Everyone from the small retailer up to the buyer of eggs by the thousands of cases, now believes that the summer and fall of this year is going to show a higher price than either 1928 or 1927. In fact, the outlook today is far more rosy than any season since 1925. Not only are egg prices higher than at this time in the last four years, but they are going to be higher during the next few months than is usual for the same time of the year.

In the mind of the average egg dealer, that thought has been deeply impressed during the last six weeks as he has witnessed the slowly accumulating supply of eggs gradually fall behind the heavy storage of 1927 and 1928. Not in several years has the holdings fallen below the light receipts of May. Here it is the first of June, the peak of the movement from the Middle West has been passed and the supplies of eggs continue to show a gradual decline. The last week in May saw the egg receipts of the country drop behind the previous week and when compared with the same week of 1928 it shows an even greater drop. If we go back over the past three weeks, we find that the supplies have steadily dropped below last year.

The great cry in the consuming markets of New York, Chicago, Boston and Philadelphia that eggs must go down to twenty cents this year has been in vain. The American farmer, the weather or the hen herself has taken the matter in hand and found the answer to the cheap egg. Except in the mind of the speculator, the twenty cent egg has proven a myth.

For once the speculators have been unable to beat down the price to the level they thought it safe to buy eggs on which to recoup last years heavy losses. Despite every effort and the reports put out that the Middle West was going to have a late lay, but a heavy one, the market has refused to listen to any rumor except that of supply and demand. Instead of twenty cent eggs, the farmers of the Middle West have received 25 and 26 cents per dozen for their eggs and the trade has been glad to get them at even those prices.

Another factor that has upset the dope of the egg trade has been the

heavy consuming demand. It is doubtful if the markets have ever put direct into consuming channels as many eggs as this season. There is hardly a dealer, if he were to give the real facts would not admit that the demand has been exceedingly heavy this season. Ever since Easter the public has been eating eggs as never before. Possibly it was late last winter that the public began to buy eggs. It will be recalled that the storage houses of the country were full of eggs even as late as the first of February. Then prices began to drop and before the spring crop reached market the store rooms were swept bare and the market rose to the highest levels in the last fifteen years.

With a high price in the early season, the speculators have ever since been trying to beat down the market, but to no avail. Despite all the maneuvers of the trade, the hens have not brought out as many cases of eggs as was anticipated and now as the season draws near the close, the trade is making a frantic effort to put into storage sufficient supplies to meet the demand that is going to exist next fall and winter. We also have a much smaller egg import this year and with the increased buying demand for fresh eggs the outlook is most promising for the producers of the Middle West during the next ten months.

SWINE

FEEDING PIGS FOR SALE

Chester and Yorkshire, 7-8 weeks old.....\$4.75
Berkshire and Chester, 7-8 weeks old.....\$4.75
8 to 9 weeks old.....\$5.00

Also few Chester Whites 6 to 7 weeks old \$5.50, and some Jersey Red Durocs 7 weeks old, \$5.50. Sold C.O.D. Keep them 10 days, if not satisfied, return them and your money will be refunded. No charge for crating.

MICHAEL LUX, WOBURN, MASS.

FARMERS BUY FROM FARMERS

Let us suggest to you as breeders the best kind of a pig to start to raise is a good one. You save time and money. We sell all pigs with a trial of two weeks, and then if dissatisfied, return pigs and we will return your money.

6-7 wks. old, \$4.75 ea.; 8-10 wks. old, \$5.00 ea.

Breeds—Chester and Yorkshire cross, and Berkshire and Chester cross, Crating free. These prices F.O.B. our depot. Will ship any number C.O.D. or send check or money order.

MISHAWUN STOCK FARM,

MISHAWUN ROAD, WOBURN, MASS.

P. S. No pigs sold at the farm; only by appointment.

Your Money's Worth Young Quality Pigs

Chester and Yorkshire—Berkshire and Chester

7 to 8 weeks old.....\$5.00

9 to 10 weeks old.....5.50

10 to 12 weeks old.....6.50

All husky, healthy, fast growing stock.

MY GUARANTEE—YOU MUST BE SATISFIED. Will ship any number C.O.D. on approval. If dissatisfied, return at my expense. Crates free of charge.

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SIZE AND QUALITY

Large type Poland China—Chester White Cross.

Yorkshire and Chester Cross.

Also a few Duroc & Berkshire cross sow and Barrows.

Pigs 6 to 7 weeks old \$5.00

Pigs 8 to 9 weeks old \$6.00

These are all good Blocky Pigs. Are weaned and will make large hogs. Will crate and ship C.O.D. for your approval. Visit us or mail your orders to

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PIGS FOR SALE OLD RELIABLE STOCK

Heavy-legged, square-backed Berkshire and Chester

crossed, and Yorkshire and Poland China crossed.

Barrows, boars and sows—8-10 weeks old, \$5.50 each.

Also, Chester Whites and Poland China and Durocs from registered Boars—7-8 weeks old, \$7.00 each. We

ship sows and unrelated boars for breeding. They are the kind that make large hogs. Shipped C.O.D. No

charge for crates. If dissatisfied, return pigs and I will return your money. Yours for quality hogs.

ED. COLLINS, 35 Waltham Street,

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SPRING PIGS FOR SALE

Buy where quality is never sacrificed for quantity. We

sell only high grade stock from large type Boars and

Sows, thrifty and rugged, having size and breeding.

Will ship any amount C.O.D.

Chester & Yorkshire — Berkshire & Chester

7 TO 8 WEEKS OLD.....\$4.50

8 TO 10 WEEKS OLD.....\$4.75

Also a few Chester barrows 8 wks. old, \$6.50 each

Satisfaction guaranteed or money refunded. 10 days

trial allowed. Crates supplied free. A. M. LUX, 206

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FEEDING PIGS FOR SALE!

Chester-Berkshire Crossed—Yorkshire-Chester Crossed

7 to 8 Weeks Old - \$4.75 each

9 to 10 Weeks Old - \$5.00 each

All pigs have the size, quality and breeding. Will ship

pigs C.O.D., ten days trial, if not satisfied return at

my expense. No charge for crates.

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NOTICE TO CREDITORS OF THE FRONTIER DAIRY CO., INC., TO PRESENT CLAIMS

Any person having a claim against the FRONTIER DAIRY CO., INC., for milk or cream of his own production sold to said Frontier Dairy Co., Inc., is hereby required to file with the undersigned commissioner at 122 State Street, Albany, N. Y., a verified statement of such claim on or before July 1, 1929.

Dated: Albany, N. Y., May 4, 1929.

BERNE A. PYRKE,

Commissioner of Agriculture and Markets.

Fancy Nearby Eggs Higher

NEARBY WHITE ..	June 5, 1929	May 28, 1929	Last Year
Hen'y Sel. Extras.....	38 -40 1/2	37 1/2-39 1/2	35 -37
Hen'y Av'ge Extras.....	37 1/2	36 -36 1/2	33 -34
Extra Firsts.....	35 -36	34 1/2-35	32 -32 1/2
Firsts.....	33 -34 1/2	33 1/2-34	30 1/2-31 1/2
Undergrades.....	32 -33	32 -33	29 -30
Pullets.....			
Pewees.....			
NEARBY BROWNS			
Hennery.....	36 -38 1/2	36 -37 1/2	34 1/2-36
Gathered.....	32 -35	32 1/2-35	29 1/2-34 1/2

The more choice marks of nearby whites and the fancier lines of browns as well have moved to a new high level. As we stated in last week's report the hot weather has had a marked effect on the quality of eggs. Most of the offerings show the effects of the recent hot spell thereby reducing the offerings of strictly choice marks, which at this writing are held with considerable firmness. Many lines which formerly sold in the top classifications have been compelled to relinquish the front line and take second or third grading. Consequently the strictly fancy new laid eggs are held with a great deal of firmness.

Live Poultry Market Easier

FOWLS	June 6, 1929	May 28, 1929
Colored.....	32-34	33-35
Leghorn.....	30-33	34-35
CHICKENS		
Colored.....		
Leghorn.....		
BROILERS		
Colored.....	30-48	30-45
Leghorn.....	20-37	20-37
CAPONS.....		
TURKEYS.....	20-30	25-35
DUCKS, Nearby.....	22-26	23-27
GESE.....	16-17	16-17

At this writing the live poultry market as a whole falls short of last week's market. Express fowls are selling rather slowly and occasionally small lots of poor Leghorns are forced out below quotations. The supply of express broilers is also heavy and the entire situation is easier. Of course there are a few of strictly fancy large birds that could be considered the "cream", that are meeting ready sale which is true of the market most any time. These few are frequently bringing a premium. On the whole, however, it is a buyers' market for the general run of the supply. There is one redeeming

Farm News from New York

Bronx Grocers Boycott Bulk Milk--American Jersey Cattle Club Has 61st Annual Meeting

ON June 5, following a conference between wholesale milk jobbers and representatives of the Greater New York Grocers' & Dairymen's Protective Association, 2,000 Bronx grocers decided to discontinue the sale of bulk milk. This bulk milk of course is milk bought by grocers in cans and sold in containers supplied by the consumer. This action of the grocers followed an increase in price by jobbers from \$4.00 to \$4.40 per 40 quart can.

We are informed on good authority, that the real story is as follows: Wholesalers of bulk milk, anticipating that there would be the usual cut in class 1 milk about this time of year, started out to get their competitor's business by reducing the price to retailers immediately. When the anticipated cut in price did not come they found it impossible to continue to sell at this price and had to go around to the grocersmen informing them that the price had come up from \$4.00 to \$4.40 per 40-quart can.

Naturally, the grocersmen could not understand why there should be a raise in price at this time of year, and knowing nothing about the real facts of the situation, grocersmen got together with the idea of fighting this increase by refusing to buy bulk milk at all. This whole case merely shows the evils that come from price cutting when the price cutting is for the purpose of stealing the other fellow's market.

American Jersey Cattle Club Holds 61st Annual Meeting

REPORTS showing that 75,690 purebred Jerseys were registered during the fiscal year ending March 31, 1929, and that a gratifying growth in all phases of the work of the American Jersey Cattle Club was experienced during the year were presented at the 61st annual meeting of the organization held June 5th at the Hotel Pennsylvania, New York City. This increase in registrations was 12.7 per cent over the previous year during which registrations showed an increase of 20 per cent. Transfers of purebred Jerseys recorded during the year totaled 57,245, a gain of 6.1 per cent over the previous year. This is the greatest volume of business handled in a single year in the history of the club.

Members of the American Jersey Cattle Club from all sections of the country attended the meeting. Samuel F. Crabbe of Fargo, N. D., was unanimously reelected president of the organization for the ensuing year. Mr. Crabbe has been an outstanding Jersey breeder and is widely known in agricultural and engineering circles in the Northwest. R. C. Tway of Louisville, Ky., Herbert Farrell of Nashville, Tenn., J. J. Grathwol of Excelsior, Md., and S. R. Head of Hannibal, Mo., were elected to the board of directors of the Club. George W. Sisson of Potsdam, N. Y., was appointed vice-president of the Club at the directors' meeting following the business session.

Secretary Morley Gives Good Report

L. W. Morley, secretary of the Club, presented the formal report for the past year. He said that representatives of the Extension Department of the organization assisted in forming 63 purebred bull associations and placed 1,273 purebred Jersey bulls and 2,163 purebred Jersey cows and heifers during 1928 in addition to the general routine of stimulating better dairying and a broader interest in the Jersey breed of cattle. In the twelve months these representatives participated in programs promoting more profitable dairying that were presented to a total of 272,425 persons attending 1,326 community and state meetings. Mr. Morley also reported a good demand for Jerseys throughout the United States, particularly in Texas, Ohio, and Missouri, the three leading states in registrations for the year. During 1928 a total of 21,249 new breeders of Jersey cattle were recorded at the office of the American Jersey Cattle Club.

Some Fine Records Made

During the past fiscal year 2,734 official production test records were completed by Jersey cows and accepted by the Register of Merit Department of the Club. These production records were for both 365-day and 305-day tests. All of the 365-

day test records showed an average yield of 524.62 lbs. of butterfat per cow, and the 305-day test records averaged 433.96 lbs. of butterfat per cow. All of these average yields represent tests completed by cows of all ages. During the 27 years since the establishment of the Register of Merit Department of the American Jersey Cattle Club 38,715 long time Jersey production records have been completed. On March 31, 1929, a total of 3,430 cows were on Register of Merit test compared with 3,211 cows a year ago. This is an increase of 6.8 per cent in the number of cows on test.

The most outstanding Jersey record of

Agricultural Programs From WGY

12:00 Noon—Eastern Standard Time, daily except Saturday and Sunday—weather report, farm produce report, farm talks. Readings from the poets of the farm and home by E. R. Eastman.

6:10 P. M.—Eastern Standard Time, daily except Saturday and Sunday—farm produce report, farm talk.

7:00 P. M.—Eastern Standard Time, (8:00 P. M. Daylight Saving Time). Thursday—Half-hour agricultural program.

all time was completed during the past fiscal year when Abigail of Hillside finished a 365-day test of 1,197.51 lbs. of butterfat from 23,677 lbs. of milk. This is the highest butterfat and milk yield ever credited to a Jersey cow. It is her second record of more than 1,000 lbs. of butterfat. She is owned by J. T. Carpenter of Shelburne Falls, Massachusetts.

Dr. Morrison of Cornell Speaks

Dr. Frank B. Morrison of Cornell University, presented some extremely interesting facts on feeding in his address, "Mineral and Vitamin Requirement of Dairy Cows," given during the meeting. A. J. Glover, editor of Hoard's Dairyman, addressed the club and discussed testing, health regulations and breeding theories in relation to the industry in his talk, "Some Essentials of Successful Dairying."

Southern Strawberries Glut Markets

STRAWBERRIES have been coming into the New York market from seven different states; namely, New Jersey, Maryland, Delaware, Virginia, Kentucky, Arkansas and Missouri. As a result of heavy shipments, prices have declined to low levels and producers of the early crop have been heavily hit. Recently prices ranged from 16c down to 5c a quart and it was possible to buy good berries from 10c to 14c. It is quite evident that these prices leave little or nothing for the man who raises them. Producers in New Jersey and Long Island are hopeful that by the time their berries come on the market, the supply will be more reasonable and that prices will advance.

On one day recently the Philadelphia market received 125 cars of strawberries, breaking the record made a few days before of 100 cars received. Such heavy receipts make it impossible to sell them at anything like a reasonable figure. One factor in the situation which helps the instability of the market is the receipt of strawberries by truck. It is impossible to estimate the amounts that will arrive on any one day and consequently, it is claimed, that it is more difficult to maintain a steady market than it would be if receipts were entirely by car.

Wheat Prices Recover Some Lost Ground

RECENTLY, wheat prices at Chicago dropped to the lowest point in years. On June 3 and 4, wheat prices recovered partially from this exceptional slump. On the 3rd, there was an advance of 8½c per bushel in wheat as well as advances of from 3c to 5c in corn; 3c in oats; 5c and 6c in rye. The advance in prices came within a few minutes after trading opened in the Chicago Wheat Pit when wheat for July delivery sold as high as

\$1.05¼ against the closing price on Saturday of .98¼. On the 4th there was a further increase to \$1.08⅝ per bushel for July delivery.

Various reasons are advanced both for the exceptional drop and the recovery. It has been suggested that the sensational drop was not altogether due to the reports of heavy carry-overs from last year and good prospects for the coming crop, but that they were also influenced by the recent agitation to reduce the freight rates on wheat for export and the demand for federal farm relief. The outstanding reason as given for the recovery of prices is talk in Washington of immediate government action in an attempt to stabilize prices at a reasonable figure.

The New York Herald-Tribune on June 4, states that Senator Arthur Capper of Kansas, predicted that the agricultural committee would give serious consideration to the suggestion that an appropriation be made to buy up from twenty-five to fifty million bushels of wheat which are now crowding the domestic market. A resolution introduced by Senator Nye of North Dakota, suggests an appropriation of \$200,000,000 to purchase wheat for distribution among the starving Chinese.

Empire State Potato Club to Have Statewide Contest

LAST year, potato growers in New York State formed what was known as the Empire State Potato Club. The object of the organization was to raise the standard of efficiency of the potato industry in New York State. The organization, which is still functioning, is not a 400 bushel potato club, although it has similar features.

Members who enroll in the club and who enter the potato growing contest, are scored on the following basis: Cost of production per bushel, 50%; yield per acre of U. S. number 1 grade, 40%; total yield per acre field run, 10%.

The club had a successful year in 1928 and the prizes were awarded at the annual meeting of the New York State Vegetable Growers Association. This year the contest will be continued along the lines of last year's contest.

Those who are interested in joining the Empire State Potato Club should get in touch with their Farm Bureau Agent immediately as June 15 is set as the date for closing entries to the contest. The dues for membership are one dollar of

which 25 per cent goes to the State Vegetable Growers Association for membership, including subscription to the official organ of the New York State Vegetable Growers Association which is printed four times a year. The balance of the one dollar goes for general expenses of the club, including medals for winners in the potato growing contest. More complete details may be secured from your Farm Bureau Manager.

Debenture Plan Defeated In Conference

On June 5, a conference of members of the House and Senate who met to iron out differences between the Senate and House farm relief bills, agreed to eliminate the debenture feature which had been passed by the Senate. The House Committee stood firm and finally two of the Senate Committee agreed to vote for its omission.

It is, however, felt that supporters of the bill will not accept defeat but will attempt to have a mandatory debenture provision added to the tariff bill which will be more drastic than the optional plan contained in the Senate farm relief measure.

The name of the bill has been changed and is now "The Agricultural Marketing Act." The Senate bill called it "The Agricultural Surplus Control Act" and the House bill was named "The Federal Farm Board Act."

The House bill provided for a Federal Farm Board of six and the Senate bill for a board of twelve. Compromise was reached and a board of eight members and the Secretary of Agriculture was agreed upon.

One exceedingly important feature of the conference report practically makes the government responsible for money losses which may be sustained by the proposed stabilization corporations providing these corporations cannot pay their losses out of future profits. It has been felt by cooperative marketing associations that the possible inability of these stabilization corporations to meet these losses would result in discrediting the entire cooperative movement and as a result, cooperative leaders have been inclined to oppose the entire plan.

New York County Notes

Cattaraugus County—The last week of May was very warm with occasional showers. Oats are being sown. C. V. Young was re-elected county president of the Dairymen's League, and J. F. Crowley, secretary and treasurer. In the Women's Auxiliary, Mrs. Mamie Saalfeld was chosen president, and Mrs. Nellie Myers, secretary. Senator Kirkland was recommended to serve on the resolutions committee at the annual meeting of the League in Syracuse June 20. Two hundred and fourteen were present at the banquet preceding the meeting. Director A. L. Milks acted as toast master. C. A. Shepherd, E. N. Williams, Senator Kirkland and several others were called upon to speak. A quartette sang several selections and the West Valley Orchestra furnished music during the banquet. Delegates were chosen to attend the Syracuse meeting.—M. M. S.

Genesee County—John D. Walker, County 4-H Club agent, with members of the Genesee County 4-H Baby Beef Club, will make a beef tour Sunday. The members will go to the beef feeding plant at Harry Yates' farm to be shown the operation of the plant by Manager Charles Welch. From there they will go to the Clayton Taylor farm at Lawson to inspect the herd of Aberdeen Angus cattle. Other farms to be visited are T. J. Kerrs of Collins, Walter Twinchell and Ward Overfields of Gowanda.—Mrs. R. E. G.

Ontario County—May has been a cold wet month with very few days when the sun shone. It has been a very backward spring. Oats have just been sown this week. There is much work ahead for barley and corn ground. We had a heavy bloom of apples and have just sprayed after bloom. On May 30 the mercury was 80 degrees in the shade and 110 in the sun. It has been hard on horses. Wheat is doing quite well.—E. T. B.

Cortland County—Most everyone has been wishing for warm weather for a long time and now we seem to be get-

ting more than we want. The temperature rose on Decoration Day to 90 degrees. Through the efforts of our County Agent more alfalfa and clover will be planted this spring than ever before.—W. N. G.

Yates County—Farmers are beginning to get on the land and will finish up spring seeding this week, two weeks late. Plowing and fitting bean ground will soon be the order of the day. John Powers is the first to plant California Reds on May 31. Fruit in the Middlesex Valley has not been injured by frost except Seckel pears which will be a light crop. Sheep are all turned out on the South Hill and have an abundance of feed. Alfalfa and red clover is a big crop and is beginning to lodge in spots. Early planted corn is coming up.—L. C. W.

Sullivan County—Farmers are very busy working in their crops. Much corn has been planted. Eggs are 30 and 32c a dozen, butter 40 and 45c a pound, middlings \$1.95 and corn \$2.20. Quite a few arrests of drivers who failed to get their new licenses have been made. The weather remains very backward and all gardens are very late. Liberty is trying to get a \$60,000 airport. The town is trying to fix up the roads a bit but many are still unfit for travel.—P. E.

Columbia County—Four days of very hot weather the past week. Saturday it was quite cool. No permits have been issued for brush burning until the dry spell is over. The Flower Show was held in Kinderhook under the auspices of the Garden Club. Orchards are being sprayed in North Claverack. Atlas Cement had a safety contest at the plant. A no-accident campaign is commenced. There was a big parade in Hudson on Memorial Day. V. F. W. Commander was speaker at the exercises in Cedar Park Cemetery. There are 8 G. A. R. members in Post 138. Eggs are 30c, butter 47c and poultry 45c.—Mrs. C. V. H.

Baby Chicks



CHICKS with vim and vigor

Hatched by men with 10 years experience, from culled flocks, 100 per cent live delivery guaranteed by Prepaid Parcel Post at the following prices:

PRICES FOR JUNE AND JULY

S. C. White Leghorns.....	9c each—\$ 80.00 per 1000
S. C. Brown Leghorns.....	9c " 80.00 " 1000
Barred Rocks.....	10c " 90.00 " 1000
S. C. R. I. Reds.....	12c " 110.00 " 1000
S. C. Black Minorcas.....	12c " 110.00 " 1000
H. B. Mixed.....	9c " 80.00 " 1000
L. B. Mixed.....	8c " 70.00 " 1000

\$1.00 will hook your order. Catalogue free.

THE PENNSYLVANIA HATCHERY
LIVERPOOL, PA.

CHERRY HILL CHICKS

S. C. W. Leghorns—Wyckoff Strain.....	\$ 8.00
S. C. Everlay Brown Leghorns.....	8.00
Barred Rocks and R. I. Reds.....	10.00
Heavy Mixed.....	8.00
Light Mixed.....	7.00

1/2c less per chick in 500 lots, 1c less in 1000 lots. For less than 100 chicks add 2c per chick. 100% live arrival guaranteed. Parcel post prepaid. Bank reference. Order direct from this adv. or write for free circular.

CHERRY HILL POULTRY FARM,
WM. NACE, Prop., Box A, McALISTERVILLE, PA.

PENNA. "State Supervised" CHICKS



Flocks inspected by officials from the Penna. Dept. of Agriculture.
S. C. Wh. & Br. Leghorns, 11c ea.
Bd. Rocks & Bk. Minorcas, 12c ea.
S. C. Reds 14c. Assorted 8c & 9c ea.
\$1.00 book order. 100% live del. guaranteed. Our 19th yr. Catalogue free

THE KEYSTONE HATCHERY,
(The old reliable plant) Box 80, RICHFIELD, PA.

SPECIAL SUMMER PRICE REDUCTION 200,000 CHICKS 1929

GOODLING'S SUPER QUALITY					
White Leghorns.....	25	50	100	500	1000
"Barron & Taner Strains".....	\$2.75	\$5.00	\$9.00	\$42.50	\$80.00
Bd. Rocks & S. C. Reds.....	3.00	5.50	10.00	47.50	90.00
Broilers, Heavy Breeds.....	2.75	5.00	9.00	42.50	80.00
Broilers, Light Breeds.....	2.50	4.50	8.00	37.50	70.00

Order direct. Prepaid. 100% Live arrival guaranteed. \$1.00 will hook your order. Circular free.

THE VALLEY HATCHERY Box A, R. No. 1, RICHFIELD, PA.

BARRED ROCK CHICKS

A large modern Breeding Farm and Hatchery devoted exclusively to the production of BARRED PLYMOUTH ROCKS.
MARVEL POULTRY FARM, GEORGETOWN, DEL.

BABY CHICKS

Tancred Strain W. Leg.....	\$9 per 100
Wh. Leghorns.....	8 per 100
Barred Rocks.....	10 per 100
S. C. Red.....	10 per 100
Heavy Mixed.....	9 per 100
Light Mixed.....	7 per 100

100% live delivery guaranteed. Order from this ad. or write for free circular.
C. P. Leister, McAlisterville, Pa.



Klines Barred Rocks

Healthy stock, Penna. State College males, Strong chicks guaranteed. Prompt del. C.O.D. \$10.00-100. \$90.00-1,000. Write or wire.
S. W. Kline, Box 40, Middlecreek, Pa.

JUNE PRICES			
S. C. White Leghorns.....	100	500	1000
Barron & Wyckoff Leghorns.....	\$ 8.00	\$37.50	\$80.00
Barred Rocks & R. I. Reds.....	9.00	42.50	80.00
Light Mixed & Heavy Mixed.....	10.00	47.50	90.00

Our chicks are properly hatched, strong and vigorous. 100% live delivery. Postpaid. Circular free giving full details of all breeds. **CLEAR SPRING HATCHERY, McAlisterville, Pa. R. D. No. 2, F. B. Leister, Prop.**

FERRIS STRAIN WHITE LEGHORN CHICKS			
Our breeders are large birds; long, deep, rectangular bodies. Selected for size, type and egg production.			
\$8 Per 100; \$37.50, 500; \$70.00, 1000			

Junata Poultry Farm, Box T, Richfield, Pa.

CHICKS 8 1/2 c

CLASS A CHICKS at low prices, also pullets. Special discounts. Several varieties. No money down. 100% live arrival; postpaid. Catalog free.

BOS HATCHERY, R 2A, ZEELAND, MICH.

SINGLE COMB VT. Certified: Tested free from B.W.D. Males from 200-300 egg hens. Pullets: Started Chicks: 3000 Baby Chicks weekly: Circular. ASCUTNEY FARMS, A10, HARTLAND, VT.

BRED TO LAY BABY CHICKS

Barred Rocks; White Leghorns \$10.00 per hundred for May and June deliveries. 25 chicks \$2.75; 50 chicks \$5.25. **Scarborough Poultry Farm, Box A, Milford, Del.**

*When Writing Advertisers
Be sure to say you Saw it in
AMERICAN AGRICULTURIST*



With the A. A. Poultry Farmer



Maintaining Summer Production

AS mid-summer approaches and the weather becomes warm, some slump in production is inevitable but if profits are to be kept up to the highest point it is important to use every possible method to keep the hens laying as many eggs as possible.

Happy hens are laying hens and there are several things which can be profitably done to make the birds comfortable during hot weather. Judging from the management that some flocks get, it is probable that many poultry keepers fail to realize that hens suffer from the heat. Where houses are low and unventilated and where there is no shade available, it is easy to understand why production drops off. Hens need shade. An orchard is an excellent place for them to run, but if this is not available, a corn field is a good substitute or as a last resort artificial shade may be provided in the form of a rough board roof with no sides. Some poultrymen may feel that the house provides shade, but anyone who stays inside an unventilated house can readily see the difference in the temperature between it and a shady place where the breeze is allowed to blow through unrestricted.

Provide Summer Ventilation

Much can be done in a properly constructed house to provide circulation of air by having summer ventilators open just under the eaves at the front of the house and also back of the dropping boards so that the air is allowed to circulate around the roosting closet.

Hens are made exceedingly uncomfortable if mites are allowed to gain any foothold in the house. It is small wonder that hens prefer to roost in trees rather than to get into a hot, mite infested house. It is little short of marvelous how rapidly mites can reproduce during hot weather, yet their control is relatively simple. Painting the roosts with waste crank case oil or some coal tar disinfectant is very effective. Kerosene oil will also kill them, but it is so thin that its effects are short-lived and a person who gives one treatment with kerosene is likely to find the house as bad as ever in a week or ten days.

Watch the Food and Water Supply

Another matter which makes for comfort as well as profit is plenty of cool water. Where running water is available the problem is relatively simple. There are a number of automatic devices on the market which can be put on a faucet and which keep the water buckets filled without waste. Where the water supply is unlimited it can be kept cooler by allowing it to run into a trough with provision for taking care of the overflow.

Feeding also can be changed during the hot weather. Many poultrymen find that a wet mash helps to maintain production during the summer. This is usually given at noon. A good plan is to spread it on boards or put it in troughs so that all the hens will have a chance to share equally. Leave it for a few minutes and then clean up all that the hens do not eat so that it does not become sour and cause indigestion.

Green feed is important. It is often felt that so long as hens have free range that they will get plenty of green feed. As a matter of fact, late in the summer, grass becomes tough and woody and is practically valueless as far as hens are concerned. It pays to grow some crop in the garden, either cabbage or some other green-leaved crop, so that the hens can have an unlimited supply.

Begin to Cull Now

A quick and effective way of maintaining the per cent production is to eliminate the poor producers. Many of the poor producers will stop laying and if kept in the flock will not get into

production again until late fall. While selling them in July does not add to the total eggs that can be marketed, it does cut down on the expenses of feeding these birds and increases the percentage production of the flock. Many poultrymen do not feel competent to cull hens. When culling is done once a year during September, it requires more skill to cull efficiently than it does to pick out the ones that stop production in July. Even if you make a few mistakes it will be better than leaving non-producers in the flock for two or three months.

It will pay to take time to visit two or three good poultry farms in your county soon. You will be able to see how the other fellow solves his problems and an hour or two spent visiting with him will almost surely give you a number of ideas that you can put into practice with your own flock. As production slumps, prices begin to improve which is just one more incentive for a man who is wide awake, to use every possible means of preventing serious drop in the production during the summer months.

Breaking Up Broody Hens

What is the most efficient and quickest way of breaking up broody hens?

IN the first place, it is important to start the treatment at the earliest possible moment. The best treatment is to put broody hens in a wire or slat coop in a place where there is plenty of air circulating and to feed her on an egg laying ration. Little is accomplished by shutting her up in a dark place and starving her. If hens are shut in an airy coop just as soon as the first sign of broodiness is observed, they can usually be put back into the flock in two or three days.

It is an excellent plan to put leg bands on all hens that are put in a broody coop. Then if you find that one hen has three or four bands inside of a month, plan to dispose of her as a chronic setter. This procedure for a number of years will decrease the number of broody hens in a flock to a minimum.

Grit Is Necessary

Do hens on free range need to have grit supplied with their feed?

THIS will depend to a large extent on the character of the soil. Sometimes on gravelly soil there is plenty of grit available and at other times it is almost impossible for hens to find anything which will serve as grinding material. It is usually felt that it is wise to provide plenty of commercial grit at all times. A small flock might find enough grit whereas there would not be a sufficient supply of natural material for a large flock.

The Cost of Baby Chicks

Have any figures been kept as to the actual cost of producing baby chicks?

THE Pennsylvania State Poultry Association has kept some figures on a hatchery of 75,000 egg capacity indicating that it costs close to 9 cents to produce a baby chick. This, of course, covers all costs, including interest on investment, depreciation, labor, advertising, etc.

Cull the Early Mother

THERE is a growing tendency among poultrymen to cull continuously during the year rather than to cull once or twice during the fall. Practically every flock has some individuals that molt during June or July. These hens not only molt early but they usually take their time at it. Often the owner does not realize that they are molting.

The early molter, unless the molt is (Continued on Opposite Page)

Baby Chicks

Chix from Large Breeders

	50	100	1000
Ferris Strain White Leghorns.....	\$4.50	\$ 8.00	\$70.00
Everlay Brown Leghorns.....	4.50	8.00	70.00
Basom's Barred Rocks.....	5.50	10.00	90.00
Owens' R. I. Reds.....	5.50	10.00	90.00
Heavy Mixed.....	4.50	8.00	70.00
Light Mixed.....	4.00	7.00	60.00

Our breeders are selected for size, type and egg production. The kind that lay and pay. Send for literature. It's free. Tells all about our great egg machines.
JUNIATA POULTRY FARM,
BOX T, RICHFIELD, PA.

STOP! LOOK! LISTEN!

	25	50	100	500	1000
Cash or C.O.D.	25	50	100	500	1000
Wh. Wyandottes.....	\$3.50	\$6.50	\$12.00	\$57.50	\$110
Rocks or Reds.....	3.00	5.50	10.00	47.50	90
Wh. Leghorns.....	3.00	4.50	8.00	37.50	70
Heavy Mixed.....	3.00	4.50	8.00	37.50	70
Light Mixed.....	2.50	4.00	7.00	32.50	65

From carefully selected free-range flocks. 100% arrival. Postpaid. Valuable illustrated 96-page booklet FREE. Telling all about poultry.

The Commercial Hatchery,
Box 75-A (The dependable plant) Richfield, Penna.

BABY CHICKS

From Heavy Laying Free Range Flocks

	25	50	100	500	1000
S.C.W. & Br. Leghorns.....	\$2.50	\$4.50	\$8	\$37.50	\$70
S.C.W. & Wh. Rocks.....	3.00	5.50	10	47.50	90
Buff Orpingtons & Reds.....	3.00	5.50	10	47.50	90
White Wyandottes.....	3.00	5.50	10	47.50	90
Assorted Chicks.....	2.25	4.00	7	32.50	60

100% prepaid safe delivery guaranteed.

Order from this ad. or write for circular
J. N. Nace Poultry Farm RICHFIELD, Pa.

BABY CHICKS

hatched by the best system of incubators from high class bred-to-lay stock. White, Brown, Buff Leghorns, Anconas \$11.50 per 100; Barred, White Rocks, Minorcas, Reds \$13.50 per 100; White Wyandottes, Buff Orpingtons \$14.50 per 100; Giants \$17.00 per 100; Heavy Mixed \$10.00 per 100; Light Mixed \$8.00 per 100; Pekin Ducklings \$30.00 per 100. Add 25c on orders for less than 100. Safe delivery guaranteed by parcel post.

Nunda Poultry Farm, Desk H, Nunda, N. Y.
Member of the International Baby Chick Ass'n. and the N. Y. State Co-Operative Chick Producers Ass'n.

TAKE NOTICE 150,000 CHICKS FOR June and July Delivery

	25	50	100	500	1000
S. C. White Leghorns.....	\$2.50	\$4.50	\$8.00	\$37.50	\$70
Barred Rox.....	3.00	5.50	10.00	47.50	90
Rhode Island Reds.....	3.00	5.50	10.00	47.50	90
Silver Laced Wyandottes.....	3.50	6.50	12.00		
Light Mixed.....	4.00	7.00	32.50	60	
Heavy Mixed.....	4.50	8.00	37.50	70	

From carefully selected free range flocks. 100% arrival Postpaid. Write for illustrated catalogue.

The Richfield Hatchery, Box 80, Richfield, Pa.

BABY CHICKS

PROMPT DELIVERY—WILL SHIP C.O.D.

	50	100	500	1000
Light Mixed.....	\$4.00	\$ 7.00	\$33.00	\$62.00
Heavy Mixed.....	4.50	8.00	37.50	70.00
S. C. W. Leghorns.....	4.50	8.00	37.50	70.00
Bd. and Wh. Rocks.....	5.50	10.00	47.50	90.00
S. C. R. I. Reds.....	5.50	10.00	47.50	90.00

PINECREST POULTRY FARM & HATCHERY
Herbert Miller, Prop. Box 12, Richfield, Pa.

BABY CHICKS

	25	50	100	500
100% Arrival.....	25	50	100	500
White Leghorns.....	\$2.75	\$5.25	\$8.00	\$37.50
Barred Rocks and Reds.....	\$3.25	\$5.25	10.00	47.50
Heavy Mixed.....	2.75	5.25	8.00	37.50
Light Mixed.....	2.50	4.75	7.00	32.50
Pekin Ducklings.....	7.50	14.50	28.00	
Mixed Ducklings.....	6.50	13.00	25.00	

John Shadel Hatchery McAlisterville, Pa. R. 2, Box 13.

BABY CHICKS ORDER DIRECT from this ad. and save time.

	25	50	100	500	1000
Free Range Bird.....	25	50	100	500	1000
Wh. & Brown Leghorns.....	\$2.25	\$4.25	\$8.00	\$39.00	\$75.00
Anconas & Black Leghorns.....	2.25	4.25	8.00	39.00	75.00
White & Barred Rocks.....	2.75	5.25	10.00	49.00	95.00
Col. Wyan. & R. I. Reds.....	2.75	5.25	10.00	49.00	95.00
Heavy Mixed Broilers.....	2.50	4.75	9.00	44.00	85.00
Light Mixed Broilers.....	2.00	3.50	6.50	31.50	60.00

Full count and quality guaranteed. Catalogue free.
Hatchery Chicks **ULSH POULTRY FARM & HATCHERY**
For Greater Profit Port Trevorton, Penna. Box A

Reduced Chick Prices

	25	50	100	500	1000
In effect June to October.....	25	50	100	500	1000
Large Type Wh. Leghorns.....	\$2.50	\$5.00	\$10	\$47.50	\$90
Bd. & Wh. Rocks, Reds.....	3.00	6.00	12	57.50	110
Wyandottes, Orpingtons.....	3.25	6.50	13	62.50	120
Light Assorted 9c. Heavy Assorted 10c.					

Live Delivery Guaranteed. Catalog Free.

LANTZ HATCHERY, Tiffin, Ohio

WYCKOFF and BARRON STRAIN, White Leghorn
Chicks for June 9c each; \$80 per 1000. Prepaid and safe delivery guaranteed. Our 19th year. Circular free. \$1.00 book order. **THE PENNSYLVANIA HATCHERY,** Box W, Liverpool, Pa.

SPECIAL FALL prices for breeding Turkeys, Geese, Ducks, and Guinea. Write your wants and for mailing list. **PIONEER STOCK FARM, TELFORD, PA.**

BABY



CHICKS

(Continued from Opposite Page)

caused by a sudden change in feed or environment, should be culled and sold. Keeping her till fall and then culling her only adds to the expense of the business. Hens that molt during August may prove profitable if kept. They can be put under lights in October and sold as soon as they stop producing.

Pullets Slump in Production

"I have 120 white leghorn hens that were hatched the 20th of last April. They began laying the first of October and by the middle of December were producing fifty per cent. They continued laying between fifty and sixty per cent until the middle of March. Since then they have gradually dropped until now they are laying only between thirty and forty eggs per day.

"I gave them artificial light from the first of December until the last of March. The lights were used from five-thirty A. M. until daylight. When it began to get dark they were put on until 6 P. M. They had laying mash before them all the time and were fed a scratch grain in troughs about one hour before the lights were taken off. The scratch grain consisted of one part wheat and two parts corn. Also they had cod liver oil, shells, and cabbage. There has been no change except the discontinuing of the lights.

"Is there anything I may do to bring them back. If not will they come back without doing anything and if so will it pay to keep them until they do?"—M.E.M., New York.

WE believe that one of two things is wrong with your flock. Either the lights were discontinued too abruptly, which would be likely to throw the hens into a molt and result in low production, or they have not been eating enough scratch food with the result that their body weight has gradually dropped until they have gone into a slump. In either case it should be possible to bring them back into production in two or three weeks. If they have dropped in body weight it will, of course, be necessary to feed them heavily on scratch grain for a short time to build up their reserve and then go back to a good laying ration.

If the sudden stopping of lights is

responsible, probably it will not be necessary to do much except to give them good feed and care and they will come back into production shortly. It would seem to us that it would be unwise to dispose of them at this time.

Probably a careful checking up on all the conditions will allow you to arrive at the cause of the slump and make it possible to prevent similar trouble next spring.

Circular Brooder Houses Have Advantages

THERE has been quite a bit of interest this past spring in circular brooder houses for chickens. Some of these are made of lumber and others are constructed of metal. There are a number of advantages to the circular house. In the first place, there are no cold corners into which the chickens can crowd and become chilled or smothered. The temperature in the entire house is even as all parts of the wall are of equal distance from the hover. Another advantage is that drafts are avoided. The walls are of tight construction and no matter how hard the wind blows the chicks are protected.

This question of tight walls is also important when it comes to ventilation. No ventilation system works properly when air is admitted through cracks in the wall. Perfect ventilation provides just enough air at all times and does not half smother them when there is no wind and chill them when there is a storm.

One added advantage of metal houses is that there is adequate protection against rats, weasels and other pests. Sanitation is comparatively simple due to smooth walls and absence of cracks in which mites can hide. An important advantage so far as time is concerned, is the speed with which one of these houses can be erected. It is quite a job to buy lumber and cut and build a square brooder house. The circular house can be purchased all ready to erect and can be put together in a very short time.

A Little Trip to Norfolk, Va.

(Continued from Page 3)

third of the way down. The round or flat bottom bushel basket is the principal package. The flat bottom type loads and rides better in the car. The barrel is still used to a slight extent, but is a back number. Refrigerated cars are not commonly used, but ice is placed on top of the load.

Hotbed Growers

One of the most interesting industries in the Norfolk neighborhood is carried on by the Norfolk Hotbed Growers Association. This organization consists of eleven members who own from 1,000 to 6,000 sash. They are used really on coldframes as no provision is made for artificial heat. The space is utilized almost the year around. The principal early spring crop is Egyptian beets. Most of the growers place their frames on about 14-foot centers. When danger of severe freezing is past, the frames are removed from the beds and set up in the alternate middles. Cucumber plants are grown in greenhouses and a hill, later thinned to two plants, is placed under each sash and this crop is harvested in May and June.

Cooperatives at Work

The Hotbed Growers Association works thru the Southern Produce Company which is the general vegetable cooperative serving the Norfolk territory. The hotbed men have a well developed and rigidly enforced set of rules as to grading and packing

standards. Their produce is well packed and distinctively labeled. Definite penalties are provided for violators of regulations and the produce all passes under federal inspection. The result is that the growers realize considerably higher prices than is usual.

It is a sight worth seeing to stand at the nerve center of the Norfolk marketing machinery. This center is the desk of J. G. Wallace, Manager of the Southern Produce Company. While much independent buying and shipping is done in the territory, this organization of 300 members does ordinarily a million to a million and a half dollars' worth of business annually. About 1,000 cars a years are sold f. o. b. and about as many more are consigned for members. Mr. Wallace's desk is an exciting spot when he is telephoning from one end of the country to another and at the same time dealing with members who have goods to ship.

The Norfolk growers are not at all sanguine about the future. Time was when the different truck sections of the country kept out of each other's way fairly well. Today there is much over-lapping and Texas, especially, is giving Norfolk growers much concern particularly as the southern producers have learned to improve their quality and pack. Each section has its own advantages and disadvantages and it remains to be seen who will win in the long run.

Hall's Chicks

Leghorns - Reds - Rocks - Wyandottes

W. LEGHORNS 12c	S. C. REDS, 15c	B. ROCKS, 16c	W. WYANDOTTES 18c
--------------------	--------------------	------------------	----------------------

For orders of 25 chicks add 75c. For orders of 50 chicks add \$1.00.
Special Mating chicks, \$2.00 per hundred extra.
From New England Accredited stock, free from White Diarrhea. 100% delivery guaranteed. Circular.
HALL BROS., Poplar Hill Farm Box 59 Wallingford, Connecticut

HUBER'S RELIABLE CHICKS

CHICKS 7½c and UP Make extra profits with Huber's Reliable Chicks. At these prices your profit is assured. Nineteen years careful development. Order from this ad. 10% down. Rest C.O.D. if you wish.

Barred and White Rocks, R.C. & S.C.R.I. Reds, Bl. Minorcas.....	\$11.50
S. C. Buff Orpingtons and White Wyandottes.....	12.50
S.C. White Minorcas and Columbian Wyandottes.....	14.00
Special Mating White Leghorns.....	11.50
No. 1 S.C. White and Brown Leghorns, S.C. Anconas.....	9.50
Heavy Assorted.....	\$9.50
Light Assorted.....	\$8.00

50c per 100 less on orders for 400 or more.
HUBER'S RELIABLE HATCHERY, NO. HIGH ST., FOSTORIA, OHIO

National "Superbred" Chicks

100,000 CHICKS FOR DELIVERY IN JUNE

S. C. White, Brown, Buff Leghorns.....	50	100	500	1000
Barred and White Rocks, Reds.....	\$5.75	\$11.00	\$52.50	\$100.00
	6.75	13.00	62.50	120.00

Light Mixed—\$9.00 per 100. Heavy Mixed—\$10.00 per 100.
Also White Wyandottes, Black and White Minorcas, Anconas and Blue Andalusians.
Send for our Catalog and price list. We guarantee 100% live delivery. Member International Baby Chick Association.
NATIONAL CHICK FARMS, BOX 408, Millintown, Penna.

FOR YEARS WE HAVE HATCHED AND SOLD SATISFACTORY CHICKS

POSTPAID PRICES, Effective June 17th.

100% Live Delivery Guaranteed.	25	50	100	500	1000
Wh. Bf. and Bl. Leghorns.....	\$3.00	\$4.50	\$8.50	\$40.00	\$78
Anconas (Sheppard's); Br. Leghorns.....	3.25	5.00	9.50	46.00	90
Bd., Wh. Rox; Reds; Bl. Min.; Bf. Orp; Barron Wh. Leg.....	3.75	5.50	10.50	50.00	98
Bf. Rox; Wh. Wyand; Bf. Minorcas.....	4.00	6.50	12.50	60.00	115
Ex. Qual. Wh. Wyand; Reds; Rox; Bf. Orp.....	4.25	7.00	13.00	62.50	118
Wyckoff Wh. Leghorns; Wh. Minorcas.....	4.25	7.00	13.00	62.50	118
Heavy Mixed \$9; Light Mixed \$7; Black Giants \$20; Lt. Brahmas \$20; Pekin Dux 28c ea.					

Not postpaid to Canada. We ship C.O.D. if desired. Bank reference. Member I. B. C. A.
Send now for beautiful 4-color Catalog, FREE.
THE NEW WASHINGTON HATCHERY CO. Box R, NEW WASHINGTON, OHIO

Big Chicks From High Record Matings

PRICES EFFECTIVE JUNE 1

300 to 326 Eggs S. C. White Leghorns. Our long experience in breeding will prove a satisfaction to our customers at the following prices:

White, Brown, Buff Leghorns & Heavy Mixed.....	100	500	1000
	\$ 8.00	\$38.50	\$ 75.00
Blk. Minorcas, Bd. & Wh. Rocks, Buff Orpingtons.....	10.00	48.00	95.00
S. C. Reds; Wh. Wyandottes; Barron Leghorns.....	11.00	55.00	100.00
Jersey Black Giants.....	17.00		
Light Mixed.....	7.00	35.00	70.00
Special Tanager White Leghorns.....	14.00	67.50	130.00

Your order will receive my special attention. Satisfaction Guaranteed.
UHL PIONEER HATCHERY & EGG FARMS, DEPT. A,
New Washington, Ohio. Albert Studer, Prop. Ref.: Farmers' State Bank

Fairport Quality Chicks

are bred to make money for you. Strong, healthy, vigorous from the world's best and heaviest laying strains such as—Tanager, Ferris, Owen Farms, Daniels, Thompson, Martin, Shepard, Fishel and others. Free range flocks, scientifically culled and supervised. Smith Hatched. 100% live delivery guaranteed. 16 breeds 9c and up. Postpaid. Members International Baby Chick Association. Send now for free poultry book and prices. Buy Hatchery Chicks for Greater Profits.

FAIRPORT HATCHERIES • Box 44 Fairport, N. Y.

WOLF SELECTED CHICKS

CHICKS C. O. D. Send only \$1.00 and pay Postman the balance

Special pen mated and extra high bred chicks at slightly higher prices. Shipment made any time you wish.

S. C. Wh. Br. & Buff Leghorns, S. C. M. Anconas.....	\$2.25	\$4.25	\$8.00	\$38	\$75
Bd. & Wh. Rocks, S.C. & R.C.R.I. Reds, Bl. Min.....	2.50	5.00	10.00	48	95
White Wyandottes, Buff Orpingtons.....	3.00	5.00	11.00	52	100
Jersey Black Giants.....	4.50	8.50	15.00	72	140
Heavy Mixed.....	2.75	4.50	8.50	40	80
Light Mixed.....	2.00	4.00	7.00	34	68

LAST HATCH JULY 1st.
WOLF HATCHING & BREEDING COMPANY, Box 1 Gibsonburg, Ohio

BABY THIS IS MY CHIX

11TH YEAR OF EXPERIENCE

Cash or C. O. D.	25	50	100
Barred Rocks.....	\$3.00	\$5.50	\$10.00
Tanager Strain S.C.W. Leghorns.....	2.50	4.50	8.00
Heavy Mixed.....	2.75	5.00	9.00
Light Mixed.....	2.25	4.00	7.00

These chicks are from free range and heavy egg producing flock. 100% live delivery guaranteed to your door. Write for Special Mating prices.
FRANK NACE, Cocolamus, Pa., Box No. 120

BETTER BABY CHICKS

BARGAIN PRICES—SAFE DELIVERY

Wh. Leghorns—Anconas.....	50	100	500
	\$6.50	\$12.00	\$57.50
Bd. Rocks—S.C. Reds—R.C. Reds.....	7.50	14.00	67.50
Wh. Wyandottes—Blk. Minorcas.....	8.00	15.00	72.50

Finest State Inspected Stock—Catalog Free.
ULSTER POULTRY FARMS, Box 40, WALDEN, N. Y.

"Pride o' NIAGARA" CHICKS

June hatched chicks for low brooder costs. Strong, livable, fast maturing, heavy producing Leghorns, Reds, Rocks, Black Giants, Pekin Ducklings. Send for catalog and full information about our money making chicks.

Niagara Poultry Farm, Box 30, Ransomville, N.Y.

Quality Chicks at Low Prices

Variety	100	500	1000
United Strain Leghorns.....	\$7.50	\$36.00	\$70.00
Barron or Wyckoff Leghorns.....	8.00	37.50	75.00
Special Leghorn Wyckoff only.....	9.00	42.50	80.00
Barred Rocks.....	9.00	42.50	85.00
Mixed Chicks.....	7.00	34.00	65.00

L. E. STRAWSER, McAllisterville, Pa.

Canning May Be Reduced to a System

Equipment and Management Determine How Hard the Job Will Be

CANNING fruits and vegetables is a very definite part of farm home routine every summer and if a good system is worked out the process should not be the exhausting one it so often proves to be. In my experience, I have found that the right tools do more than anything else to speed up the work and prevent irritating delays. Four or five large containers, kettles, dishpans, or cookers, either of enamel ware or aluminum will accommodate all the fruits and vegetables that one person can handle alone. This allows for washing and for blanching of such vegetables or fruit as need to be reduced in size or have skins removed or, as in corn, have the juice set. A large wire basket for blanching is a wonderful help.

For processing the filled jars, a pressure cooker is the best time-saver and the surest for keeping vegetables especially. But where a pressure cooker is not available, the hot water bath may be used. Any large utensil, sap-

blanching process. Standing in a warm kitchen a long time before processing is bad for both blanched and unblanched foods.

3. Use only perfect jars and tops and the best of rubbers. Test for leaks by inverting jars with water in them. A live rubber should stretch to six inches and spring back to shape.

4. Organize the job so there is room and table space for each necessary step. If a wood or coal stove must be used, have plenty of fuel and regulate heat carefully as a steady temperature is necessary. An oil or gas stove is a great convenience as either type is more easily regulated than the wood or coal range and makes less heat in the kitchen.

5. Briefly summarized, the following rules in canning give the necessary steps:

a. Carefully wash all jars, covers, rubbers, canner and other equipment.

o. Keep at room temperature for about a week.

p. Store in cool place away from strong sunlight.

I thank you for it. And my brother ate nine pieces of the cake.—Your little friend, J. M. R., New York.

If you want a Scrapbook, send ten cents to Betty, care American Agriculturist, 461 Fourth Ave., N. Y. C.

Some of Betty's Letters

Dear Betty:—I see your name in the American Agriculturist. I have not got one of your scrapbooks to paste these recipes in so will you please send one to me. I have sent my ten cents with the letter.

I can bake cakes, cookies, and cook potatoes and all kinds of vegetables and fix all kinds of fruit.

My father takes the American Agriculturist. We live on a farm and like it very much. We have ten cows. My sister and I have a little lamb about a year old. I am eleven years old and in the 5th and 6th grade in school. My teacher's name is Mrs. Frank Waterman. We have thirty-six baby chickens and ten little ducks. We have three horses and three pigs.—Your friend, I. H., New York.

P. S.—Will you please send me two scrapbooks, one for my sister. I will send twenty cents. You may send them both in my name. Thank you.

Dear Betty:—Please send the scrapbook with past lessons to my daughter Helen Elizabeth? She is only four years old but she is practising breaking eggs. I just came across the cooking lesson page in your recent Agriculturist and I think it is fine. As I am a former Home-making teacher and have given many cooking lessons I can appreciate their real value.—Very truly yours, Mrs. R. C., New York.

Dear Betty:—I am sending for one of your scrapbooks for my little girls in the future. They are not quite old enough yet but I shall save them just the same. I think they are fine. My little girl Ruth is 4 years old, Ellen is 2 years and Louise is 4 months but I am hoping they will all be able to use it some day.—Respectfully yours, Mrs. M. C., New York.

Dear Betty:—My mother wants me to learn to cook too so will you please send me one of your scrapbooks?

I just love to cook and bake. I make cakes and puddings. I like your recipes very much. I try other recipes too. I am ten years old and am in the fifth grade at school. I am sending the money with this letter for a scrapbook. Thank you very much.—Your friend, G. McC., New York.

Dear Betty:—I have been trying your recipes in the American Agriculturist and find them very good, especially the cocoa. I would like one of your scrapbooks to keep these recipes in. Inclosed you will find ten cents for this book. Please send it to me.

I enjoy reading the Children's pages in the American Agriculturist and have lots of fun doing the puzzles.—Your friend, M. P., New York.

Dear Betty:—I am writing to you to let you know I got my Scrapbook and I made a chocolate loaf cake that Robert put in the American Agriculturist. I think my Scrapbook is very nice and

Pictures You Should See

(Specially Recommended by National Board of Motion Picture Review)

j—*WE AMERICANS—Universal—9 rls.—George Sidney, Patsy Ruth Miller, George Lewis—A drama of immigration. A well acted story of the in-



This smart PURSE No. B2652 is much in demand to use with the lovely summer frocks. The purse may be had either in white linen or white lustre sheen rayon hand tinted in green and black. It is also stamped for simple embroidery stitches. The package includes the stamped linen or rayon, the canvas interlining, the green rayon lining and inner pocket, the green buckle and snap fastener, together with working chart and floss for working. Price \$1.00. Send order to Embroidery Department, American Agriculturist, 461 Fourth Ave., New York City.

fluence of the younger foreign generation on the manners and customs of the older generation showing how the alien population came to the front during the world war. (Play by Max Siegle and Milton Herbert Grotter).

j—THE WIZARD OF THE SADDLE—FBO—5 rls.—Buzz Barton—Interesting Western story of claim jumping. (Original screen story by Frank Howard Clarke).

hs—THE ACTRESS—Metro—8 rls.—Norma Shearer—Story of an actress who marries into an aristocratic family and when she is snubbed leaves and goes back to the stage. Later the father of her husband sees his mistake and a reconciliation takes place. Well produced. (Play "Treasure of the Wells" by Sir Arthur Pinero).

j—THE BIG NOISE—First National—8 rls.—Chester Conklin—A clever satire on the hero of the hour. A subway guard is used as a tool for the election of the mayor. Good sub-titles and some funny situations. (Original screen story by Ben Hecht).

j—juvenile audiences.

hs—high school audiences.

Household Hints

Silk materials look best if ironed on the wrong side while still damp.

After icing a cake, let it stand in a cool place twenty minutes before it is wrapped or boxed.

Lukewarm water, mild soap, quick handling and drying are recommended to prevent dyes in garments from running.

bucket, wash-boiler or oyster-pail, may serve as a hot-water canner, provided it is deep enough to allow a rack or false bottom under the jars and at least one inch of water above them. A tight-fitting cover saves time and fuel in processing. Kettles with fitted racks and lids are made for the special business of canning; these are most convenient.

Other time-saving tools are; a ladle, preferably non-metal, a long-handled spoon, a jar lifter, two funnels, one with small and one with large mouth, good stainless paring knives, measuring cups and spoons, a pan of convenient size to serve as a tray for jars while being packed, and a pair of household scales. We can multiply these tools many times and save time by doing so if we add to the list a cherry-pitter, frame for holding jelly-bag, an up-to-date sieve, which has a sort of pestle for pressing through fruit pulp, cabbage shredder, and food chopper.

But no matter how elegant or complete the equipment, certain rules must be followed to get a well-flavored product that will keep almost indefinitely.

1. Have fruits and vegetables as fresh and as nearly perfect as possible. Corn, asparagus, green peas, and beans lose much of their sweetness within six hours after picking. Furthermore, fruit which has rotten spots is apt to have a spoiled flavor. Culls or imperfectly shaped fruits may be utilized, but even then, every one needs some of the "fancy" stock for special occasions.

2. Avoid handling too large a quantity if you wish to prevent flat sour. Blanched foods need to be packed into the jars and processed as soon as possible after becoming heated by the

b.. Place jars and covers in canner, cover them with cold or tepid water.

c. Place canner over fire and sterilize jars at least ten minutes, after the water has reached the boiling point.

d. Place a second vessel of water over the fire, to be heated for blanching of vegetables.

e. Sort, grade and wash products to be canned, being careful to discard any that are over-ripe or decayed.

f. Prepare in pieces of a desirable and convenient size for canning.

g. Blanch in boiling water if necessary. Green vegetables should be blanched in live steam. Dip peaches or tomatoes to loosen skins for easy removal.

h. Pack into sterilized jars.

i. Add syrup to fruits, and salt and water to vegetables.

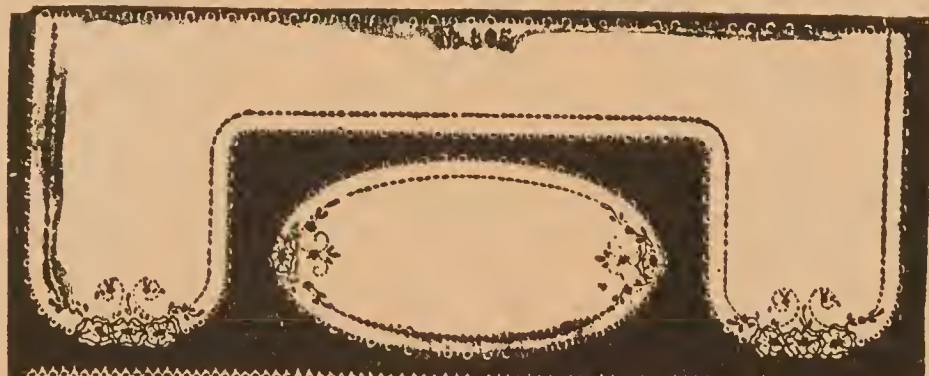
j. Dip rubber ring into hot soda water, using one teaspoon soda to one cup of boiling water, then place it on the jar.

k. Place cover in position and partially close—if screw top, screw cover half way on; if glass top, bring wire bail into position across top with a distinct click, but do not press clamp down at side until the fruit or vegetable has been processed.

l. Process in canner according to time given in the reference issue of American Agriculturist of March 2nd.

m. Remove jars from canner and press down clamp as each jar is taken out.

n. Invert jar to cool, and test joint for perfect seal.



scarf 18x45 inches the set is 65c; set with scarf 18x54 inches \$1.00 postpaid. Send order to Embroidery Department American Agriculturist, 461 Fourth Ave., N. Y. C.

Buffet or dresser set NO. 605 has a very unusual and attractive design stamped on excellent quality material ready for working. These hem-stitched sets consist of scarf and two doilies and come in two sizes: with

Aunt Janet's Counsel Corner

Success or Failure at School Now Looms Large

GRADUATION and commencement are abroad in the land now with all the excitement and interest they cause in homes having young folks being educated. Of course, education goes on through life if a man or woman is progressive mentally, but to a boy or girl having the thrill of grammar or high school graduation, the big time is NOW and the family ought to take notice of it.

Sometimes I wonder that some children get on as well as they do at school: they seem to progress in spite of the lack of interest taken by the family. I could name a few cases where the only time a very active interest is shown is when the child fails to be promoted. Then it's too late. Helpful sympathetic interest all through the year would encourage a child to do his best instead of having a general "blow-up" when time has passed to do anything about it.

The children that seem to get along best in school usually are encouraged to do so by being treated as if their first business in life is to succeed with their school work. That really IS their business just as much as earning the living is their father's job. So when Albert and Harriet or Johnnie and Mary have done a good job of the year's school work, that is a cause for family celebration. The school picnic may come at a terribly busy time, or it may seem as if other things were more important than going to the school

"exercises" but these events are great ones to a child and he is encouraged and proud to have Mother or Dad there.

And in addition to the usual school affairs special privileges at home add to the importance of the day. The boy or girl could invite some friend to dinner for which he might have his favorite dishes; or he might pick out some special thing he wanted, a book, a knife, a baseball bat or glove, or for a girl a new scarf or something pretty for her bedroom, or some article for

mash them. Dip the dough in well oiled gem pans and bake about 25 to 30 minutes in a hot oven. Serve hot with butter. This recipe omitting the berries makes a plain delicious muffin and can be varied by the addition of any desired berries or chopped meats. Try it. Serve with butter.—Clarice Raymond, N. Y.

Most people will prefer a slightly sweet mixture for any berry muffin. To this quantity add 2 level tablespoons of sugar. If the berries are large they may be cut in half and rolled in sugar before stirring into the mixture.

Smartly One-Sided



STYLE NO. 2811 with its side jabot frill and gathered inset for the skirt has a chic-ness all its own. And it is not difficult to make, yet has the best characteristics of this season's styles, snug hip-line, slightly bloused back, and a very feminine touch found in the frills. Georgette, printed silk, flowered voile and printed chiffon are very suitable to use with this design which cuts in sizes 16, 18 years, 36, 38, 40 and 42 inches bust measure. Size 36 requires 3 1/4 yards of 40-inch material. PATTERN PRICE 13c.

which she has expressed a wish. Making the occasion have some personal meaning to the child, no matter how small the method used, is what makes it something to remember. A word of praise or a reward for work well done is something all of us appreciate and children are even more sensitive to praise or blame than grown-ups.—Aunt Janet.

Tested Recipes Blackberry Muffins

Two cups flour, four teaspoons baking powder, half teaspoon salt, one cup milk, two tablespoons shortening, one cup blackberries and two well beaten eggs. Mix all thoroughly together excepting the berries which are added last just folding them in so as not to

Rockwell Salad

On some crisp lettuce leaves put three slices of nice ripe tomatoes and over these slice one half of a banana. Mix whipped cream and mayonnaise, equal parts, add as many chopped nut meats as desired, then place one heaping tablespoonful on the above which is one serving.—Clarice Raymond, N. Y.

A little sprinkle of salt before combining adds to the flavor.

Picnic Sandwiches

Chop three hard boiled eggs rather fine, add one cupful cooked tomatoes from which all juice has been drained under pressure. One tablespoonful butter, a dust of cayenne, one tablespoonful chopped peppergrass or parsley and a seasoning of salt and pepper. Put in frying pan and bring to boiling temperature, cooking out any moisture that would make the filling "sloppy". Cut white or brown bread in thin slices and put together with the savory mixture without buttering.—L. M. T., New York.

This is a slight variation from the usual tomato sandwich filling. The filling should be thoroughly cooled before serving.

Dill Pickles

- | | |
|------------------------------------|-------------------------------|
| 3 1/4 gals. medium sized cucumbers | 1 lb. salt |
| 1 qt. vinegar | 10 qts. water |
| 1/2 oz. mixed spices | Dill (stem leaves, and seeds) |
| | Grape leaves |

Cucumbers for dill pickles should be about 5 inches long. Wash the cucumbers and wipe them. In the bottom of a 4 gallon crock or jar put a thick layer of grape leaves and over this a layer of dill and the spices. Pack the cucumbers into the crock to within 3 inches of the top. Mix the salt, vinegar and water, and pour the mixture over the pickles to fill the jar. Put a layer of dill and then a layer of grape leaves over the cucumbers. Invert a large plate over the top of the pickles and weight it down to keep the pickles under the liquid. Let the pickles cure from three to four weeks. Remove the plate, wash it, replace it over the pickles with the weight, and seal the crock with hot paraffin or pack the pickles into glass jars and seal them.

Watermelon Rind Pickle

Cut up rinds and soak overnight in water to which has been added 1 cup lime to a gallon of water. The next morning rinse in four waters. Boil until tender in a tea made of 1/2 gallon of water and 4 tablespoons of ginger. Then cook in the following syrup:

- | | |
|-------------------------------|------------------------------|
| 4 lbs. sugar | 1 tablespoon whole cloves |
| 1 qt. vinegar | 1 tablespoon ground allspice |
| 2 tablespoons ground cinnamon | |

Cook until syrup is thick.—ROBERTA SYMMES.

Every bedroom should have cross-ventilation.

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The Plains of Abraham—By James Oliver Curwood

HIS spirit leapt like the flare of powder in response to the cheerful sound of his uncle's voice, and what he had lost for a few moments became a part of him again, stronger than before. He returned to the grass-covered open in front of Lussan's house as Paul helped Toinette from her horse; and then, to his amazement and increasing admiration, he observed his Uncle Hep approach the baron boldly and offer his hand. Tonteur accepted it, and a little later Jeems saw them drinking flip together. These matters he made note of as he stood at the outer edge of the throng gathered about the auctioneer, who was making the welkin ring with his descriptions of Lussan's goods and his exhortations for people to buy. This man, who possessed a huge pair of lungs, had an ally as well as a competitor in the barrels of whisky and flip and beer, between which and the table whereon he stood men began to pass back and forth with increasing frequency; for while these barrels drew his customers away for a time, they were sure to send them back—as Lussan had planned—mellowed in disposition and heart and with purse strings looser at every imbibition.

The sights and excitements of the scene about him would have made for Jeems one of the most thrilling events of his forest-rimmed world, had his heart not been choked with the emotions of impending drama. Even the aroma of many good things to eat held no interest for him. The voices of the auctioneer and the bidders, the loud banging of a wooden mallet which put a note of legality to every sale, the hubbub of men and women about him, the play of children, the fighting of a couple of dogs, all seemed outside the things he had come to seek. Yet he did not press his desires by undue haste, and it was half an hour before he found himself close to the one who occupied his thoughts. This happened in such a fortuitous way that Toinette, concealed by the ample forms of Lussan's wife and daughter, was within a foot of his shoulder before he knew it. She did not see him, and he stood with wildly beating heart, breathing the faint perfume from her person, his senses dazed by the nearness of her splendour and his world of vision filled only with a great broad-brimmed hat, an enravishing mass of lustrous curls, a sunset of crimson ribbons, a pair of slim shoulders—and then, his paradise broken by the ugliness of reality, he discovered Paul Tache. The young man was returning from a journey to the barrels, and, when he saw Jeems, a contemptuous smile twisted his lips. It was this look which turned Toinette so that she found Jeems standing beside her, his cap and a package in his hands, his face tensely set as he fought himself into obliviousness of his rival's presence.

He held out his gift to her.

"My Uncle Hepsibah has just come from the English Colonies, and he brought me this that I might in turn give it to you. Will you accept it, Toinette?"

He forgot Paul Tache. Spots of red came into his cheeks as Toinette's surprised eyes greeted him. She almost smiled, and as if something made her forgetful of her magnificence and the dignity it imposed, she extended her hand to receive the package. He felt the embroidered doeskin of her glove against his flesh, and the touch of it, the gathering colour in her face, the manner in which she accepted his gift, sent the blood racing through his body. He had scarcely hoped for this graciousness after the way she had treated him yesterday, and Toinette, won by the unexpected-

ness of his act, was conscious of her forgetfulness and of the embarrassing nearness of other eyes and ears about them. The colour deepened in her cheeks, and, mistaking this for still greater evidence of the pleasurable thrill he had given her, Jeems was sure she was about to thank him for his gift, when Paul stood beside them. Ignoring Jeems, Toinette's cousin led her away, politely relieving her of the package as they went. It was then Toinette turned to smile at Jeems, in spite of the eyes she knew were watching her. In this same moment her escort allowed the package to drop surreptitiously from his hand.

Bringing the Story Up to Date

JEEMS BULAIN with his French father and his English mother lived in colonial times near the border between Canada and the English colonies. Their neighbor, Tonteur, is their friend but Madam Tonteur hates Catherine Bulain because of her beauty and her English blood and tries in every possible way to teach her daughter Toinette to hate Jeems Bulain. Jeems admires Toinette and is deeply hurt by her disdain. He hates Paul Tache, Toinette's cousin from Quebec, because Paul assumes a superior air and because he is in the good graces of Toinette.

Catherine Bulain sees and understands the situation to which her husband is blind. Jeems is brooding over the situation as he, his mother and father and Odd, his dog, walk home from a visit to Tonteur Manor.

On their arrival they find Hepsibah, Catherine Bulain's trader brother who visits them at long intervals. After supper he opens his pack and among the presents he has brought is a beautiful piece of red velvet cloth for Jeems to give to Toinette. Jeems attends Lussan's auction the next day and resolves to give Toinette his present and to whip Paul Tache.

This act, inspired by a contempt for the forest boy, and urged by a meanness of spirit hidden under a display of wealth and fine clothes, swept Jeems' thought from Toinette, whose nearness of person, surprising beauty, and sweetness of disposition had almost made him forget his one reason for being at Lussan's sale. This weakness in the armour of his intentions was sealed when he saw his present fall to the ground. Toinette became instantly immaterial in the path of a storm of emotion which caught and held him fiercely. He saw only one person where there were two, and that one was Paul Tache. In half a dozen seconds, as many years added themselves to his shoulders, and with these years came a fuller capacity for hurt, for hate, and for a desire to avenge. In a brain white with the heat of things, and in eyes blinded to the presence of all living forms except that of the youth who had darkened his mind with bitterness, Toinette ceased to exist for him, and when he sprang forward to recover the bundle, it was not with the thought that he was rescuing it for her, but that it was to be his reason for glorious war when the moment was at hand for him to hurl it in his rival's face.

That this moment should arrive as if inspired by a genius intent on guiding his destiny did not strike Jeems as unusual. Detaching themselves from the shifting groups of which they had been a part, Toinette and young Tache strolled to their horses, knowing that many glances followed their elegant departure. Giving themselves a brief time in which to be admired, they sauntered into the gardens back of Lussan's house.

From the flip barrel, where their newly made friendship had been growing apace, Tonteur and Hepsibah watched the pretty pair, with broad grins on their faces; and nudging the well-covered ribs of the man he should have regarded as an hereditary enemy, but in whom he had found a convivial comrade well suited to his own humours and disposition, the baron chuckled loudly.

"There they go, friend Adams, a couple of young peacocks on parade! My fine lady has grown into a young woman since she put on that costume

and the big hat, and as for the *petit maitre* who thinks himself a blood and a buck—why, I say, if this skinny little nephew of yours—"

"Sh-h-h! There goes Jeems!" interrupted Hepsibah.

Unaware of the attention of the old war dogs, Jeems was only a few steps from Paul and Toinette when they disappeared behind Lussan's house. He held back with a feeling of satisfaction when he saw the two going down a path which took them out of sight of any curious eyes that might have watched them. Not until the last flutter of Toinette's skirt was gone did he proceed with the business of follow-

each other to pieces. He had watched a duel between two mighty bucks until one gasped out its life with a broken neck. He had looked on the hunter-wasps as they tore off the heads of their prey. In a hundred ways he had viewed strife and death as the wilderness knew these things. And all that he had witnessed, all that he knew of torture and violence and the desire to maim and kill gave to his action a character of such lively ferocity that it drew a howl of pain from Paul Tache and a shrill little scream from Toinette.

Jeems heard the scream, but it held no significance for him now. His dreams were gone, and Toinette, her presence close to him, her eyes upon the battle just as he had imagined in the thrill of his mental visionings, was forgotten in the more vital depths of his interest in the flesh and blood of Paul. In the first attack, his fingers clutched like small iron claws in the folds of Tache's cravat and coat, and the rending of cloth, a splitting asunder of gorgeous material almost to the other's waist, was evidence of the strength behind his assault. He followed this with a fury of scratching and tearing and both went down in the melee. When they rose, Paul heaving himself up with an effort which flung Jeems from him, they were such a sight of muck and stain that Toinette forgot her precious dress and covered her eyes in horror. But she was looking again in an instant, for the spectacle fascinated even as it appalled her. Jeems had landed on his feet with a fist loaded with mud, and this he projected with an aim so accurate that half of Paul's face was obliterated by it, and as he leapt with a roar of rage at his smaller assailant, he was such a shocking contrast to his usual immaculate self that Toinette nearly ceased to breathe. Then she saw and heard what her feminine eyes and instincts could not understand or keep proper count of, a mad twisting and tumbling of bodies, panting breaths, grunts, and finally a clearly audible curse from Paul Tache. With that sound Jeems flew backward and landed on his back.

He was up almost before he had struck, and with his head ducked low like a ram's in a charge, he hurled himself at Tache. This individual, having cleared his eyes sufficiently to perceive the blindness of the other's rush, stepped aside and swung a well-directed blow which again sent Jeems down into the muck. His hand filled itself with this sticky substance a second time, and as he returned to battle he let it fly at Paul. Profiting by experience, Paul dodged skillfully, and the volley passed over his head, spreading in its flight, and fell in its contaminating virulence upon Toinette. She saw her raiment spotted and defiled, and such a sudden fury rose in her that she sprang upon Jeems as he clawed and kicked in a clinch with Paul, and assailed him with all the strength and bitterness of her small fists and biting tongue.

Jeems had seen the tragedy of the misdirected mud, and he knew that Toinette's hands and not Paul's were pulling viciously at his hair. There is a hurt which bears with it a sting of satisfaction, and this emotion pressed upon Jeems as he fought desperately in front and felt himself attacked treacherously from behind. For Paul was accountable for the mishap to Toinette. Had the other not dodged in a cowardly fashion, allowing the stuff to pass on to her, the thing would not have happened. It did not take more than a few seconds for the inspiration of this thought with its apparent justice and truth to fire him

(Continued on Page 18)

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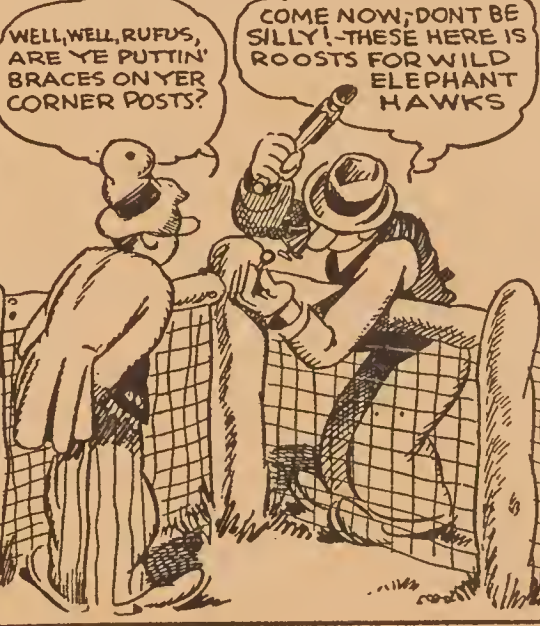
To Brace Corner Posts

By Ray Inman

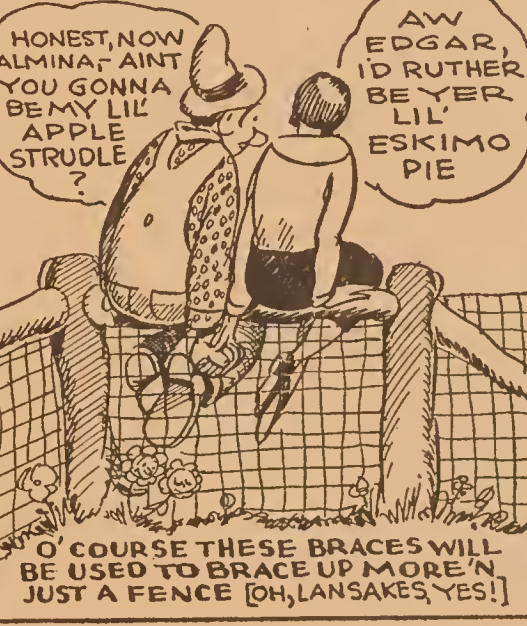
DO THE CORNER POSTS OF YOUR FENCE PULL OUT OR SAG? you can stop it.



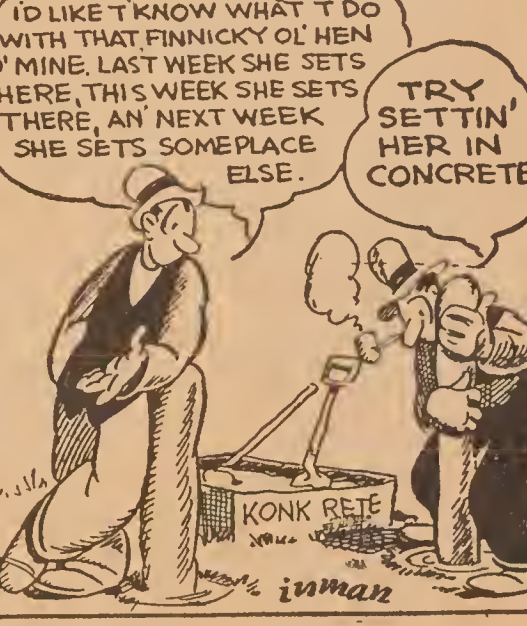
PUT A BRACE FROM THE TOP OF THE CORNER POST TO THE TOP OF THE SECOND POST...



THEN PUT A BRACE FROM THE TOP OF THE SECOND POST TO THE GROUND.



CORNER POSTS AND BRACES SET IN CON- CRETE ARE SET FOR GOOD.



Where the Dairy Cow Reigns Supreme

(Continued from Page 1)

ple were together, perhaps life was not so hard after all.

The early settler could get some recreation out of the stern business of earning a living. Delaware County is today noted for its trout fishing. In early times shad came well up the Delaware. The sky was sometimes darkened with the flight of wild passenger pigeons. Deer hunts not only furnished the thrill of the chase, but were the substantial sources of meat. Of course pigs were kept and although the bears often ate the occupants of the pen, there was left the opportunity of catching and eating the bear. Training days were the equivalent of several Fourths of July.

Nature intended Delaware to be a

dairy county. When other hillsides lie dry and brown, Delaware County slopes are green. This is due somewhat to the abundant rainfall on the western edges of the Catskills. The average annual rainfall of New York State is about 38 inches. There are few years when Delaware County does not receive at least 40 inches of precipitation and the weather records kept at the State School of Agriculture at Delhi, New York, show 46 inches of rain for the year 1927 and 43 for the year 1928. Kentucky Blue Grass and Rhode Island Bent Grass, two of the best pasture plants, seem to be perfectly at home in the county, while the soil though rough is very fertile.

Buttermaking was for many years

the principal industry of the county. Middle aged persons will remember the row of shiny tin pans sitting in the cool dairy house. The cream was skimmed and the farm dog was invited to do the churning stunt on the tread power machine. The butter was packed into firkins or tubs and kept on the farm until autumn. Then some early morning, to the delight of the farm boys who were often allowed to accompany the load, and to the whole family as this was the only shopping trip of the year, the butter was loaded into the heavy wagon and the long haul started to Catskill or Kingston. From hence the butter went by boat to New York. Perhaps the roads were not so lonely as the hotels on the Catskill turnpike averaged one per mile. Butter was also sold at the grocery stores and the tale is told of the old lady who asked the storekeeper to taste of a strange weed before sampling her butter. He pronounced the weed leeks. He was then unable to detect the same taste in her butter because he had just eaten leeks. A dairy census of 1891 reports the town of Bovina as producing 66,998 pounds of butter. The dairymen kept on an average 23 cows each. These cows produced from \$30.00 to \$100.00 apiece and averaged \$63.00. This is in strange contrast to present conditions when car loads of fluid milk leave daily for the metropolis. In the year 1927, 316,820,000 pounds of milk were delivered to the milk plants of the county. This milk production was exceeded only by the county of St. Lawrence.

Styles of cows as well as customs have changed in Delaware County. The cows brought in when there was on the average one cow to the clearing, were small, and were said to be descendants of early importations from Holland, Denmark and West Indies into the colonies. These cows when they tried hard gave six to ten quarts of milk per day and produced about 100 pounds of butter per year. Quite different from the 15,000 pounds of milk and 828 pounds of butter made in 1927 by Vermont Owl's Addie M., a Jersey cow owned by the State School of Agriculture, Delhi, N. Y.

The first Jersey stock was imported into the county about the time of the Civil War. For many years the Jersey was the favorite, though in recent times many black and white and Guernsey herds are seen.

The well kept houses and barns denote the prosperity of the Delaware County farmer. While grain and fruit farmers have had uncertain returns, milk has given substantial monthly payments. With the increasing city population and the nearness of Delaware County to the milk markets of New York, coupled with the County's natural resources, the future for the financial prosperity of Delaware County is bright.

The degree of prosperity of the country folk can be determined quite accurately by their standard of living. Rural people are not accustomed to adding porches to the houses until the mortgage is removed from the farm. Farmers ride in such automobiles as they can afford, or at least more nearly so than do the people who yet have installments to pay on everything but the children. The standard of living of the inhabitants of Delaware County is probably higher than that of the average rural county of the State. A survey made by rural sociology classes of the State School of Agriculture at Delhi, and covering about 400 farms, shows that 50% of the owners of these farms mow their front lawns, about 40% have heating systems other than stoves, nearly 80% have running water in their homes, about 30% have bath rooms, 34% have indoor toilets, 40% have lighting systems other than kerosene lamps, 30% had radios in 1927 and there are probably more now, 86% have telephones, over 90% have automobiles, while 90% have some form of musical instrument. Nearly all have more than one farm journal. All have weekly papers while a large per cent have a daily. Probably no county has

a larger per cent of homes having running water and bathroom.

Nature has been good to Delaware County in arranging that water shall run down hill, for the abundant springs on the uplands furnish a never failing supply of pure water in the buildings of nearly every farmstead. I once asked a child in the level land of central New York where the family received its water supply. The youngster in perfect innocence replied, "From the well of course; where else could we get it?" This boy had evidently never heard of water being piped from a hillside into the house.

Educationally, Delaware County has been blessed with exceptional facilities. The old Academies at Delhi, Franklin, Stamford and Andes can boast of an illustrious alumni. The State School of Agriculture at Delhi (the Farmers' School) now registers 100 students, over 40% of whom are residents of Delaware County. The Delaware County 4-H club has at present over 1,000 members and is doing a splendid work in not only giving information and practice but it is instilling into the minds of the boys and girls an appreciation of the importance of country life and a familiarity with team work which will help the next generation to co-operate in business as well as in play.

Delaware County has an active farm bureau with a banner increase in its membership for the past year.

All in all, Delaware County, with no cities, and few large villages, is giving to its inhabitants a prosperous, happy country life.

The Plains of Abraham

(Continued from Page 16)

with a determination beside which his former resolution sank to insignificance. He was no longer fighting for Toinette's approval, but against her, against Paul Tache, against all the world. Toinette, pulling at his hair, beating at his back, had raised his struggle to epic heights. The strength of martyrdom filled his lean arms and body, and he fought with a renewed fierceness that made his heavier but softer antagonist give way before the punishment, and both went down to earth again. Toinette fell with them, her long skirt impeding the activity of their legs, her big hat hanging like a sunshade over her face, her beautifully made curls tangled and spotted with mud, her hands beating angrily at whichever of the two chanced to come in her way.

Jeems was aware of her presence and physically sensible of her combativeness, but in the complexity of action which surged over and about him he could afford no discrimination in the manner of using his arms, legs, teeth, and head, and at last, finding herself disentangled, Toinette scrambled to her feet considerably bruised and in such disorder that no one would have recognized her as the splendid little lady of the seigneurie who had come so proudly to Lussan's place a short time before. Her handsome hat was a crumpled wreck in the mud. Her dress was twisted and bedraggled. Her hands and face were discoloured with soil, and her hair was so tangled about her that she was almost smothered in it. Despite this physical condition, her mental self was more than ever inflamed with the desire to fight, and seizing upon the hard and wood-like stalk of a last year's sunflower which lay in the dirt, she succeeded in bringing it down with such force that, missing Jeems, it caught Paul on the side of the head and laid him sprawling flat on his face. This terminated the conflict for Toinette, who gave a cry of apprehension when she saw what she had done.

(To be Continued Next Week)

Additional Classified Advertising

SEEDS—NURSERY STOCK

MILLIONS NORTHERN GROWN Hardy Cabbage, Cauliflower Plants, June, July delivery. Best strains Danish seed, chemically treated. Golden Acre, Jersey, Copenhagen, Enkhinzen, Surehead, Succession, Savoy, Flatdutch, Ballhead, Red. Postpaid: 200-65c; 500-\$1.25; 1000-\$2.25. Collect: 5,000-\$7.50. Snowball Cauliflower: 50-40c; 200-\$1.00; 500-\$2.25; 1000-\$3.75. Transplanted Tomatoes: 36-45c; 100-\$1.00; 1000-\$10.00. Bermuda Onion: 200-60c; 500-\$1.00; 1000-\$1.75. PORT MELLINGER, Dept. A.A., North Lima, Ohio.

TOMATO PLANTS: Baltimore, Stone \$1.00 thousand; 5000, \$4.25. Cabbage Plants, 75c thousand; 5000, \$3.25. Roots mossed, safe arrival guaranteed. BURGESS FARMS, Pembroke, Ga.

MILLIONS FIELD GROWN vegetable plants, cabbage and beets 100-35c; 300-90c; 500-\$1.25; 1000-\$1.95. Tomatoes 100-45c; 300-\$1; 500-\$1.40; 1000-\$2.25. Sweet potatoes and sweet pepper 100-50c; 300-\$1.25; 500-\$1.90; 1000-\$3.50 postpaid. Express Collect cabbage and beets \$1.00; tomatoes \$1.25, potatoes and pepper \$2.75 per thousand. Delivered safely anywhere. V. C. LANKFORD & SONS, Franklin, Va.

CABBAGE, CAULIFLOWER, TOMATO and Egg Plants. Ready now. Copenhagen Market, Enkhinzen Glory, Early Summer, Succession, All Seasons, Danish Ballhead, Danish Roundhead, Flat Dutch, Danish Round Red and Drumhead Savoy Cabbage plants. \$2.00 per 1000; 5000, \$9.00; Rerooted \$2.25 per 1000. Snowfall and Erfurter Cauliflower plants all rerooted \$4.50 per 1000; 5000, \$20.00. Transplanted John Baer, Matchless Stone, Greater Baltimore and Dwarf Stone Tomatoes \$8.00 per 1000. Field grown plants same varieties \$3.00 per 1000; 5000, \$13.00. Potted Black Beauty Egg Plants \$30.00 per 1000; \$3.50 per 100. Send for Free list of all plants. PAUL F. ROCHELLE, Morristown, N. J.

FARMS FOR SALE

OLD AGE NECESSITATES sale of 235 acre river farm on main auto thoroughfare, near high school, and railroad. 50 head stock, team, full equipment, tools, modern buildings, \$8,000.00 cash required or will accept smaller improved farm as part payment. THEO. FULLER, Unadilla, N. Y.

DEL-MAR-VA—THE PENINSULA OF PLENTY. Three to ten hours by motor truck to markets supplying twenty millions of people. Pennsylvania Railroad permeates entire peninsula. Low-priced farms, town and waterfront homes. Very little snow and freezing. Finest concrete highways. Good schools, low taxes. Handsome descriptive booklet, FREE. Address 164 Del-Mar-Va Building, Salisbury, Md.

IN ADIRONDACKS—Farms for chickens, vegetables, fox, muskrats, summer boarders, hunting camps, gas stations. 130 acres 7 rooms, cellar, other buildings. \$2100., \$900 cash, 6 years. Booklet. EARL WOODWARD, Hadley, N. Y.

HUNDRED EIGHTY ACRES, state road, will harvest 125 tons hay this year, part alfalfa, excellent dairy proposition, fair buildings, telephone, electric lights, power available, sugar orchard. Reasonably priced. Agents protected. F. G. FLETCHER, Norwood, N. Y.

59 ACRE POULTRY and dairy farm. 700 hens; 7 cows, could carry 10. Fully equipped for hatching and brooding chicks, grade A milk, and tools. Good buildings and land. On account of poor health will sacrifice for quick sale. ADELBERT CARTER, Groton, N. Y.

HERE IS THE PLACE TO SELL YOUR FARM

Reach over 150,000 interested people at a cost of only 7c per word. Write now to the Farm Dept.

BARN EQUIPMENT

CRUMB'S STANCHIONS are shipped subject to trial in the buyer's stable. Also steel stalls, stanchions, and partitions. Water bowls, manure carriers and other stable equipment. Tell me what you are most interested in, and I will save you money. WALLACE B. CRUMB, Box A, Forestville, Conn.

CORN HARVESTER

RICH MAN'S Corn Harvester, poor man's price—only \$25.00 with bundle tying attachment. Free catalog showing pictures of harvester. PROCESS CO., Salina, Kans.

CLIPPING MACHINES

CLIPPED COWS mean clean milk.—Improve the health of cattle, horses, mules, etc.—use a "Gillette" Portable Electric Clipping Machine. A postcard will bring you prices and interesting information. GILLETTE CLIPPING MACHINE CO., Dept. A-1, 129-131 W. 31st Street, New York City.

SITUATIONS WANTED

DO YOU NEED FARM HELP. We have Jewish young men, able-bodied, some with, but mostly without experience, who want farm work. If you need a good, steady man, write for an order blank. Ours is not a commercial agency. We make no charge. THE JEWISH AGRICULTURAL SOCIETY, Inc., Box A, 301 E. 14th Street, New York City.

LET THE AMERICAN AGRICULTURIST HELP YOU

sell that farm. Just write us giving details and we will write your copy. Do it this week.

PRINTING—STATIONERY

BEST PRINTING, least money. Get our samples and price list, they're free! HONESTY PRESS, Putney, Vermont.

WEDDING INVITATIONS, ANNOUNCEMENTS—Latest styles. Best workmanship. Moderate cost. Samples free. HOWIE STATIONER, Beebeplain, Vt.

WOMEN'S WANTS

PATCHWORK 7 POUNDS Percales, Gingham \$1.00. 3 pounds silks \$1.00. 4 pounds cretonne samples \$1.00. 3 pounds Corduroy remnants \$1.00. Nile Green, Pay Postman plus postage. Silks or Velvets Large Package 25c postpaid. NATIONAL TEXTILE CO., 93 B St., South Boston, Mass.

STREET DRESSES! Lovely tubfast Prints, only \$1.98. Send your measurements to BENNETTS DRESSES, Schuylerville, N. Y.

MISCELLANEOUS

WANTED USED BAGS any quantity and grade. Highest prices and freight paid. HOEFMAN BROS. BAG CO., 39 Gorham St., Rochester, N. Y.

USED CIVIL WAR ENVELOPES with flags, designs, etc., \$1 to \$15 paid. Other stamps on envelopes before 1871 bought. Three-face lamps and old glassware bought. W. RICHMOND, Cold Spring, N. Y.

COTTON DISCS for your milk strainer, 300 sterilized 6 inch discs at \$1.30, postage prepaid. HOWARD SUPPLY CO., Box 30, Canton, Maine.

RUBBER TUBING for all makes of milkers. Attractive prices. Cotton strainer discs (sterilized) 300 in package 6 inch \$1.40, 6 1/2 inch \$1.60 Postpaid prepaid. Tubing and cotton discs very highest quality obtainable anywhere. ANDERSON MILKER CO., Jamestown, N. Y.

KEOUGH'S—Poul remedy. For fowls or hoof rot. Used by farmers for over 25 years. Satisfaction or money back. Get a bottle at your druggist or feed dealer or send one dollar for a bottle. KEOUGH PHARMACAL COMPANY, Box A, New Berlin, N. Y.

TOBACCO

GUARANTEED HOMESPUN TOBACCO. Chewing, 5 lbs. \$1.50; 10-\$2.50. Smoking, 10, \$1.75. Pipe Free. Pay Postman. UNITED FARMERS, Bardwell, Ky.

CIGARS FROM FACTORY—Trial 50 large Perfectos postpaid \$1.00. SNELL CO., Red Lion, Pa.

LEAF TOBACCO—Good, sweet chewing, 3 pounds, 90c; 5, \$1.25; 10, \$2. Smoking, 3 pounds, 60c; 5, 90c; 10, \$1.50. UNITED FARMERS, Mayfield, Ky.

AMERICAN AGRICULTURIST Classified Ads get results. Try one.



The Service Bureau
A Department Devoted to the Interests, Welfare
and Protection of A. A. Readers

How a Will Saves Trouble

"My husband and I are alone in the world and he wishes his property to go to me at his death. We have been told that lawyers take a large part of the property when they make out a will and we would like to know whether he can deed the place to me or in some way be sure that I will get the property."

THIS letter reflects a feeling toward lawyers which is very common. It is our opinion that in this case where the details of the will would be very simple, that the lawyer's fee would be relatively small. In the past there have been too many cases where our readers have attempted to save the price of a lawyer's fee and in doing so have laid up endless trouble for those they left behind.

For example, a recent letter tells of a sad case where a man left no will and in spite of the fact that his estate was

element of risk as to the ability of the company to continue to pay dividends. With an old, established company where dividends have been paid for years, this risk is very slight. With a new company just starting up the risk is very heavy and an investment is decidedly speculative.

Same Business—New Name

"We were recently solicited by the Federal Auto Club of Syracuse, who are selling memberships for \$29.50 and claiming to give free towing service in case of accident, emergency road service, including mending tires and delivery of gasoline within ten miles of towing stations, as well as some other services. What can you tell us about this concern?"

WE are informed that several of the promoters of the Federal Auto Club have been identified with the National Automobile Service Corporation of Newark, N. J. which we have mentioned several times in the Service Bureau columns. Two years ago the National Automobile Service Corporation offered a type of insurance along with their membership and as a result the Attorney General of New Jersey instituted action resulting in a fine of \$500.

A "Thank You" Is Our Pay

I RECEIVED your letter yesterday, including the check for \$5.00 which your Service Bureau obtained from the _____ Company. We are very grateful to you for the services rendered. While five letters from us to the company did not even receive an answer, the American Agriculturist Service Bureau surely did the "trick". Keep on with your good work, and wish that there were more such Bureaus. We certainly now know where to turn when in search of a square deal.

small, his two children are taking action to get their part of it and are not willing to allow their mother to have the use of it as long as she lives. In this case a will would have saved much sorrow.

In this particular case, inasmuch as there are no children, it is possible that the property can be deeded over to the wife, thus doing away with the necessity of a will. We would hesitate to recommend this procedure in most cases as it is usually advisable to keep property in one's own name.

It is not necessary that a will be drawn up by a lawyer in order to be legal, but a lawyer does know the conditions which are necessary to make it legal and a will made by a lawyer is much more difficult to break by legal action. In general, the conditions necessary are that the will must be witnessed by two persons who actually see the person making the will sign and acknowledge it. It is also necessary that the person making the will see both witnesses sign the will. We certainly recommend to all of our readers who have not already done so, that they see a lawyer and have a will made.

Stock Fails to Pay Dividend

"About five years ago we invested some money in stock of the _____ company. For two or three years we received dividends regularly but last year no dividends were received. Will you get the money back for us which we paid for this stock?"

THIS is a fair sample of many letters which we receive from readers showing that they do not understand the nature of an investment in stock. Our subscriber has bought stock in this company, which may or may not be an investment suited to his individual needs, but unless it can be shown that those in control of the company have been dishonest, in which case legal action can be taken, the only way that the money can be secured for the stock is to put it on the open market and sell it to someone else.

Anyone who buys stock assumes an

element of risk as to the ability of the company to continue to pay dividends. With an old, established company where dividends have been paid for years, this risk is very slight. With a new company just starting up the risk is very heavy and an investment is decidedly speculative.

While we wish to be absolutely fair to every reader and stand back of our guarantee, we also feel that it is only square that we be fair to our advertisers. We felt is strange that although this particular ad has been appearing every week all spring, that this is the

According to our information, the membership in the new concern, the Federal Auto Club, does not include liability insurance, although letters from our subscribers on a number of similar auto service concerns, indicate that they believe that they are taking out automobile accident insurance.

From information which we have, it appears that the Federal Auto Club is practically identical with a number of automobile service concerns, some of which have in the past, fallen afoul of the law as well as others which appear to be operating within the law. We have yet to receive a letter from any subscriber who has invested in the membership of such a concern and who feels that he has received his money's worth.

Bogus Maple Syrup Sold in Pennsylvania

PENNSYLVANIA subscribers are warned against a number of trucks that have been selling a product supposed to be strictly maple syrup. It appears that the cans containing the material, which has been found by state chemists to consist of cane sugar syrup and artificial coloring and flavoring, are not labeled until just before they are sold.

It has been found that the labels contain fictitious names and addresses of persons assumed to be the producers. Anyone approached to buy material which answers this description will do well to get in touch immediately with the State Troopers or other law enforcing agencies.

Two Letters—A Boost and a Knock

"I take great pleasure in informing you that I have received the remainder of my order from _____ company tonight and I heartily thank you for the service you have given. It is indeed a pleasure to know that there is someone to call on for help where cases of this nature arise. You previously collected a bill for me, and I think that I have recommended your paper and your Service Bureau to over fifty people."

"You may be sure that I will never forget the American Agriculturist, or be without it. Again I thank you for this favor, and assure you of my heartiest appreciation."

WE are glad to get letters like the above showing that we have been successful in our efforts to be of service to our subscribers. Unfortunately, not all letters we receive are similar to this one. For example, here is one that just came in:

"Your letter received and I wish to thank you for the interest you have shown in the misfortune I have had through one of your advertisements. However, when our subscription expires with the American Agriculturist we will not renew but will subscribe for a paper that contains legitimate advertising and furthermore, I am informing my friends of this lovely deal and they are subscribers to your paper."

This letter was received following some correspondence on a complaint against an advertiser. Our subscriber reported that she had purchased 150 duck eggs from an advertiser in our paper. In the first letter received from our subscriber she says:

"I sent to one of your advertisers for 150 eggs. Six days after I put them under the hens I picked one of them up and it was so rotten that it burst in my hand. I took another one and tried it and it was rotten too. Now this man has used the mail and your paper to cheat me. I work hard to get the money and I want it back and I also want this man punished. I want the government to know that he used the mails to send me rotten eggs. I have been setting eggs for 20 years and know eggs laid this spring could not be in the condition those were. He certainly sent eggs that were laid last year."

While we wish to be absolutely fair to every reader and stand back of our guarantee, we also feel that it is only square that we be fair to our advertisers. We felt is strange that although this particular ad has been appearing every week all spring, that this is the

first complaint we had received from any of our readers. We sent a copy of the complaint to the advertiser who replied that while he could see absolutely no reason why a large percentage of the eggs should not be fertile, that he was willing to go a long way and make an adjustment to keep a satisfied customer.

We then wrote our subscriber, asking what adjustment she felt was due her and in reply she stated that she would either accept a return of her money or 125 baby ducklings. She also mentioned that some of the eggs had dead ducks in them and in the same sentence maintained that there was not a fertile egg in the entire lot. On receipt of this letter, we advised our subscriber that it was evident that some of the eggs must have been fertile or there could not have been dead ducks in them and that in our opinion she was asking too much in the way of an adjustment. Under the best of conditions 125 live ducklings from 150 eggs would be a wonderful hatch. At the beginning of this story we have already given our subscriber's reply.

Very rarely do we feel that a subscriber asks for an unreasonable adjustment. Where both the subscriber and advertiser are fair it is a comparatively simple matter to make a satisfactory adjustment. In this case, we feel that our reader is unfair for the following reasons:

1. If the advertiser were shipping out infertile eggs or eggs produced last year, the Service Bureau would be flooded with complaints against him.

2. It is evidently impossible for eggs to be infertile and at the same time contain dead ducks.

3. There are many things that can happen to eggs to prevent their hatching. An advertiser can logically be expected to furnish eggs with a reasonable percent of fertile eggs, but should not be expected to guarantee the hatch. If the eggs had been candled seven days after they were put under the hen and had this test showed no fertile eggs or an unreasonably low percent of fertility, our subscriber would be entitled to a replacement of the eggs or her money back.

Finally, we wish to emphasize that neither we nor our advertiser have refused to make some adjustment on this complaint.



"NEVER LETS GO"
For Easy Application
A smooth powerful, long lasting joint—it protects your belt ends and insures dependable service. Used and recommended by leading manufacturers of threshing machines and belting—and by farmers everywhere. Your dealer has it. Ask for it by name.
INSIST UPON GENUINE
ALLIGATOR
TRADE MARK REG. U.S. PAT. OFFICE
STEEL BELT LACING

SCHOOL BOARDS—ATTENTION! SAVE HALF Your Paint Bills USE INGERSOLL PAINT

PROVED BEST by 87 years' use.
Made in all colors for all purposes at
WHOLESALE FACTORY PRICES
INGERSOLL PAINT BOOK tells all about Paint and Painting for Durability. FREE TO YOU with Sample Cards and our PREPAID FREIGHT OFFER. WRITE US. DO IT NOW and SAVE MONEY.

PATRONS' PAINT WORKS, Inc.
Oldest Ready-Mixed Paint Factory in America. Est. 1842
252 Plymouth Street, Brooklyn, N. Y.

GET YOUR ROOFING DIRECT FROM FACTORY...FREIGHT PAID

SAVE MONEY! Get your Roofing direct from the Factory and keep in your own pocket the profits the dealer would get. All kinds and styles. Galvanized Corrugated. Shingles and Asphalt Roofing. Freight paid. Easy to nail on. Write TODAY for Free Samples and freight paid prices. FREE SAMPLES.

Newark Fence & Roofing Co.
4 Ave. & Ogden St., Dept. A-6
Newark, N. J.




THE FARRELL HOIST
FOR UNLOADING HAY WITH GAS ENGINE HAS QUICK RETURN DRUM AND BAND BRAKE. BOTH DRUMS OPERATED FROM LOAD BY ONE ROPE. SEND FOR CIRCULARS.
JOHN FARRELL & SON
NEWTON, SUSSEX CO., N. J.

PATENTS Booklet free. Highest references. Best results. Promptness assured.
WATSON E. COLEMAN, Patent Lawyer
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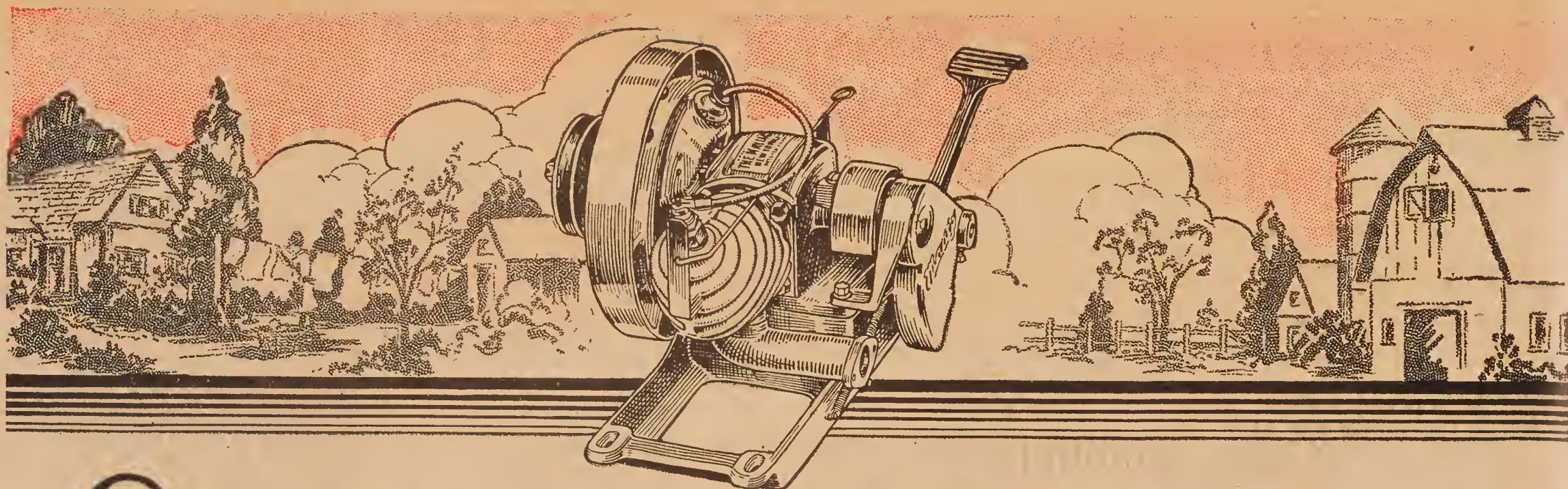
WATER PUMPS WATER
night and day with Rife's Hydraulic Ram. No attention, no expense. Write for free catalog.
H. T. OLSEN, 13 PARK ROW, NEW YORK

CAULIFLOWER and Cabbage Plants. Pedigreed Seed. Selected Plants. Disease free. Safe delivery. See classified column for varieties and prices. **F. W. Rochelle & Sons, Chester, New Jersey**

Post Your Farm And Keep Trespassers Off

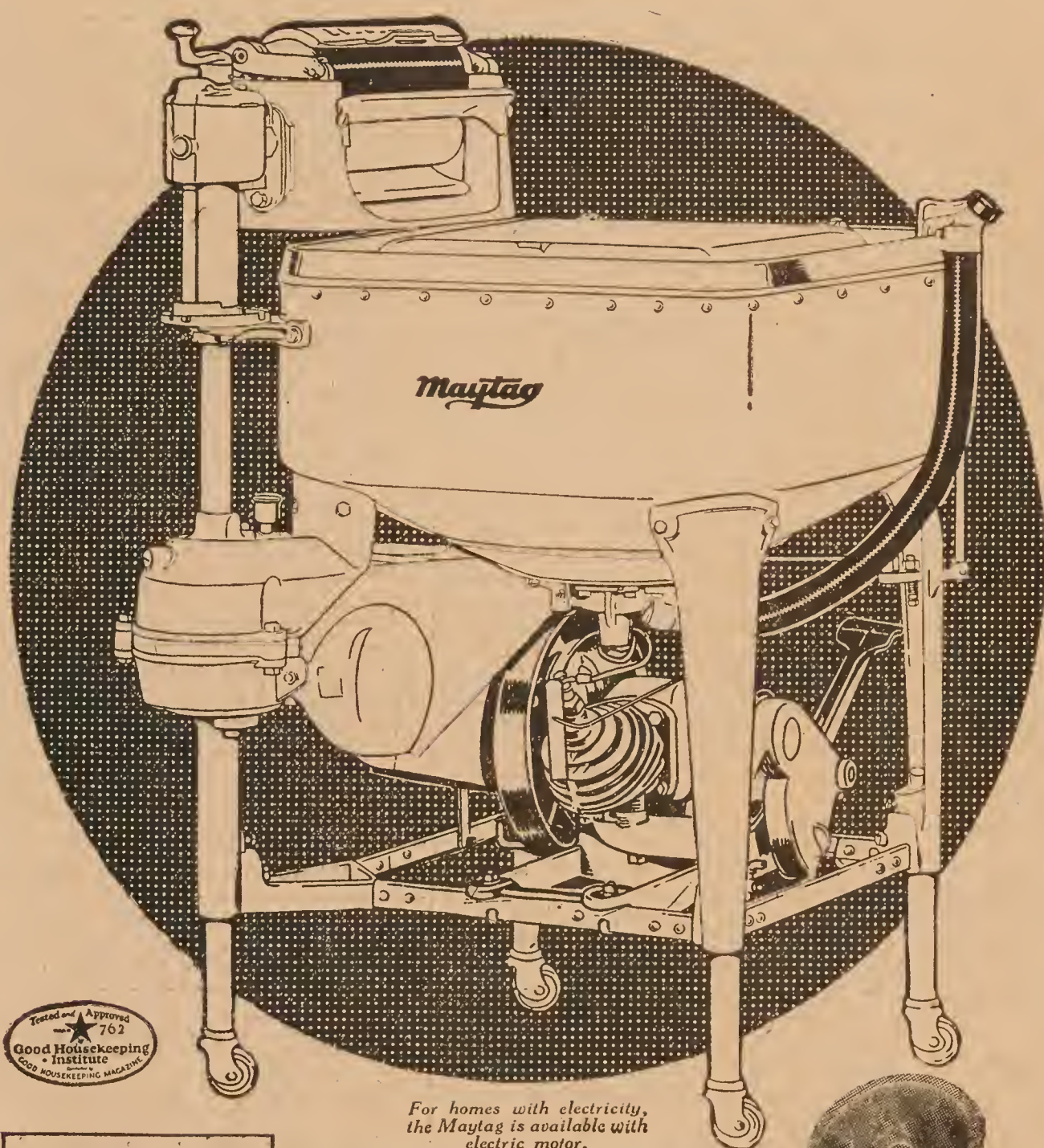
We have had some new signs made up of extra heavy material because severe storms will tear and otherwise make useless a lighter constructed material. We unreservedly advise farmers to post their land and the notices we have prepared comply in all respects with the laws of New York, New Jersey and Pennsylvania. The price to subscribers is 95 cents a dozen, the same rate applying to larger quantities. Remittance must accompany order.

American Agriculturist
461 Fourth Avenue. New York



The Finest Washer *has the Finest Engine*

**— An Engine
Worthy of the
MAYTAG**



*For homes with electricity,
the Maytag is available with
electric motor.*

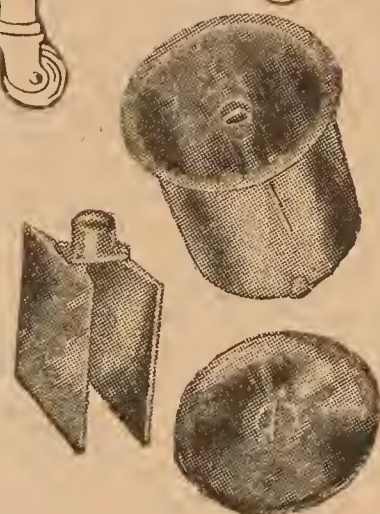
Maytag Radio Programs

Boston-WBZ-A. Chicago-KYW.
Cincinnati-WLW. Cleveland-
WTAM. Denver-KLZ. Des
Moines-WHO. Detroit-WJR.
Fort Worth-WBAP. Kansas City-
KMBC. Los Angeles-KNX. Mil-
waukee-WTMJ. Minneapolis-
WCCO. Omaha-WOW. Phila-
delphia-WCAU. Pittsburgh-
KDKA. Portland-KGW. St.
Louis-KMOX. Salt Lake City-
KSL. San Francisco-KFRC.
Toronto-CFCA.

*Over 50 stations now on the schedule;
watch newspapers for date and hour.*

The Maytag Has a Churn Attachment

The three-gallon aluminum
churn sets over the Maytag
gyrator post and is operated
by the same power that runs
the washer. A valuable, ex-
clusive Maytag feature. Ask
about it.



YEARS before any other washer offered in-built power to the farm wife, Maytag introduced the Gasoline Multi-Motor. Success always brings imitators, but Maytag still remains the only washer company that builds its own engine and the demand for self-powered Maytags makes The Maytag Company the world's largest producers of single-cylinder gasoline engines.

Fifteen years' development have brought the Multi-Motor to a high state of perfection. It is a time-tested product. Only the finest workmanship and materials enter into its construction. There are only four moving parts, and each part is as finely engineered as a fine automobile. By removing only four bolts, this compact, simple engine is interchangeable with an electric motor.

Compare the Maytag with other washers. Compare the Multi-Motor with other engines. You will, doubtless, decide as the majority of other farm homes have decided. You will want the Maytag.

FREE for a Week's Washing
*Write or Telephone
the Nearest Dealer*

Ask for a trial Maytag washing. If it doesn't sell itself, don't keep it. Deferred payments you'll never miss.

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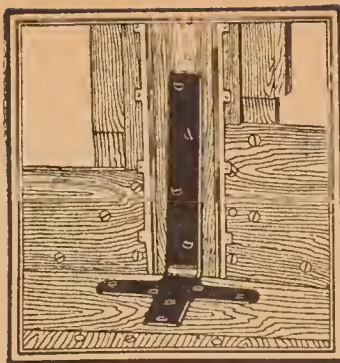
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June 22, 1929

Published Weekly



Beauty Spots of the East—Storm King and the Breathtaking.
Storm King Highway dug from its Side.—See Editorial



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New Jersey Highway Right-of-Way Troubles

WHAT are the rights of a property owner, when the state or the county decides to widen the highway? One of our New Jersey readers wrote us as follows:

"As a reader of A. A. I would like to know about the public road being made wider through this section. It was mapped out, I was told, in 1871 for a four-rod road from Lambertville through New Jersey on the old York road. It is now two rods wide.

"They are now making the road eighty feet wide and allowing us only over four rods for the land they are using. If the land was never bought from the farmers in 1871, are we now not to be paid for the land?

"They do not say in their agreement over two or four rods, only part of an acre and amount to be paid. It measures over the four rods." H. J., New Jersey.

Our New Jersey editor has looked up the situation and replied as follows:

"While I do not know the situation relative to the four-rod road which you mentioned in your letter, I do know of a similar situation in South Jersey.

"From what we can learn, the State Highway Commission is exercising its full authority in taking possession of all land on the right-of-way as prescribed in the original road grants. The experience of farmers on the Camden to Bridgeton state road might serve you as an illustration of what the Highway Commission is doing.

"It appears that nearly 100 years ago, this road was laid out as a four-rod road. In the meantime, many homes had been built beyond this limit, fences had been erected and even wells dug that were within the four-rod road lines.

"Some time last spring the Highway Commission served a notice upon property owners that their houses, buildings, fences and even wells must be moved back beyond the four-rod limit. They were given thirty days in which to make the changes. At the expiration of thirty days, it is understood that the Highway Commission took certain legal steps to lay claim to all the land within the original right-of-way.

"While none were compelled to move their houses, yet it is understood that the action of the Highway Commission establishes its rightful ownership to the land within the original grant. While not officially announced, it is thought by many who have been in close touch with the situation that should the Highway Commission, in the next fifty or one hundred years, decide to build wider roads and require additional land, it will not be compelled to move these properties or pay an exorbitant price for the land within the full four-rod limit.

"It places the present property owners in a position that, when the State Commission wants this land, the property owner will be compelled to move his property from the highway lines.

"Now, in your case, I am inclined to think that the Highway Commission is exercising its rights to a four-rod road and is planning to pay the property owner only for the narrow strip that they need beyond the four rods, as called for in their original grant. I can realize the position in which it is placing property owners. It means the confiscation of valuable land and at times destruction of trees, lawns and fences which the owners have not foreseen.

Property Value May Increase

This matter has been taken up by the Farm Bureau with its legal attorneys as well as with the Highway Commission and at the present time there is no way out for the farmer. The four-rod road grant made by property owners fifty or one hundred years ago still holds, regardless of the status of the present owners. The only satisfaction an owner can get is the increased value that will naturally accrue by having such an improved highway past his land. Of course, the Highway Commission will pay you for all the land it needs beyond the four-rod limit, which, in this case, will be a very small amount unless it is a very extensive holding.

"Should there be any further information that you desire, do not hesitate to write us as we are willing to do all we can to aid you in this matter."

Either a Feast or a Famine

A Basic-Surplus Plan Might Equalize New York's Milk Supply

BECAUSE of the constantly increasing demand for milk, the New York market is in the best and healthiest shape that it has ever been in the history of the dairy industry. But it has one big problem, a problem which, if it is not solved may ruin the market for eastern producers. The solution of this difficulty lies in the hands of producers themselves. It is largely the fault of dairymen. The trouble is that farmers are flooding this New York market with milk at one time and starving it at another.

This big trouble leads to many minor ailments, such as, for instance, price-cutting. The great surplus of milk in the spring makes it very easy and possible for unscrupulous dealers to cut prices, which soon leads every dealer to reduce his prices if he is to keep his markets. Therefore, spring after spring, farmers receive less for their milk than consumers are really willing to pay.

Give Consumers What They Want

Owing to the determined stand of the Dairy-men's League and of Borden's and Sheffield's and a few other reputable dealers, prices were pretty well maintained this spring in spite of price-cutting. However, when there is so much milk available the danger is always there. The other trouble caused by flooding the market at one time and starving it at another is the danger that the eastern producers will lose control of their market because the cities will insist on widening the territory in order to get enough milk during the short periods. The whole trouble comes from the fact that we producers will not regulate our supply to the consumers' needs. Consumers use approximately as much milk in November as they do in June, yet in spite of this, we insist on flooding the market with twice as much milk in June

as we produce in November. This is just about the only section left in the country where summer and winter milk production is not equalized. The problem is not alone one of milk; it applies to the whole field of agriculture.

Farmers will get farm relief when they finally make up their minds that no matter how hard it is, they will give consumers what they want when they want it. Why continue to produce hay when there are few horses left to eat it? Yet we do it and continue to take heavy losses because our fathers did it before us and because it is hard to find something to replace it. The same is true of nearly everything else we grow. Times change, markets grow, consumers' demands change, and if we are to continue in the farm business, we must change our methods to meet the changing conditions.

Surplus Used To Lower Prices of All Milk

Ever since we began shipping milk to these city markets, surplus has been a great bug-a-boo. Enough milk for short periods has always meant too much milk the rest of the time and always this surplus has been used to bear down the whole price all of the year. It still does. Although the multiple price plan in use in this territory has helped some, it has not been adjusted to keep from glutting the market at one time and starving it at another. The surveys recently taken in this milk shed show a very large number of heifer calves that will soon be in milk production. Unless something is done, the majority of these calves will be producing June milk and the problem will be greater than ever.

Everybody has been urging summer production this year in order to be sure that there would be enough milk next November. Farmers have been

urged to do everything within their power to increase milk right now which, of course, will increase the surplus. This is a necessary expedient to be certain of milk this fall, but it is very dangerous and we never should have gotten into this position in the first place. If the spread of price between summer and winter milk had not been so great, in other words, if winter dairying had been profitable, there never would have been all of this trouble over milk shortages and the real danger of losing our milk markets to outsiders. We must go ahead now and do the best we can to save the milk shed but at the same time let us make the necessary changes in our price plans so that this situation will not happen again.

Changes In Price Plan Necessary

What changes in price plans are necessary? The answer is, some kind of a plan that will equalize production throughout the year. The way to get milk or anything else when it is wanted, is to pay for it. Pay producers a high price on a basis of the amount they produce during the short period in the fall and a smaller surplus price for whatever they exceed their fall production during any other part of the year.

For example, supposing a dairyman produces five cans of milk during October, November and December. Let this count as his basic production and for this five cans pay him the high price. Then if in June, he produces eight cans of milk, give him the top price for the first five cans and a surplus price for the last three cans. This plan has its problems and will work some injustice to certain producers, but there is no theory about it for several other milk shipping territories in

(Continued on Page 8)

What Our Readers Want to Know About Lime

An Acid Soil is a Big Handicap in Growing Profitable Crops

IT is remarkably easy to take things for granted. For example, much has been said and written about the advantages of using lime on the soil, and it might be assumed that there is little more to be said on the subject. However, several readers have recently reminded us, by their questions, that they are still interested in the subject.

This gentle reminder recalled the story of the man who asked a nationally known safety razor manufacturer why he continued to advertise when everyone already used his razor. His answer was, "For two reasons; first, not everyone uses my razor. Second, if everyone did use it I would still advertise because there is a new crop of shavers every year." There is also a new crop of farmers every year, so here are the questions about lime and their answers.

How can we determine whether our soil needs lime, and how can we determine how much should be added per acre?

In general, lime is needed in soils where clover fails to grow satisfactorily. There are a number of tests which can be made and many County Farm Bureau Agents have made the testing of soil for acidity one of the services which they give their members. Perhaps the simplest test is to moisten a handful of soil with rain water and then put a piece of litmus paper (which can be secured at most drug stores) between two pieces of the soil. After ten minutes remove the litmus paper and wash it in rain water. If it turns red or pink, it indicates that the soil is acid.

A general rule as to the amount to be added is a ton of ground limestone per acre but in many cases this does not satisfy the lime requirement of the soil, particularly in very acid regions where lime has not been added for years. Many Farm Bureau Agents have equipment known as the "rich or poor" test, which tells roughly how

much lime is required to give the soil a neutral reaction.

How often should lime be applied?

After the lime requirement of the soil has been once satisfied the application of a ton per acre once in the rotation, which ordinarily means once in four or five years, is usually sufficient to keep the soil supplied with lime.

On what crops should we use lime?

More attention has been given to liming for alfalfa than any other crop. Next in importance comes red clover. In fact, most farm crops grow better where the soil has an alkaline reaction. In eastern sections where dairying and general farming is the rule, it is considered good management to add lime with the nurse crop to an extent which makes it possible to grow alfalfa and clover and to assume that this will take care of the lime needs

of other crops. Among the vegetables, beans, cauliflower, onions and spinach are those which react best to applications of lime, while watermelons, cranberries and blueberries require a distinctly acid soil for best growth.

What is ordinarily recommended as the best time for applying lime to the soil?

There are a number of points which have a bearing on the best time to apply it. First, where alfalfa or clover is to be grown on very acid soils, it is an advantage to apply the lime a year previous to the sowing of the crop, or at least to add it the previous fall. Another point that is important is to add it at a time which will not interfere with the other work. Lime is not easily leached from the soil, and therefore it can be added at almost any time of the year. Best results can be secured by spreading it on top of plowed ground and mixing it with the soil, although under certain conditions, for example on pastures, broadcasting on the surface of the soil is recommended. This means that it is ordinarily applied either in the fall on the fall plowing or early in the spring, before the crop is planted.

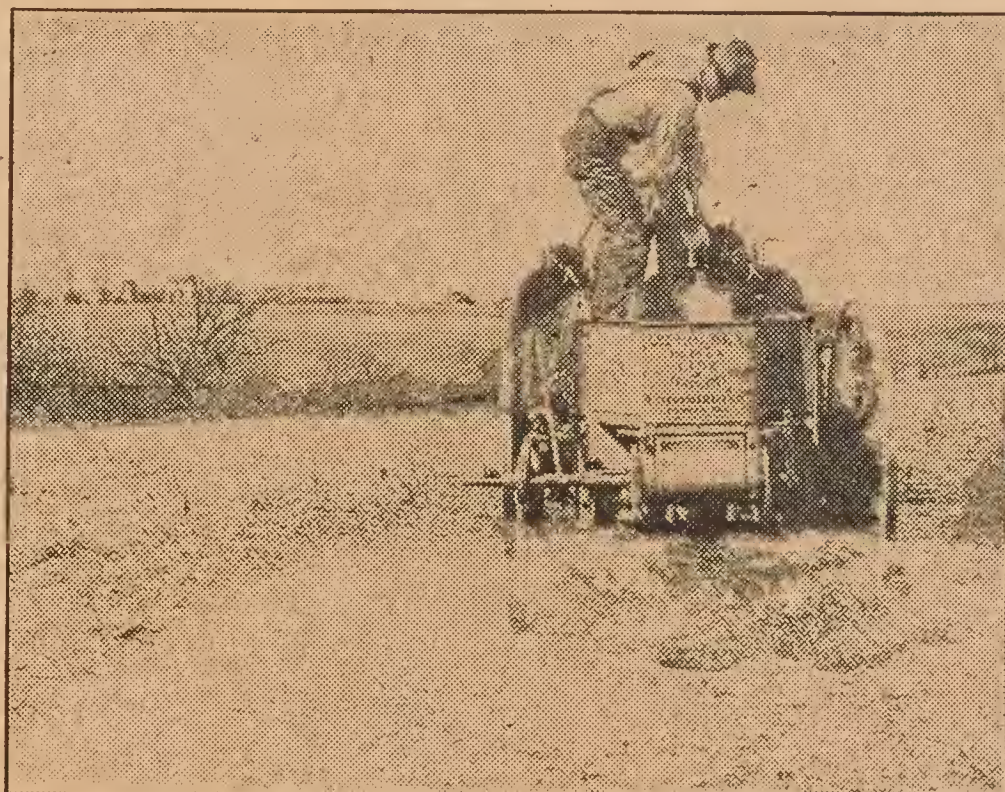
What form of lime is usually recommended as most efficient?

The record of the sales of lime show that there has been a very heavy increase in the use of ground limestone, and little or no increase in the use of hydrated lime, and quick lime. One ton of quick lime, or one and one-half tons of hydrated lime is as efficient as two tons of ground limestone. Ground limestone, of course, is considerably less costly per ton. Where a farm is located a long distance from a railroad station, the use of hydrated lime or quicklime may be advisable to cut down the amount of material which must be handled. The best rule to follow is to buy the form which will enable you to deliver, or have delivered, the correct amount of calcium to your farm for the least cost.

How fine should limestone be ground in order to be effective?

The finer limestone is ground the more quickly it will be effective, and the more

(Continued on Page 20)



This lime distributor can be used on the end-gate of any tight wagon box.

Editorial Page of the American Agriculturist

AMERICAN AGRICULTURIST

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Long Island Farmers Study Market Problems

ON Saturday, June 8, a very important meeting of the Long Island Agricultural Conference Board was held at the State Institute of Applied Agriculture at Farmingdale for the purpose of discussing Long Island farm marketing problems. Among those present, in addition to Director Knapp of the State School, were representatives of the various farm organizations of Long Island, AMERICAN AGRICULTURIST, Long Island Chamber of Commerce, Long Island Railroad, New York State Department of Agriculture and Markets, and the Commissioner of Markets of New York City.

Like all other farmers, those on Long Island have a real marketing problem. To understand this problem, one must realize that the Island is 120 miles long and that therefore it has a long and a short haul to market. Those farmers living nearby, chiefly in Nassau County, have for two generations trucked their products, once by horse and now by truck, into the city markets. Those living farther out in Suffolk County ship their products chiefly by railroad in the same way as upstate New York farmers.

Long Island once had nearly a monopoly on the market for certain of its truck crops. The Island has always been a very big source of the city's food supplies, particularly of potatoes, other vegetables and poultry. But with the growth of rapid transportation and refrigeration, Long Island farmers have seen their market difficulties become much more complicated because of competition with their products from other parts of the country. There is no doubt that the Island must soon make changes in some of its marketing practices to meet the changes brought about by much stricter competition from other sections.

In addition to this competition, Long Island truck growers have always been up against selling their products in the city's public markets, which have been more or less controlled by politicians and by speculators. One of the hopeful things developed by the conference on Saturday was the fact that Thomas Dwyer, the New York City market commissioner, seems determined to cooperate with farmers to give them better opportunities in the city markets by controlling the speculators and by regular consultation with leading Long Island farmers as to ways and

means of improving the city markets from the farmer's standpoint.

It was brought out at the conference that a survey of the market conditions was much needed not only in the large city of New York but in the smaller towns on Long Island to find out just what the situation is, and what, if anything, can be done to improve it. The conference voted to appoint a marketing committee representative of Long Island farmers, first, to have a study or survey made of the situation, and, second, to make suggestions for a Long Island marketing program.

This certainly is a move in the right direction, and we sincerely hope that something will come of it.

Business Is Organizing—What About Farming?

NEWSPAPERS report the election of five officials of leading food manufacturing companies in the United States as directors of the new United Stores Corporation. The United Stores Corporation is to include two large tobacco companies which will be merged with the tobacco chain store system, the United Cigar Stores Company, into a \$200,000,000 organization. The United Stores Corporation is also to enter the field of food merchandizing, expanding into a great chain store food retailing business.

The five new officials on the board of directors represent the Corn Products Refining Company, with assets of more than \$120,000,000; the Gold Dust Corporation, with assets of \$6,000,000; the National Dairy Products Corporation, with assets of \$110,000,000; the Ogilvie Flour Mills, with assets of \$18,000,000; the Standard Milling Company, with assets of \$42,000,000; and the Flour Mills Company of America, with assets of \$11,000,000. It is said that the election of these officials from the different companies may be the first step in the merging of all of the companies into one corporation.

What does all of this merging and combining that is going on almost every day in this country mean to farmers? Almost all of these corporations directly affect the farmers' interests and are bringing solid organization of capital and business right up to the farmer's doorstep.

Yet hundreds of thousands of farmers go blissfully on in the old individual way of doing business without seeing the handwriting on the wall. There is a great deal of loose talk about farm relief and about what is the matter with agriculture. The fundamental trouble with farming is that each individual farmer is trying to go it alone, so far as marketing is concerned, against the whole organized world, and is pitting his five or ten thousand dollars of capital against the hundreds of millions organized in the corporations with which he does business.

Progress Toward Real Peace

EVERY American, in fact, every citizen of the world, should breathe a sigh of relief because of the successful results of the German reparation settlements, negotiations for which have just been concluded.

For almost four months representatives of the Allies have been conferring with German representatives in trying to find a satisfactory settlement. Several times the conference came near ending without an agreement. Great credit is due to Owen D. Young of the American delegation and his associate, J. P. Morgan. Mr. Young succeeded in his efforts to conciliate all parties, and the plan finally adopted will probably go down in history as the Young Plan because many of the features were his ideas.

When the Treaty of Versailles was signed immediately following the war, the Peace Conference fixed the total amount of German reparation and indemnity obligations at approximately thirty-two billion dollars. Germany found it absolutely impossible to meet these payments, and a commission appointed to make necessary reduc-

tions finally adopted what is known as the Dawes Plan. This plan substantially reduced the total amount of Germany's obligations and fixed the amount that Germany would be required to pay each year for an indefinite period.

Germany has met these payments under the Dawes Plan since 1924, but with increasing dissatisfaction, which finally resulted in the calling of the international conference which has adopted the Young Plan. Under this plan, Germany is given thirty-seven years to pay off approximately \$9,000,000,000. The first of these payments will date from April 1, 1929.

The settlement is especially important to the United States because from the payments made by Germany to the Allies these countries in turn repay the loans which the United States made to them during the war. But more than this, the satisfactory settlements under the Young Plan will do much to settle uncertainties and misunderstandings among the nations and to lead to permanent peace.

Storm King Mountain (See Cover)

ONE of the most fascinating and awe-inspiring automobile rides in the East is along the Storm King Highway, west of the Hudson and overlooking it. Old Storm King Mountain is pictured on our front cover this time in our series, "Beauty Spots of the East".

Storm King Mountain is well named. The road itself is sawed right out of the side of the mountain. The sky may be clear and the sun shining in other places, but one will nearly always find some kind of a storm rumbling around the sides of old Storm King. Travelling along this now famous highway, one can see the majestic Hudson River stretching away to a silvery ribbon both to the north and the south. Not far south of Storm King is Bear Mountain, Bear Mountain Park, and the great Bear Mountain Bridge across the Hudson. A little farther still are the Palisades region and park, all of which is worthy of a visit by tourists who believe in "seeing America first".

The whole section is famous historically. Rip Van Winkle took his long sleep not far away. West Point is in the vicinity, and Stony Point is a little farther south where mad Anthony Wayne captured the fort on a July night in 1779.

No one has really seen New York State until he has been through this whole section from the Jersey line northward to old Catskill.

The Comparative Cost of Education

WE think the cost of education comes pretty high in America, and it does seem high when we come to pay school taxes. But there are many other things we buy that cost far more per person than education.

It is estimated that the average American spends \$2.68 a year for schools. He spends \$2.77 for candy, gum, tobacco and amusements, and \$14.21 a year for passenger automobiles.

We believe in plenty of good recreation, but it would seem as if the education of boys and girls is fully as important as, for example, our automobile industry.

Eastman's Chestnut

ARE women really poorer drivers of automobiles than men? Most men think so, but this may not make it a fact. Anyway, there are certainly a lot of jokes about women drivers.

"I see that you have given up teaching your wife to drive," said Jones.

"Yes," said Brown, "we have had an accident. I told her to release her clutch, and she let go of the steering wheel!"

Maybe you heard the one, too, about the girl who got her car stuck in a traffic jam and held up all of the cars back of her. The policeman came over and yelled at her:

"Use your noodle! Use your noodle!"

To which she answered, almost crying, "Oh, officer, where is it? I've tried every darn thing in this car!"

What A.A. Readers Are Thinking

Letters from a Civil War Veteran and a Horseless Farmer

ON our cover page of the May 25th issue, the issue preceding Decoration Day, you will remember that we published a picture showing the fine old face of a Civil War veteran. We buy such pictures from professional photographers, so we did not happen to know the name of the man in the picture.

However, after it was published, we received a letter from him stating that he was much pleased with the picture and asked to have some copies of that issue of AMERICAN AGRICULTURIST sent to him. We sent him the pictures and received the following letter which, in spite of the fact that the writer is ninety years of age, was well and legibly written.

We are sure that every reader will congratulate Brother Draper on reaching his extreme age in good health, and will hope with us that he still has years of happiness ahead of him.

"The copies of your magazine are at hand. Thanks for your generosity in sending them to me free of charge.

"I am glad you are the son of a Civil War veteran, and that you feel kindly and sympathetic toward us. I will frame your letter to me. I fought with Banks and Butler in the army and Porter and Farragut in the navy.

"I was glad to see my face inspecting my old navy cutlass. The picture was taken in our Clifton Park close to the World War monument for the boys who have gone West.

"I am in my ninetieth year. In January 1930 I shall be ninety years old. Am still in good health and spirits (not fermented) and doing business at the old stand in a small way; can cut and set a pane of glass, fit a key, and can do light carpenter work at shop; only can, but don't. I drive a Ford car."—WM. B. DRAPER, New York.

From a "Horseless Farmer"

IS the time coming when there will be no horses used in farming? We doubt it. Yet it is a fact that there are quite a good many farms now in the United States, some right here in the East, that may truly be called horseless farms, where all of the work is done by tractors and trucks. The following letter is from one of these "horseless farmers."

"The operations on my farm are somewhat different than on the average farm of this county. I am a vocational agricultural teacher and have a 150-acre potato farm as a side line, (a personal project if you please). The cash crop is potatoes (with all the cash that they brought this year). Oats and barley seeded in spring with crimson clover are the other major crop. The early oats and barley are cut and threshed and the crimson clover comes on making a good mat to plow under for potatoes the following season. Most of the straw is spread and plowed under with this mat of clover. Soy beans are being worked into the system on a small scale. With the potato price so uncertain, I find that soy beans and potatoes alone might prove financially disastrous. I live in town about six miles from the farm and in the future plan to keep enough hens to use the grain raised. Thus far I have been selling the grain.

"When starting this operation some six years ago I hired a man the year around. However, I decided to sell the team and little livestock that I had and hire day laborers when needed in the growing season. This has been done two years now. It is the best method yet.

"But this meant buying and selling a team every season. I had a C— small type tractor and a F— tractor beside the team. The C— did us little good. The F— and the team put things through in pretty good shape. But cultivating could not be done with the F— tractor and the team could not cultivate and spray 45 acres of potatoes and keep ahead of the job. With the perfection of the New — tractor I bought one of

these machines and tried last year to get along without a team.

"This method worked fine. The new machine was better than I had hoped for. It did all the planting, preparation, cultivation, spraying, harvesting of crops beside some hauling. During the summer I had but one person working and that was a high school student. This lad sprayed potatoes and cultivated them. He lived with the tractor and kept the patch in good tilth and kept out blight. Six rows were sprayed with 300 lb. pressure. This was done easier than four rows with horses at 250 lb. pressure.

"The season closed with the C— tractor never in the field and the old F— basking in the shade of the barn most of the season. Not a horse put his hoof on the farm during the season except some stray skates looking for something to eat—they smelled oats in my grain bins.

"There was no time when we wanted a team or even thought of one. Mechanical power is the thing, and with modern appliances a lot can be done in a short time with greatly reduced labor costs.

"There is one point I would like to mention, however. The price of gasoline in this state, and the price of potatoes and grain do not match well. On a large scale, mechanical power is O. K., but for the small farmer who is growing a few acres of cultivated crops and keeping some stock I would not advise farming by power alone.

"But you are not asking my advice. You asked about my farming operations and reasons why I used power alone. In a rambling way I have given you the major part of these points."—H. W. S., Pennsylvania.

A Grafting Experiment

WE are always glad to get results of experiments from our readers. Perhaps others have tried this method or a similar method of grafting and will be willing to tell our subscribers about it. Time, of course, will tell just how satisfactory this method will be.

"The readers of AMERICAN AGRICULTURIST may be interested in some experimental work that I have been doing. I grafted some pear trees without using any grafting wax. Scions the size of a lead pencil were used; a hole was bored through the stock and the stock clamped tightly upon the scions. A sheet of wax paper was then put over stock and scions and tied

down to form a moisture proof cap. The wax paper was removed long enough to examine the condition of the scions today and they appeared to be in excellent condition. It is well to use a hole of greater diameter than the bolt as some difficulty is otherwise experienced in getting the bolt through the stock after splitting."—R. C. J., New York.

With the Poets on Memorial Day

This was the first of a series of talks under the title, "Visits with the Poets of the Farm and Home" given over the General Electric Company's broadcasting station, WGY, at Schenectady, by E. R. Eastman, editor of AMERICAN AGRICULTURIST. The address below was given on Memorial Day.

Listen in every Thursday at noon on station WGY, and then send in your favorite poem. Those that get the most votes will be both broadcast and published. The address follows:

IT seems only yesterday that I stood as a child in a crowded village street on Decoration Day and proudly watched Father go marching by with a large company of his Civil War comrades. Today I watched one of my boys marching as a Boy Scout. Thus does time hurry us along. It was only the day before yesterday, as history measures time, when the soldiers of '61 were just boys and a part of a mighty host following the drums and the flag through Dixie.

Where are they now? The ranks have closed up and up until only a half dozen old men answer the roll call in any county, and each Grand Army post is writing its final chapter.

But appreciation of the soldiers, living and dead, of all wars, lives on in the hearts of men and is commemorated in song and poetry and in beautiful monuments.

To me the most impressive reminder of the great struggle between the North and the South is the scythe tree

near Waterloo, New York. You remember the story of James Johnson, the farmer boy. The Civil War was mostly fought by farmer boys. Jim was working in the hayfield in that long ago summer of '61. He came in from the field at noon time, hung his scythe in a small tree, with instructions to leave it there until he came back. The snath has rusted away. The tree itself has grown large. The seasons have come and gone, and men have done their haying and gathered their harvests for sixty-seven years, but the scythe still hangs in the tree, awaiting the touch of a soldier's hand that may come when the Bugle blows Reveille for that final roll call on a Great Day in the Morning.

Much that is fine has been written in prose and verse in memory of the American soldiers of all of our wars and of both sides of the Civil War. Memorial Day knows no sectionalism.

All of you have heard the familiar and stately poem by William Collins:

How sleep the Brave who sink to rest
By all their country's wishes blest!
When Spring, with dewy fingers cold,
Returns to deck their hallowed mold,
She there shall dress a sweeter sod
Than Fancy's feet have ever trod.
By fairy hands their knell is rang;
By forms unseen their dirge is sang;
There Honor comes, a pilgrim gray,
To bless the turf that wraps their clay;
And Freedom shall awhile repair
To dwell a weeping hermit there!

How quickly one can recognize the master hand in prose or poetry. One could be sure that Henry Wadsworth Longfellow would have something well worth listening to about Decoration Day.

All is repose and peace;
Untrampled lies the sod;
The shouts of battle cease,—
It is the trace of God.
Rest, comrades! rest and sleep!
The thoughts of men should be
As sentinels, to keep
Your rest from dangers free.
Your silent tents of green
We deck with fragrant flowers;
Yours has the suffering been,
The memory shall be ours.

You older folks in my audience will recall the tune of that sad but haunting old ballad which lingers in my memory because Mother used to sing it, "The Faded Coat of Blue."

Long, long years have vanished, and though he comes
no more,
Yet my heart will startle beat with each footfall
at my door;
I gaze o'er the hill where he waved a last adieu,
But no gallant lad I see, in his faded coat of blue.
No more the bugle calls the weary one,
Rest, noble spirit, in thy grave unknown!
I'll find you, and know you, among the good and
true,
When a robe of white is giv'n for the faded coat
of blue.

Another Memorial Day piece which you all will recognize is "The Blue and the Gray", written by Francis Miles Finch. The poetry is not so good, but it has endured through years because of its fine sentiment.

So with an equal splendor,
The morning sun-rays fall,
With a touch impartially tender,
On the blossoms blooming for all;
Under the sod and the dew,
Waiting the judgment-day;
Brothered with gold, the Blue,
Mellowed with gold, the Gray.

No more shall the war cry sever,
—Or the winding rivers be red;
They banish our anger forever
—When they laurel the graves of our dead!
Under the sod and the dew,
Waiting the judgment-day;
Love and tears for the Blue,
Tears and love for the Gray.

Nothing finer in honor of the soldier has ever been written than the "Ode

(Continued on Page 18)

What Is Your Favorite Poem?

AS announced in other issues, there is broadcast every Thursday at noon, eastern standard time, over WGY, General Electric Company's station at Schenectady, a series of readings prepared by me entitled "Visits with the Poets of the Farm and Home."

Also, in each issue of AMERICAN AGRICULTURIST on this page there will be published the favorite poems of our readers, particularly those that have the most votes, and as many as possible of these favorite poems will be broadcast over WGY. So here is your chance to get your favorite poem in the old A.A. and also on the air. Be sure to let me hear from you and do not forget to give the author of your poem. Address either AMERICAN AGRICULTURIST, 461 Fourth Avenue, New York City, or station WGY at Schenectady, New York.

Henry Morgenthau, former ambassador to Turkey, sends the following poem. He did not say that it was his favorite, but stated that he thought this one was very fine. Read it out loud, and I think you will agree.

—E. R. EASTMAN.

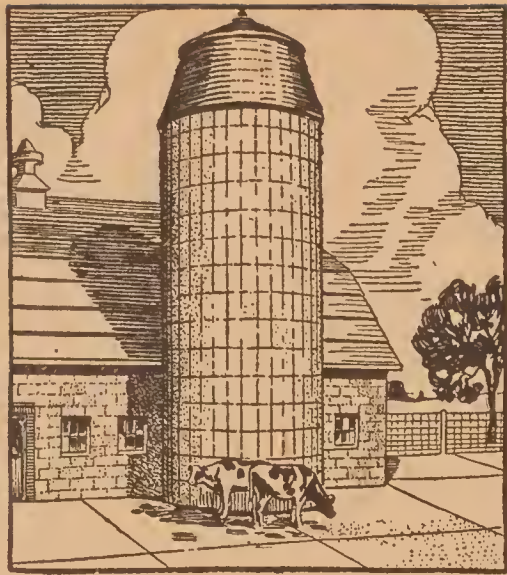
I Shall Find Rest

A little further on—
There will be time—I shall find rest anon:
Thus do we say, while eager youth invites
Young hope to try her wings in wanton flights,
And nimble fancy builds the soul a nest
On some far crag, but soon youth's flame is gone—
Burned lightly out—while we repeat the Jest
With smiling countenance—I shall find rest
A little farther on.

A little further on
I shall find rest; half fiercely we avoid
When noon beats on the dusty field and care
Threats to enjoin our armor, and the glare
Throbs with the pulse of battle, while life's best
Flies with the flitting stars, the frenzied brow
Pains the laurel more than for the breast
Where love soft nestling waits. Not now, not now
With feverish breath we cry, I shall find rest
A little farther on.

I shall find rest; half sad, at last, we say
When sorrow's settling cloud blurs out the gleam
Of glory's torch, and to a vanished dream
Love's palace hath been tamed, then—oh! depressed,
Despairing, sick at heart—we may not stay
Our weary feet, so lonely then doth seem
This shadow-haunted world, We, so unblest,
Weep not to see the grove which waits its guest;
And feeling round our feet the cool sweet clay,
We speak the fading world farewell and say,
Not on this side—alas! I shall find rest
A little further on.

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A.A.'s Western New York Farm and Home Talk



Does Orchard Cultivation Pay?

By M. C. BURRITT

THE editor's remarks about sod and cultivation in orchards, together with the fact that many orchards throughout the fruit belt were plowed



M. C. Burritt

during the first week in June, after blossoming, suggest a discussion of this practice. It is true that the cost of cultivation, more knowledge of the factors involved, cheaper nitrogen and other reasons have caused a decided shift from cultivation to sod. And yet old practices persist to a considerable extent. I should say that 25 per cent or more of our orchards are still cultivated. At least as many more are neglected. I doubt if much more than a third of our orchardists practice a real sod culture.

The old view of cultivation was that it conserved moisture, kept the weeds down and made the orchard look clean and thrifty. Many growers have spent much time and money to get the last weed or blade of grass out of the orchard. The newer, better informed view is that the liberation of nitrates is really the big advantage of cultivation, that weeds do little harm and add humus, and that normally the average apple tree gets plenty of moisture without cultivation. To liberate nitrates so as to be of the greatest benefit to tree growth, bud development and especially to the set of fruit, cultivation should take place at least three weeks before bloom. Unless cultivation can be done well in advance of bloom it is questionable whether there is any advantage in doing it at all. Especially after the orchard soil has become dry and hard, as many now have, I am inclined to believe that June plowing does more harm than good. Our first cultivation of orchards not in sod was on May 11. The trees were in full bloom about June 1st. We cultivated again on May 20th. Further cultivation will be only to fit the soil for a cover crop of buckwheat to be sown late in June.

Other Ways of Adding Nitrogen

We have learned also through our experiment stations and experience, that there are other and perhaps cheaper ways of furnishing nitrates to the trees when most needed. One of these is the growing of nitrogenous crops, such as alfalfa and sweet clover in the orchard. Another is the application of commercial nitrates. I have had one orchard in alfalfa sod for four years and another in sweet clover for three years now, without being able to note any difference in productivity or tree growth between them and cultivated trees. We usually cut the alfalfa twice and leave it on the ground. Grass is gradually running out the alfalfa but checks with cultivation and the application of nitrates here shows no bad effects as yet. In fact, we are able to note little if any effect from the use of four to seven pounds of nitrates per tree. Apparently the alfalfa and sweet clover have maintained a sufficient supply of nitrates.

The Use of Commercial Nitrogen

The use of nitrates in commercial form has increased very greatly throughout this region during the past two or three years. It is too early yet to tell what the results have been. Apparently, the character and condition of the soil together with its other treatment has much to do with the results. Sandy soils need nitrogen and on such soils trees usually respond to applications of nitrates. Old trees in a heavy, non-leguminous sod are more likely to respond to nitrate application. My ex-

perience so far is that on our heavier silt loam soils, there is less response, especially under cultivation or with a nitrogenous cover crop. Many applications of nitrate are wasted because not needed. Others show striking results. The whole matter needs further careful study.

We have had another week—two now—without enough rain to amount to anything. The surface of the ground is getting dry and light rains would help. The excess early rains and the long water soaking of soils has left them hard, compact and leathery and late plowing is very hard. Considerable plowing remains to be done. Some corn and beans and most of the tomatoes were planted during the week. The after-the-petals-fall spray has been completed. In about two weeks now we shall be able to tell pretty definitely about the fruit set. The tennis court is finished and in daily use.—Hilton, N. Y., June 9, 1929.

Net Returns Per Tree From Apples

THERE is published below an interesting table showing the net returns per tree for important apple varieties covering the period 1922-1926 for some Western New York farms. The study was made by the New York State College of Agriculture and published in Farm Economics.

It will be noted that Rhode Island Greenings and McIntosh appear to be two best varieties for Western New York. McIntosh yields were a little above the average and sold for the highest price. McIntosh and Rhode Island Greenings are selling even better in recent years than formerly.

NET RETURNS PER TREE FOR IMPORTANT APPLE VARIETIES

Newfane-Olcott Farms 1922 to 1926

Variety	Average bushels of packed fruit per tree	Average farm price per bushel (package deducted)	Average of the net returns per tree by years
<i>Trees 30 yrs. and over</i>			
R. I. Greening.....	6.02	\$0.79	\$4.53
Northern Spy.....	4.77	0.93	4.34
Twenty Ounce.....	5.15	0.81	4.08
Tompkins King.....	4.73	0.88	4.07
Baldwin.....	5.45	0.77	3.97
Roxbury Russet.....	4.25	0.74	3.15
Spitzenburg.....	4.05	0.79	3.14
Tolman Sweet.....	4.11	0.70	2.83
Cranberry Pippin.....	3.24	0.80	2.54
<i>Trees 10 to 29 yrs.</i>			
Wolf River.....	3.41	0.80	2.22
Stark.....	2.50	0.85	2.00
McIntosh.....	1.29	1.30	1.76
R. I. Greening.....	1.98	0.79	1.46
Hubbardston.....	1.87	0.72	1.41
Wealthy.....	1.80	0.74	1.28
Baldwin.....	1.77	0.77	1.26
Tompkins King.....	1.54	0.88	1.22
Maiden Blush.....	1.90	0.67	1.15
Ben Davis.....	1.65	0.59	.87
Duchess.....	1.61	0.56	.84
Northern Spy.....	.87	0.93	.80

The Mexican Bean Beetle

What control measures have been worked out for the Mexican bean beetle? How long has this pest been in New Jersey?—R. J., New Jersey.

THE Mexican bean beetle can be controlled by dusting or spraying the beans with calcium arsenate or magnesium arsenate. One objection is that the material is too conspicuous if the beans are about ready for market. We understand that the New Jersey College is working to develop a non-staining spray. The Mexican bean beetle was found in considerable numbers in New Jersey for the first time last year.

Pastures may get short in August and cows will then need extra feed. The herd should be watched carefully and if the milk flow shows a marked decrease or the cows begin to lose flesh, increase the feed.

Little Recipes for Little Cooks

Lesson Number Four

by *Betty*

Something New To Make

DEAR LITTLE COOKS:

This month I have three recipes which you are sure to like. I have tried them and know they are good, and easy to make. One of them is creamed potatoes, for mother says that no father of any little cook needs to be hungry if all of you learn to make good creamed potatoes, to scramble eggs and make good cocoa.

This time I am telling you about some dandy muffins that I learned to make. Be sure to try them several times, because the practice on these makes other things, that I'll tell you about later, a lot easier.

You will like the pudding, too. At least I think it is very good and hope that you will try it.

After you have made all these things I would like to have you write me a letter and let me know how you are getting on with these cooking lessons. Lots of little girls tell me that it is great fun and their mothers are pleased, too. I will have some more nice things for you next month.

BETTY.

Muffins

Mother says Little Cooks should practice a lot on muffins so that they will become quite expert because next month we're going to make cookies (chocolate drop cookies), and they would be hard for anyone who had not learned to measure and beat and stir well.

Of course you won't want to make the same kind of muffins all the time till the family is tired of them so I will tell you how to change the recipe a little and make different kinds.

Here's how:

When I want graham muffins, I use only half as much white flour as the recipe calls for and for the other half I take graham flour. That is, if my recipe called for $\frac{1}{2}$ cup flour I would take $\frac{1}{4}$ cup white and $\frac{1}{4}$ cup graham flour. Then I like molasses better than sugar for dark muffins so if the recipe calls for 1 tablespoon of sugar I would take 1 tablespoon of molasses instead.

In the same way I take bran for bran muffins and rye for rye muffins. This really gives me a recipe for four kinds of muffins, you see.

We eat the dark, coarse breads, such as whole wheat, rye, corn, graham and bran because they help us to grow strong, healthy bodies, to have pretty teeth, and rosy cheeks.

Have a good hot fire so the oven will be hot.

Have ready

- $\frac{1}{2}$ cup flour.
- 1 tablespoon sugar.
- 1 teaspoon baking powder.
- $\frac{1}{2}$ teaspoon salt.
- 1 tablespoon beaten egg.
- 4 tablespoons milk.
- 1 tablespoon melted butter or lard.

Large Recipe (15 Muffins)

- 2 cups flour.
- $\frac{1}{4}$ cup sugar.
- 4 teaspoons baking powder.
- $\frac{1}{2}$ teaspoon salt.
- 1 egg.
- 1 cup milk.
- 4 tablespoons melted lard or butter.

Measure and sift together the dry ingredients which are flour, sugar, baking powder and salt.

Into a small bowl break an egg and beat it well before measuring. (Mother saves out a little for me from her cooking if I am only going to use a tablespoon or two). Add milk, and melted shortening (butter) to the beaten egg and add the dry ingredients. Stir and beat well. Grease muffin tins well and fill them half full with the muffin batter. Put to bake in a hot oven. It will take from 20 to 25 minutes to bake them.

There are lots of good muffin recipes which I can send you if you like to make them.

Cream Potatoes

Either freshly boiled or cold boiled potatoes may be used. If potatoes are to be cooked they should be put to cook and the gravy made when they are nearly done. Potatoes for creaming are usually cut into small cubes or larger pieces or left whole. When cold potatoes are used they should be put into the hot white sauce (gravy) to heat for ten or fifteen minutes before serving.

White Sauce

- | | |
|------------------------------|------------------------------|
| 1 cup milk. | (Larger Recipe) |
| 2 tablespoons butter. | 2 cups milk. |
| 2 tablespoons flour. | 4 tablespoons butter. |
| $\frac{1}{4}$ teaspoon salt. | 4 tablespoons flour. |
| Few grains pepper. | $\frac{1}{2}$ teaspoon salt. |
| | Few grains pepper. |

Measure out the butter and put it in the saucepan to melt slowly. Measure flour and add to melted butter and rub or stir till very smooth. Then add the milk slowly, stirring all the time. Cook slowly and stir all the time until the mixture is thick and smooth. Then add salt and pepper.

This may be made in a double boiler.

How we use the white sauce:

When we can make a really nice white sauce we find it easy to prepare a great many good dishes such as creamed dried beef, codfish, egg, carrots, peas, etc., so it is quite an education for a little cook to learn to make this well.

Yum Yum Pudding

Here is the way to make a pudding that tastes as good as the name sounds! First get these things together:—

- 1 cup milk.
- 2 tablespoons cornstarch.
- 4 tablespoons sugar.
- $\frac{1}{4}$ square of chocolate.
- 3 tablespoons cold milk
- $\frac{1}{2}$ teaspoon vanilla.
- 1 egg white.

Put about 1 inch of water in the bottom of a double boiler and put it on the stove to heat. Measure 1 cup milk and put that in the top part of the double boiler and set it in the bottom part to warm. While this is heating cut chocolate fine and measure into a small bowl the sugar, cornstarch, salt, stir and add the cold milk and stir until the mixture is smooth. When the milk in the top of the double boiler is hot add the mixture stirring as you pour it in. When it has thickened add the chocolate and stir smooth. It will need to cook about ten minutes so that there will be no raw taste. Beat the egg white very stiff and fold it into the hot pudding and add the vanilla just before you take it from the stove.

How to Serve the Pudding

Pour the pudding into sauce dishes or sherbet glasses while it is still hot and serve with cream. Or you may rinse out old cups or custard molds with cold water and fill with the hot pudding. Before serving turn out on small plates and serve with a spoonful of whipped cream on top.

My very favorite way of making this pudding is to take only half as much sugar and make it just as before except that instead of adding egg white I put in four marshmallows cut in quarters just before it is done. The marshmallows should soften but not melt entirely.

Mother says the more common name for this is Chocolate Cream Pudding, but I like my own name better, don't you?

Perhaps your mother will want the full size recipe, so here it is:—

- 2 $\frac{1}{2}$ cups milk.
- 6 tablespoons cornstarch.
- $\frac{3}{4}$ cup sugar.
- 2 squares chocolate.
- $\frac{1}{2}$ cup cold milk.
- 1 teaspoon vanilla.
- 3 egg whites.

(Serves Six)

I hope you have good luck and will be able to do these real well before the next lesson, which will be just four weeks. Good bye till then,

Betty



The above picture was taken as Little Betty was showing her dad one of the things that she had baked. Betty, you know, is a real little girl, and has learned to make all the things that she tells you about in these Little Recipes for Little Cooks pages in just the same way that she is telling you. Betty is eight years old and lives on a great big Northwestern farm, which is called Shady Lane Farm. Betty's mother, Mrs. R. C. Dahlberg, is helping her to write these pages for you

A Scrapbook for Each Little Girl

Send for Yours

Some dandy scrapbooks have been made for little cooks to keep these Little Recipe pages in and every little girl should have one. Send for one now. The first lessons are printed right in so that if you have not saved the ones that have already been in this magazine you can start now and have them complete. There is room for you to paste in this and the next twenty lessons. Send ten cents in stamps or money for Betty's Scrapbook. Address your letter to Betty, care of AMERICAN AGRICULTURIST, 461 Fourth Ave., New York City.

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Either a Feast or a Famine

(Continued from Page 3)

America have been using some form of this plan for years.

Our near neighbors, the Philadelphia producers, have used a basic surplus plan since 1919 and it has been in practice long enough in the Philadelphia milk shed to prove its worth. Here is what this plan did to the surplus in Philadelphia. In the year of 1921 shortly after the basic surplus or Philadelphia market plan went into operation farmers sold during May 68% more milk than they did during January. Four years later, in 1925, after the plan had been in force for several years May sales were only 24% greater than January sales. Within the Philadelphia territory during 1922-1926, farmers selling under the basic surplus plan produced 10% more milk per cow in October, November and December, and 5% less in April, May and June than farmers in this same territory who did not sell under the basic surplus plan. On the other hand, in our own territory where the basic surplus plan was not used, for each can of additional milk obtained in November 1926 over that for November 1922, 2½ cans were added to the June surplus.

Plan Helped To Raise Prices

What did the Philadelphia plan do to prices from 1921-1925? During this time, the prices to basic surplus producers in a Philadelphia territory increased 14%. Some of this increase was due to other conditions but F. F. Lininger and F. P. Weaver of the Department of Agricultural Economics of the Pennsylvania State College are authorities for the statement that at least a part of the increased price to Philadelphia producers during these years was due to the basic surplus plan.

Since 1925 some changes in determining the basic amount have been made in the Philadelphia plan but the production during October, November and December is still used as a basis for working out each farmer's basic production. A recent change has been made whereby a farmer's basic amount represents a three-year average production during October, November and December, rather than for these months for any one year. Sometimes producers receive basic price for at least a part of their surplus. There is an agreement between the Interstate Milk Producers' Association and the cooperating dealers that when there is likely to be a shortage of milk for fluid use, the basic price may be paid for a greater quantity of milk than the basic amount. For instance, during July and

August farmers received the basic price for 110% and during September for 115% of their basic amount. The whole idea of the Philadelphia plan and of similar basic plans used by several other milk producers' associations is to give farmers additional encouragement in cutting down summer production and in increasing production during the fall and winter. This is done by paying them a higher price throughout the year for the basic amount of milk than is paid for the surplus above the basic amount.

It Saved Philadelphia Milk Shed

In Philadelphia, the distributors were frequently compelled, before this plan went into effect, to go outside of the milk shed during the fall of the year to meet the demand of the consumers. During the spring and early summer there was a large surplus above that required for fluid sales. This surplus had to be devoted to uses for which it netted the distributor a lower rate, and this low rate generally fixed the price to producers for all of the milk during the spring and summer.

Since the distributors were compelled to maintain channels for the receipt of milk over a large enough area to supply their needs in the fall, the low production in the fall months was responsible for a steady enlargement of the Philadelphia milk shed beyond the size that was needed throughout the rest of the year. This added to the surplus problem each succeeding spring and summer. The distributors were willing to pay a higher price for milk, which was needed through the summer, if by this plan they could be assured of an adequate supply for the fall.

The Philadelphia plan has accomplished just what was wanted. It has encouraged milk producers to increase their basic production in the fall, and therefore has helped them financially and taken care of the seasonal shortage in the market. It has tended to cut down surplus in June, therefore making it easier to maintain good prices during the flush months, and, incidentally, help to cut out price-cutting.

The basic-surplus plan has some difficulties. It probably would work some injustice to certain farmers who have large and good pastures. It would certainly need considerable adjustment if used here. Maybe it would not work. It is hard to be sure of anything in the milk business.

On the other hand, the present situation is causing great injustice to producers of winter milk at the present time and in fact is bad business for all producers, both summer and winter, for if continued all dairymen in this milk shed will lose their markets to outsiders. The basic surplus plan could be so adjusted by freight differentials as to help dairymen living long distances from the market, such as those in northern New York.

In any case, the fact that the New York milk shed is nearly the last one in the country to adopt some form of this plan leads to the conclusion that at least it should have some thought and consideration, especially in view of the fact that our milk production now is so unequal between the summer and winter periods.

Use Proven Sires

RECENTLY in studying the ages of 376 purebred bulls, it was found that 166 of them were under two years of age and 283 of them were under three years of age. It is generally agreed that the most valuable herd sire is the one that has proved that he can transmit the ability to produce heavily to his offspring. This is impossible until his daughters are old enough to

(Continued on Opposite Page)



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CRAINE, Inc.

70 Wilson St., Norwich, N. Y.

(Continued from Opposite Page)

get their first year's production figures. If full use were made of proven sires it seems a fair statement to make that the average production of dairy cows could be increased considerably in the next five or ten years.

The chief cause of sending bulls to the butcher before they can be proven is the supposed danger of keeping an aged bull. There is little or no danger if certain precautions are taken. First the herd sire should be kept in an adequate bull pen so constructed that it is unnecessary to enter the pen unless he is securely fastened. Second, the bull should have exercise. It is not always easy to do this but it is entirely possible. A bull pen with an outside yard helps. Some dairymen use the herd sire in a tread power to pump water. Others report good results from hanging a heavy block of wood at the proper height so the bull can bunt it. Still another idea is to put a heavy cask into the pen for the bull to play with.

The herd sire is always dangerous and should be so regarded. Proper precautions will reduce this danger to a minimum. The herd sire should be dehorned and handled only with a good bull staff. We will be glad to supply any reader with plans and suggestions for a bull pen.

Maine Dutch Belted Cow Makes World Record For Breed

BY producing 16,545.9 pounds of milk, averaging 4.714% fat and 780.087 pounds of butterfat in 365 days Gloria No. 3231 owned by Mr. J. A. Wilson of Maine, has set a new Dutch Belted world's record in butterfat production.

Under the rules for admittance to the Advanced Registry in the Dutch Belted Cattle Association a cow must qualify on both milk and butterfat production.

The placings are made by allowing one point for each pound of fat and one point for every 25 pounds of milk produced. Gloria has to her credit 1442 points making her Champion Dutch Belted Cow by 117 points over



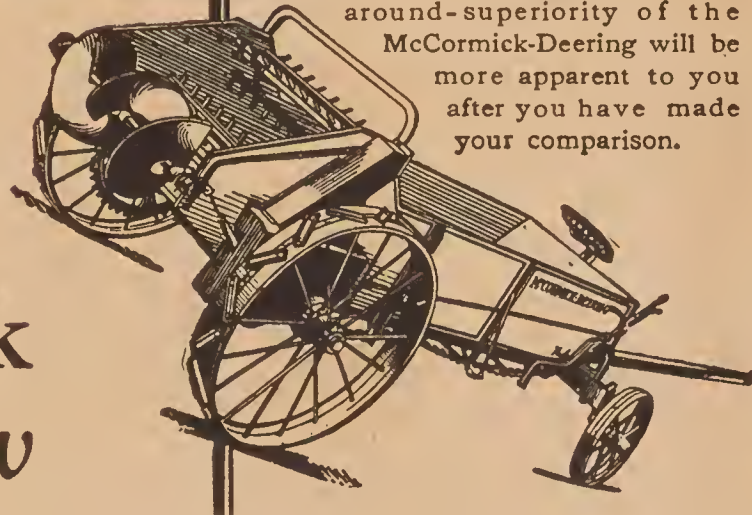
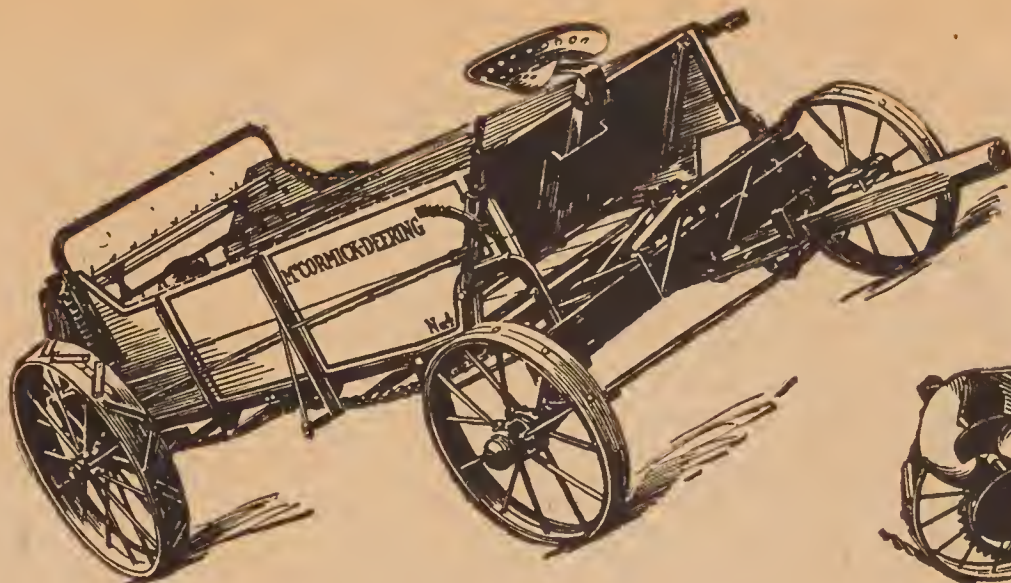
Gloria, a record making Dutch Belted Cow owned by J. A. Wilson, of Maine.

the former Champion, Gem of Columbia, whose record is 17,268.2 pounds milk and 633.863 pounds fat. This record was started when this cow was 3 years and 298 days of age and was supervised according to the rules of the Dutch Belted Cattle Association and the Dairy Department of the Maine Department of Agriculture. Gloria was milked three times a day and fed at milking time 2½ pounds of moistened beet pulp along with a ready mixed commercial dairy ration, moistened with molasses and water at the rate of 1 pound to 3½ pounds of milk. She also had all the mixed hay she would eat, which was of only fair quality.

She reached a maximum of 61.2 pounds of milk her best day and produced 38.1 pounds of milk on her last day of test.

She had no special fitting or preparation for being placed on test before freshening and no special attention while on test over the rest of Mr. Wilson's herd of seventeen cows excepting that she was milked three times daily.

The average production for Dutch Belted Cows is 10,100 pounds milk, averaging 4 per cent fat and 390 pounds fat.—J. D. DAWSON, Mgr. Advanced Registry.



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Steers, calves, yearlings and two-year-olds. Uniform in size. Choice quality. Tested cows and heifers. Many cars. JOHN CARROW, Box 193, OTTUMWA, IOWA

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100 HEAD of T.B. tested Canadian Holstein and Ayrshire cows and heifers, to freshen in Summer and Fall months. Pure bred and high grade cows a specialty. HUTCHINS & LEGGETT, Malone, N. Y.

FOR SALE Togenburg goats, good milking strain, all ages. WM. OLNEY, NAPLES, N. Y.

Milking Shorthorns Accredited herd. Splendid young bulls for sale. WM. E. SUTTON, Windham, New York

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Shetland Ponies Good ones. Special Prices for thirty days. Write your wants to A. B. PORTER PONY FARMS, Atwater, O.

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FEEDING PIGS FOR SALE

Chester and Yorkshire, 7-8 weeks old \$4.75
Berkshire and Chester, 7-8 weeks old \$4.75
8 to 9 weeks old \$5.00

Also few Chester Whites 6 to 7 weeks old \$5.50, and some Jersey Red Durocs 7 weeks old, \$5.50. Sold C.O.D. Keep them 10 days, if not satisfied, return them and your money will be refunded. No charge for crating.

MICHAEL LUX, WOBURN, MASS.

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Heavy-legged, square-backed Berkshire and Chester crossed, and Yorkshire and Poland China crossed. Barrows, boars and sows—8-10 weeks old, \$5.50 each. Also, Chester Whites and Poland China and Durocs from registered Boars—7-8 weeks old, \$7.00 each. We ship sows and unrelated boars for breeding. They are the kind that make large hogs. Shipped C.O.D. No charge for crates. If dissatisfied, return pigs and I will return your money. Yours for quality hogs.

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Let us suggest to you as breeders the best kind of a pig to start to raise is a good one. You save time and money. We sell all pigs with a trial of two weeks, and then if dissatisfied, return pigs and we will return your money.

7-8 wks. old, \$4.50 ea.; 8-10 wks. old, \$4.75 ea. Breeds—Chester and Yorkshire cross, and Berkshire and Chester cross. Crating free. These prices F.O.B. our depot. Will ship any number C.O.D. or send check or money order.

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Your Money's Worth Young Quality Pigs

Chester and Yorkshire—Berkshire and Chester
7 to 8 weeks old \$5.00
9 to 10 weeks old 5.50
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All husky, healthy, fast growing stock. MY GUARANTEE—YOU MUST BE SATISFIED. Will ship any number C.O.D. on approval. If dissatisfied, return at my expense. Crates free of charge. EDWARD BUNZEL, LEXINGTON, MASS. Tel. 0496

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Chester-Berkshire Crossed—Yorkshire-Chester Crossed
6 to 7 Weeks Old \$4.75 each
8 to 9 Weeks Old \$5.00 each

All pigs have the size, quality and breeding. Will ship pigs C.O.D., ten days trial, if not satisfied return at my expense. No charge for crates.

J. W. GARRITY, 7 Lynn St., Woburn, Mass. Tel. 1503-W

Reviewing the Latest Eastern Markets

Milk Prices

The following are the June prices for milk in the basic zone of 201-210 miles from New York City.

Dairymen's League prices are based on milk testing 3.5%. Sheffield on the basis of 3%.

Class	Dairymen's League	Sheffield Producers
1 Fluid Milk...	3.37	3.17
2 Fluid Cream		1.95
2A Fluid Cream	2.16	
2B Cond. Milk...		
Soft Cheese...	2.41	
3 Evap. Cond. Milk Powder		
Hard Cheese	2.20	1.95

4 Butter and American cheese. Based on New York City Market quotations on butter and American cheese.

The Class 1 League price for June 1928 was \$2.90 for 3.5% milk and Sheffield's \$2.70 for 3%.

The above prices in each class are not the final prices the farmer receives. The final price received from the dealer is the result of the weighted average.

May Prices Announced

The Dairymen's League announces the following pool prices for May for 3.5% milk.

Gross	\$2.45
Expenses .....	.06
Net Pool	2.39
Certificates of Indebtedness.....	.15
Net Cash Price to Farmers.....	2.24

May 1928, Net CASH Price, 3.5% milk.....	\$2.01
May 1928, Net POOL Price, 3.5% milk.....	\$2.16
May 1927, Net CASH Price, 3.5% milk.....	\$2.07
May 1927, Net POOL Price, 3.5% milk.....	\$2.22
May 1926, Net CASH Price, 3.5% milk.....	\$1.78 1/2
May 1926, Net POOL Price, 3.5% milk.....	\$1.93 1/2

The Sheffield Producers announce the cash price to producers for 3% milk in the 201-210 mile zone, as \$2.36 1/2 per hundred, (\$2.56 1/2 for 3.5% milk).

May 1928 price to producer,	3% milk, 2.14 1/2; 3.5%, \$2.34 1/2
May 1927 price to producer,	3% milk, \$2.30 ; 3.5%, \$2.50
May 1926 price to producer,	3% milk, \$2.20 ; 3.5%, \$2.40

Butter Market Holding Strong

CREAMERY	June 12, 1929	June 5, 1929	Last Year
SALTED			
Higher than extra....	44 -44 1/2	43 1/2-44	44 1/4-44 3/4
Extra (92sc).....	43 1/2	43	-43 3/4
84-91 score.....	39 1/2-43	39	-42 3/4 40 1/2-43 1/2
Lower Grades.....	38 -39	38	-38 1/2 39 -40

Many unusual features characterized the butter market this week. The into storage movement is heavy, so heavy in fact, that at times there has been

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West Washington Market, N. Y. City

Now is the Time to Ship FOWLS, BROILERS, CALVES, EGGS

We remit daily at top market. Write for coops, tags, information on market prices, etc. Our Mr. Berman has satisfied thousands of shippers for 25 years.

Compare our sales with others
Joseph C. Berman, Inc., West Washington Market, N. Y.

LIVE BROILERS WANTED

If your broilers weigh over 2 lbs., ship them in—don't wait for prices to lower. Ship any day excepting Saturdays. Write for information, tags or advice.

BAEDECKER & WILLIAMS, Inc.,
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EGG CASES

Wholesale dealer and shipper of second hand egg cases. Car lots a specialty.

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WOOL WANTED

Double the value of your wool by having it made into BLANKETS, ROBES and COMFORT BATTING and put it in your home.

Write for particulars.

Shippensburg Woolen Mill,
Dept. M Shippensburg, Pa.

no surplus of goods for immediate trade needs, and current consumption. All classes of buyers are at work. We are right in the midst of the heavy part of the storage deal which is eating into current receipts to the extent that jobbers have got to keep on their toes lest they be caught short for their required supplies to meet the calls of their trade.

Retail buying is heavy and the greatest demand is for the better grades. As a matter of fact, the bulk of the goods arriving score 92 or better. From all indications there is a feeling of confidence pervading the trade, and that combined with the volume of business that is done from day to day is keeping the market in a firm condition. There is some business being done at premiums over those prices quoted above. However, the amount of said business is insufficient to be considered worthy of representing the market as a whole.

The weather has been unusually favorable of late and the quality of the creamery butter is unusually fine. Supplies coming forward are heavy. New York holdings have increased at a tremendous rate. According to the Price Current on June 7 the four largest cities had in cold storage just about twice as much butter as they held on the same day last year. The figures for June 7, 1929 are 15,821,338 pounds, compared with 7,773,596 pounds for June 7, 1928. Furthermore, the into storage movement during the first week in June was about 50% heavier than it was during the same period a year ago, which is a statistical fact that we should not overlook.

Cheese Holds Steady—Trend is Upward

STATE FLATS	June 12, 1929	June 5, 1929	Last Year
Fresh Fancy.....	23 1/2	23 1/2	24 1/2-25 1/2
Fresh Average.....			
Held Fancy.....	27 1/2-29 1/2	27 1/2-29 1/2	30 -32
Held Average.....			29 -30

The gain experienced by the cheese market last week has been held and at this writing it appears that the market is going to make another gain. The trend is distinctly upward. The reason for this statement is that fresh cheese showing full grass is usually held above quotations. There are a few lots of fresh State flats that are still being offered at 23 1/2c but recent arrivals are coming forward at a price that makes it impossible to sell below 25c. Just now it is difficult to sell at that price in the regular trade channels. Buyers can get very good values in full grass Daisies and Young Americas at 24c, all of which means that the West is the controlling factor.

Egg Prices Holding Steady

NEARBY WHITE	June 12, 1929	June 5, 1929	Last Year
Hen's Sel. Extras....	38 -40 1/2	38 -40 1/2	37 -38
Hen's Av'ge Extras....	37 1/2	37 1/2	34 1/2-36
Extra Firsts.....	35 -36	35 -36	32 1/2-34
Firsts.....	33 -34 1/2	33 -34 1/2	31 -32
Undergrades.....	32 -33	32 -33	29 -30
Pullets.....			
Pewees.....			
NEARBY BROWNS			
Hennery.....	35 -40	36 -38 1/2	34 1/2-36
Gathered.....	32 -34 1/2	32 -35	29 1/2-34

Egg prices remain substantially the same as they were last week. Browns of top quality are showing the only improvement. Eggs have been coming in a little more freely of late. Many excellent selections from nearby points are selling from 38c to 40c. At the same time there is a free offering of good quality hennery stock at 36c and 37c.

The market as a whole shows just a little easier condition. There is a continued good demand for the cheaper qualities and fair interest in closely selected mixed colors. However, receipts are running a little heavier than last year, and some receivers are a little cagy about storing June eggs at current prices.

On June 7 the ten cities making daily reports had in their cold storage houses over 3 1/4 million cases of eggs; whereas on the same day a year ago the same cities reported over 4 1/2 million cases. Furthermore, during the first week in June the into storage movement in the ten cities was about fifty thousand

cases short of the same period a year ago. All of which continues to indicate bright prospects for the poultryman.

Live Fowls Continue Easy

FOWLS	June 12, 1929	June 5, 1929	Last Year
Colored.....	29-31	32-34	26-27
Leghorn.....	25-27	30-33	18-23
CHICKENS			
Colored.....			
Leghorn.....			
BROILERS			
Colored.....	30-50	30-48	28-43
Leghorn.....	20-33	20-37	15-33
CAPONS			
TURKEYS.....	20-30	20-30	
DUCKS, Nearby.....	-25	-22-26	18-22
GEESSE.....	16-17	16-17	

The condition we reported in the live fowl market last week continues, only we are sorry to say, more so. Every indication points to the fact that we have apparently too much poultry for the needs of the trade. Freight receivers face a serious problem. Some sort of protection has got to be devised for those buyers who are carrying a large number of cars of poultry who would be seriously embarrassed if there were to be a break in prices. The fact that no cars were to be unloaded Friday and Saturday the 14th and 15th had the effect of steadying matters.

Broilers are not as seriously affected as fowls. Leghorn fowls especially are experiencing difficulties. Fortunately very few fowls are coming by express and the demand is limited. Receipts of broilers, on the other hand, via express are not excessive. The trade has been actually looking for large sizes of choice lines so that on those classifications the market is steady. Rocks and Reds seem to be averaging a little higher. Leghorn broilers, on the other hand, are experiencing pressure with the exception of those that average two pounds or over.

Feeds and Grains

FUTURES	June 12, 1929	June 5, 1929	Last Year
(At Chicago)			
Wheat (Sept.).....	1.10 1/4	1.11	1.39
Corn (Sept.).....	.91 1/4	.89 3/4	.99 1/2
Oats (Sept.).....	.42 3/4	.43 1/4	.45 3/4
CASH GRAINS			
(At New York)			
Wheat, No. 2 Red.....	1.29 3/4	1.31	1.75 1/2
Corn, No. 2 Yel.....	1.07 3/4	1.04 1/4	1.20
Oats, No. 2.....	.56	.56 1/4	.80
FEEDS			
(At Buffalo)			
Grade Oats.....	32.00	30.00	44.50
Spring Bran.....	25.50	25.00	35.00
Hard Bran.....	27.50	26.50	36.00
Standard Mids.....	25.00	25.00	38.50
Soft W. Mids.....	33.00	32.00	43.00
Flour Mids.....	30.50	30.00	41.00
Red Dog.....	34.00	34.00	44.50
Wh. Hominy.....	36.50	35.25	44.00
Yel. Hominy.....	36.50	35.25	44.25
Corn Meal.....	38.00	35.00	42.00
Gluten Feed.....	38.50	38.50	44.75
Gluten Meal.....	46.00	46.00	
36% C. S. Meal.....	37.00	35.00	58.00
43% C. S. Meal.....	40.00	39.00	66.00
34% O. P. Linseed.....	43.00	41.50	68.00
Meal.....	49.50	49.50	52.00

The above quotations are those of the local Buffalo market and are P.O.B. They are reported in the weekly letter of the N. Y. State Department of Agriculture and Markets.

Hay Firm and Higher

Lights receipts, an active demand especially for No. 1 timothy which is extremely scarce, and a fair call for medium grade hay has given us a firm market with advancing prices. If lower grades and sample hay were only as scarce as No. 1 farmers holding medium grade hay would indeed reap a harvest. On June 12 No. 2 hay was easily bringing \$25 to \$26 for straight timothy, with mixtures of grass or clover averaging about \$2 less. No. 1 straight timothy is quoted at \$27 to \$28 but there is precious little of it. Timothy containing light mixtures of grass or clover and grading No. 1 average about \$2 under straight timothy prices. Small bales as usual bring a dollar less.

Trend of the Farm Markets

Special to the A. A. from the U. S. Department of Agriculture, Bureau of Agricultural Economics, Market News Service

Grain continued the most disturbing feature of June market. Prices recovered on prospect of favorable lawmaking or sagged back on the appearance of the June report showing good crop conditions. Live stock, hay, cotton, wool, eggs and butter have followed a fairly steady course in the June market. New potatoes

and other vegetables sell a little lower, with increasing supplies.

Domestic grain markets developed a firmer tone the first week or ten days of June, influenced by prospective reduction in seedings in Argentina because of dry weather. Trade expectations of an early enactment of pending farm relief legislation was also an important strengthening factor. These market conditions were offset by the June crop report showing heavy increase of the winter wheat crop in the United States and improved conditions of spring wheat.

Prices of wheat feeds declined 50 cents to \$1 per ton at the principal markets. Linseed meal prices held about steady, with demand and offerings light. Cottonseed meal and cake continued to decline with only limited demand for the liberal offerings. Corn by-product feeds were firm, influenced by the advances in corn prices. Inquiry for alfalfa meal continued dull and prices declined around 50 cents to \$1 per ton.

Apples in New York, Michigan, the Ozark region, Kansas and Nebraska may be more plentiful than last season, but in most of the other States the crop promises to be smaller. Condition of apples in Washington and West Virginia is far below that of a year ago. New-crop apples have begun to move in a limited way from Tennessee and New Jersey. Georgia expects about 4,000,000 bushels of peaches, compared with 10,000,000 in 1928. The pear crop is forecast at 20,663,000 bushels, a little above the five-year average.

Lighter average yields, as well as decreased acreage, account for the one-third lighter production in the second-crop potato States. All these States show a marked decrease, which should leave the potato market in better condition than last June. The eastern shipping season is early and North Carolina moved 2,130 cars June 3 and 8. Virginia shipped 1,060 cars, as against 150 a year ago.

Fowls have been in larger supply and market has steadily declined under pressure to keep stocks moving. Receipts of eggs at the big markets have been the lightest since 1925. Demand is good, leaving only a moderate surplus for cold storage. Holdings so far as reported are considerably under those of a year ago. Prices have not shown any important net change this month to date and the market level is about 2 cents higher than in mid-June 1928.

Heavy weight cattle were in such limited supply at Chicago the first part of June that so far as prices served as an index of demand, there was no discrimination against weight. Best grades sold a little higher. The lower grades were generally steady, with a few sales a shade lower. Cows, heifers and bulls were scarce. Stocker and feeder trade was generally unimportant and prices were more or less nominal. This was due chiefly to the scarcity of cattle suitable for feeding, rather than to any lack of demand from the country. Vealers showed an advance of \$1 to \$1.50. The extreme top price on fed steers was \$15.25.

The price advance on hogs which was in evidence in early June, continued toward the middle of the month. Chiefly because of a rather dull fresh pork trade along the Atlantic seaboard, eastern packers were limited hog buyers.

The eastern wool markets showed a fair volume of business. Coarser grades were a shade lower. There was some trading in western wools.

CAULIFLOWER and Cabbage Plants. Pedigreed Seed. Selected Plants. Disease free. Safe delivery. See classified column for varieties and prices. F. W. Rochelle & Sons, Chester, New Jersey

HEAVES CAN'T BE CURED with ordinary drugs or powders

It requires treatment of a SPECIALIST. 17 years of exclusive study of HEAVES has produced

WONDER HEAVE REMEDY

Proven on thousands of horses without a failure—and heaves won't come back.

Results Guaranteed or Every Dollar Refunded
Price \$5.00 per large bottle. Write

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NEWTON'S Compound
Heaves, Coughs, Conditioner, Worms. Most for cost. Two cans satisfactory for Heaves or money back. \$1.25 per can. Dealers or by mail. The Newton Remedy Co. Toledo, Ohio.

FARMS FOR SALE

\$2000 Gets Modern Home
100 Acres, good 10-room house, 100 ft. barn, 16 cows, 12 heifers, bull, 3 horses, hogs, hens, growing hay, oats, buckwheat, potatoes, vegetables, also hay loader, gas engine, corn harvester, grain drill, other equipment; substantial income at once, fertile land, 60 acres tillable, fruit, spring water, wood. \$6000 complete, \$2000 cash. Pg. 47. Send now for your free catalog. STROUT AGENCY, 255-R Fourth Ave. at 20th St., N. Y. City.

Farm News from New York and Pennsylvania

Senate Refuses by Close Vote to Kill the Debenture Plan--County Notes

THE prospects that the federal farm relief bill will be passed in the near future received a serious setback on June 11, when the Senate by a vote of 46-43 refused to accept the bill without the provisional export debenture feature. As reported by us last week, a conference between House and Senate Committees had agreed to eliminate the debenture feature which has received so much comment, and which is not favored by President Hoover. In fact, it is quite generally believed that the entire bill will be vetoed unless the debenture feature is eliminated.

It has been intimated that the action of the Senate has a political significance in that they resent the failure of the House to take a roll call on the debenture question. It has been claimed that if the House will take this roll call which will require each representative to come out in the open and state whether he is for or against it, that the Senate will then consent to pass the bill without including the debenture plan. If this should happen, there is an excellent chance that the Senate will attempt to tack the debenture feature on the tariff bill. It is believed, if it comes to a showdown, that Mr. Hoover will prefer to veto the tariff bill rather than the farm relief bill. President Hoover in a statement on June 11, said:

"The vote in the Senate today at best, adds further delay to farm relief and may gravely jeopardize the enactment of legislation. * * * * No serious attempt has been made to meet the many practical objections I and leaders in Congress have advanced against this proposal. It was not accepted by the House of Representatives and has been overwhelmingly condemned by the press and is opposed by many leading farm organizations. For no matter what the theory of the export subsidy may be, in the practical world we live in it will not bring equality, but will bring further disparity to agriculture. It will bring immediate profits to some speculators and disaster to the farmer. "I earnestly hope that the Congress will enact the conferees' report and al-

low us to enter upon the building of a sound agricultural system rather than to longer deprive the farmer of the relief which he sorely needs."

Holstein Friesian Association Holds Annual Meeting

THE Holstein-Friesian Association assembled for its forty-fourth annual convention at Philadelphia on June 5th. Ex-Governor Frank O. Lowden was re-elected president and Dr. L. M. Thompson of Montrose, Pennsylvania, was re-elected vice-president. W. D. Robens of Poland, New York, Fred Pabst of Milwaukee, and T. E. Elder of Mount Herman, Massachusetts, were re-elected as directors. L. T. Winger of Brush, Colorado, was elected in place of Mrs. McCormick.

A resolution was passed recommending that a duty should be placed on all Cana-

dian registered Holsteins coming into the country.

On June 6th and 7th the National Holstein Sale managed by Paul Misner took place. A number of breeders were disappointed in the prices which they received. The bull, Baynewood Calamity Ormsby, consigned by Mr. E. M. Bayne of Romeo, Michigan, topped the sale for \$10,100. The cow, Royal Ormsby, also consigned by Mr. Bayne was the highest female sold, bringing \$6,300. These two animals brought up the average of the sale considerably. Over one-half of the cattle consigned brought in the neighborhood of \$300 each.

National Fertilizer Association Meets at New London, Conn.

FERTILIZER manufacturers, scientists and agricultural newspapers from practically every state in the Union were

represented at the Annual Convention of the National Fertilizer Association which was held from June 10 to 13, at New London, Conn. The convention headquarters were at the Griswold Hotel, which is located on Long Island Sound.

Among the speakers best known to our readers were Louis J. Taber, Master of the National Grange who spoke on "Industry's Interest in Agriculture", Mr. E. S. Bayard, Editor of the *Pennsylvania Farmer* and Dr. J. G. Lipman, Dean of the New Jersey State College of Agriculture. Dr. E. C. Brooks, President of the North Carolina College of Agriculture who spoke on the importance of fertilizer in the economic development of agriculture, as well as a number of men prominent in the fertilizer business. Mr. Merle Thorpe, Editor of the *Nation's Business* was the principal speaker at the annual banquet on Wednesday evening. His subject was "From The Bottom Up Or From The Top Down".

New York County Notes

Syracuse June 20 are making plans to attend. School picnics and family reunions are once again in order. Strawberries are 25c per quart.—Mrs. O. H.

Genesee County—The Oak Orchard Feeder which formerly supplied the Erie Canal with water from the Tonawanda Creek is to be sold by the State. High waters frequently cause damage to farm lands along its banks and the opening from the Tonawanda Creek is to be closed. A children's program was presented at the Majestic Home, Park Place, for the Stafford Grange. Four hundred fifty members were present. Light frosts have damaged gardens and crops on low lands around here. Wheat has dropped to \$1.05 per bushel.—Mrs. R. E. G.

Tioga County—Many weather changes within the past two weeks—the last three days of May were extremely warm, ranging around 80 to 90 in the shade at intervals. Then it turned cooler, and on June 1st and June 2nd frost came. The gardens that were up received a clipping, and it was decidedly cold. Good fires were needed for comfort. But many gardens are now, (June 8), being planted and plants set. Some few farmers have their corn planted or partly done. There have been several days now without a heavy rainfall, though showers are frequent.

Several farm buildings near Halsey Valley and Straits Corners burned recently, and much property destroyed, and some buildings were uninsured.

The state constabulary are endeavoring to diminish the many motor accidents, and are strict in enforcing the law, which is as it should be. Too many reckless or intoxicated drivers have heretofore escaped arrest. A "fine" does not mean much to them. A good stiff jail sentence would accomplish more.

Two deer were recently found in the highway, which had been injured by passing motorists, and had to be killed.

The Farm Bureau picnic will not be held this year on the Agricultural grounds in Owego as it has been for several years past, but instead a Dairy Field Day will replace that event, and it will be held at the farm of Harry Petzold in Wiltonville, under the auspices of the Farm and Home Bureau, and will be an "all day" entertainment for the county. There will be competitions between the townships. Athletic events, games, cattle judging contests, and horse-shoe pitching will be among the diversions. The township scoring the largest number of points will be awarded a prize. Great preparations are being made by different townships.

Chenango County—Chenango County is to have a permanent Children's Health Camp adjoining the Sanitarium at Sherbourne. The committee has bought a small farm and construction of a unit to which room may be added as needed is under way. It is planned also to repair buildings now on the place and in time we hope to have a very complete camp for the care of children who need what cannot be had in their homes. A week of extremely hot weather gave farmers a chance to get crops in. Corn is planted and a few early cabbage set. Since the heat there has been three hard frosts but nothing seems seriously hurt unless it is the fruit trees. Strawberries are in full bloom and unless hurt by frost, growers look for a large crop.—M. M. H.

Schenectady County—Farm work is being rushed since the weather changed. Tractors have helped those who have them very much. Gardens have not ad-

vanced very far, the weather being too cool. The Kiwanis of Schenectady entertained the Farm Bureau members at a dinner at the Hotel Van Curler the 5th and a good delegation was present. The 4-H Club is active in this county and doing good work.—S. W. C.

Oswego County—We have had a few nice days. On the 5th we had quite a rainstorm and it has been quite cool since. On the 7th we had a hard frost which froze quite a good many tomato plants. Farmers are still sowing oats. Some are planting corn. Not many potatoes have been planted yet. The season is the latest which has occurred in 50 years. The hay crop will be light. Pastures are good. There will be more onions raised on account of this. There is a large acreage of beans being planted and cucumbers. Labor is high. No cabbage has been set yet only early ones. Potatoes are selling at 60 to 75c, eggs 30 to 35c, cows from \$100 to \$150 and veal has kept up. There are no pigs for sale. The roads are full of new cars and a number of new roads are being made.—J. S. M.

Sullivan County—Liberty had an election to vote on an airport for the town but was defeated by 61 votes. A \$75,000 still near Parksville was wrecked by dry ralders and a quantity of raw alcohol was found on the premises. Several buildings have been burned by electric showers and much damage has been done. The "Italian Gardens" was sold to Mrs. Dominco Gatto for \$25,000. It is one of the beauty spots of Sullivan. Grass is coming along well and gardens are being cared for. Milk remains about the same as well as eggs and butter.—P. E.

Columbia County—A week of nice corn growing weather. Chathamites have the measles. The Claverack 4-H Club held an entertainment in Grange Hall. There was an admittance fee to help pay the expenses of delegates to Junior Field Day. Over 1600 books in Kinderhook Library. Mr. Boucher of Hudson caught the largest trout so far in Columbia County. Rod and Gun Club Contest. It is 16½ inches long. The Court of Honor of the Boy Scouts of America was held in Valatie and badges were presented to members. This followed a Parent-Teachers association meeting. Ancram Lead Mines mail is now delivered by a rural carrier coming from Copake Falls. The old P. & E. R. R. contract with the government is terminated. Shortage of water in Hudson is due to a broken water main near Churchton Reservoir. Eggs are 30c a dozen.—Mrs. C. V. H.

Saratoga County—The few fair days of last week gave the farmers an opportunity to get in some crops and many acres of oats were sown and some corn planted. Gardens are very late but growing nicely. Pomona Grange meets June 15 and Gansevoort Grange June 8. Turkey eggs seem to be hatching well. Schools are nearly over for this spring, examinations soon. The few hot days were very hard on the horses so many hired tractors to work. Butter is 45c. eggs not as plentiful and higher in price.—Mrs. L. W. P.

Orange County—Prospects of good hay crop. Just now the strawberry season is beginning and it promises to be a good one. The County Board of Supervisors has made plans for a 98 mile system of cross highways, to take about ten years to complete. This plan must first have the approval of the State Highway Department.—D. C. H.

Notes from Pennsylvania

PENNSYLVANIA State Fairs will become a real thing instead of an alleged misnomer, such as had been the case for many years past, as Governor Fisher recently approved, by his signature, the new bill passed by the Legislature, which provides the almost fabulous sum of \$1,340,000 for the erection of a monster farm show building at Harrisburg. The immense structure will be erected upon state-owned real estate, hence the net amount is available for the building operation. An additional amount of \$25,000 is available for necessary grading of the grounds. The area to be covered by the new building is about twelve acres, all under one roof.

The funds are now available, and the active operations will be speedily pushed by the state officials and contractors, but it is not expected that the building will be placed in readiness in time for the coming winter show, which is usually held every year, early in January. Governor Fisher certainly has again proved himself to be the genuine, earnest friend of all agricultural and kindred interests, as well as our splendid public roads. Appropriations amounting to \$6,311,000 were approved for the use and benefit of the Pennsylvania State College, located at Bellefonte, Centre County.

The items approved for the use of the State College stand out prominently as follows:

Maintenance, \$2,340,000.
Agricultural research, \$300,000.
Oil Research, \$50,000.
Agricultural extension work, \$650,000.
New Building, \$2,250,000.
To wipe out old debts of the college, \$711,000.

That the Commonwealth of Pennsylvania stands second to none is made plainly clear along these progressive and notable lines, as indicated by such wonderfully rich and liberal financial and moral support on the part of the Governor and Legislature.

Nut Growing Attracts Interest

The almost total extermination of the American Chestnut timber growth along the Atlantic coast by the chestnut tree blight involving the loss of many millions of dollars again suggests the additional appropriation of a liberal fund to be devoted to the general subject of nut culture. The fungus disease of the chestnut tree has not been successfully combated, as thousands of dead trees will testify to

travellers by train, or automobile, and these bear mute evidence to the fact that the supply of dead chestnut timber is too large to be judiciously utilized.

Strange as it may read, these are various varieties of nut trees, and the black walnut in particular, which could be planted to replace the ill-fated chestnut, a statement which alone is an appeal for practical research work along nut culture in Pennsylvania.

Pennsylvania's Fruit Crops

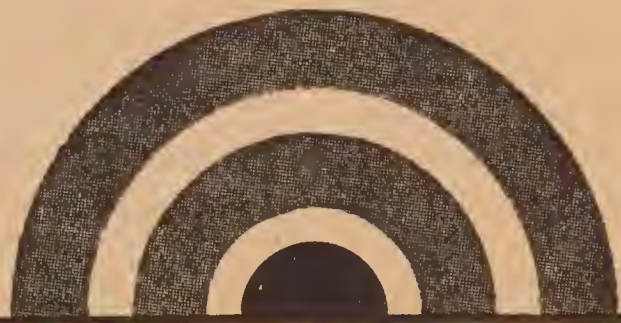
Statistics compiled by State markets officials show that last year 4506 carloads of apples, peaches, grapes, plums and pears were shipped to points both within and outside the Commonwealth of Pennsylvania. Rail shipments have materially decreased during the past two years due to the constantly increasing use of motor trucks. Apples, as usual, constitute the bulk of Pennsylvania fruit shipments, numbering 2621 carloads. Grapes comprised 1068 carloads; peaches, 806 cars; pears, 10 cars; and but a single solid car of plums was shipped.

Adams county led in apples, (1026 cars) and was second with peaches (806 cars). Franklin county was first in its product of the peach crop (358 cars). The general prospects for Pennsylvania apples this season are reported as being above the average.

* * *

Crawford County—Heavy frosts here June 6 and for several nights before. It seemed to whiten corn leaves, beans and cucumbers but not kill them. Most farmers are putting in oats and corn at last but some gave up oats. Several have potatoes in and some are trying certified seed for the first time. Serious talk of a bull block being formed among Jersey herdsmen. Nearly everyone in a circle around Geneva is leasing their farms for oil drilling. Eggs are 30c.—Mrs. C. B. L.

Northampton County—The weather has become normal and the crops are making fair growth. Cattle are out on pasture and the meadows look fine. Cows are doing well. More than ever the chicken business is being taken up and many brooder houses are being erected. Eggs are 38c and butter 54c. Pigs are not as plentiful as last year. Many forest trees have been planted this year. The Dairymen's League held a banquet May 11. We are hoping for fair weather.—F. P. H.



The World's Best Bone and Body Frame Builder

Like all Larro Mash, Larro Growing Mash contains the correct amount of dried buttermilk, minerals, vitamins. Its ingredients are clean, safe, wholesome — no fillers or rubbish of any kind. Its uniformity is assured by exclusive standardizing processes used in no other feed plant. The results secured by thousands of feeders prove that it is in every way the ideal feed for the growing bird. Feed it together with Larro Growing Grains following the directions printed on the Larro Growing Mash sack.

CAPACITY—the goal you try hardest to reach in raising pullets—is made easy with Larro Growing Mash. The weight, the size, the big bone, the width across the back, and the depth of body which prevails in Larro-raised pullets is evidence of the greater "capacity" always developed by that wonderful bone and body frame builder, Larro Growing Mash.

Larro-raised pullets have that vigor, vitality and stamina that enable them to stand up under the strain of long, continuous laying.

It takes only eight pounds of Larro Growing Mash to build the necessary bone and body frame into your pullet—to give her that capacity which means heavy and consistent egg production and profit.

Think of it! Just a few cents' worth of this high quality growing mash will do the job. You can't afford to take chances with home mixes and cheap rations when you know that Larro Growing Mash will get the results in quick, safe and substantial growth. It is profit over the feed bill you're looking for and Larro Growing Mash gives it in abundance.

Ask your Larro dealer to send you a trial order of Larro Growing Mash. If you don't know who sells it, write The Larro Milling Company, Detroit, Mich.

THE LARROWE MILLING COMPANY

DETROIT, MICHIGAN



Larro

FEEDS THAT DO NOT VARY

Chick Starter Chick Grains
Growing Mash Growing Grains
Egg Mash Scratch Grains



With the A. A.
Poultry Farmer



A Warm, Dry Henhouse

OUR poultry house is situated just under the crest of a hill on a southern slope. Two large apple trees to the west and southwest furnish great protection from the cold westerly winds. The building is 60 feet long by 20 feet wide with an underground room five feet high at the front. The north side is supported by a cement wall one to three feet above the ground level. It was built of lumber taken from an old building and part was sawed from logs cut in our woods. The outside is covered with the best grade of green gravel-surfaced roofing. This gives cheap construction, good appearance and effective insulation from outside temperature. Water does not freeze in this building nights, unless the outside temperature reaches as low as 15 degrees Fahrenheit, with a brisk wind. No artificial heat has ever been needed even in the coldest weather; the water is warmed occasionally with the tea kettle.

Sliding Windows for Ventilation

Near the center, both upstairs and down, is a solid board partition with a door which has always been left open. On each end, west and east, is a large sliding window which gives good circulation of air in the summertime. Openings next to the eaves at the back are also provided. These are always tightly closed in the wintertime. All other windows are on the south front, of which there are ten about three by five feet in size on the upper floor; between these windows are five openings about the same size, located as high up as possible so that the wind does not strike directly on the floor and the sunshine reaches back to the farthest part of the room.

The roosts are at the north side, sealed above and at the rear with matched lumber. Under them the nests slide in and out in sections. The nest doors are hung with screen door hinges. At the center of the building lengthwise, nailed to the center posts is a wide board dividing the floor space. The half at the front is the scratching floor where clean straw is provided and the hens dig for their grain. When the litter becomes too fine and reduced in quantity, it is transferred to the back side where it remains for a while longer. This system provides for sanitary conditions with less than half the scratching materials. Cabbage, sour milk and mash are fed near the back where the litter is not so deep and troublesome. Windows under the roosts are not needed. They never let in any sunshine and spoil the seclusion of the nesting place.

Lights in the Winter

Six forty-watt electric bulbs with shades hung about three feet above the scratching floor provide ample light. They are turned on at five A. M. by a "Tort" clock and go off as daylight is breaking. We never light them nights. "Early to bed and early to rise" is the natural life for a hen. I do not favor the modern citified notion of keeping them up late nights. The openings between the windows at the front are

fitted with frames covered with factory cloth which swing up to the roof and fasten. They are always closed at night in the winter time. There is sufficient ventilation for cold weather around these frames and the windows which are only nailed in. Four openings in the floor at convenient places give the hens easy access to the underground which is always warm in winter and cool in summer. Two tight doors near either end, fitted inside with wire covered frames provide for access and ventilation. They are closed or opened according to the weather. The underground is nearly as well lighted with windows as above. The cleaning is less trouble than would be supposed, as the hens scratch all the accumulations down hill to the front where they are easily removed.

A Dry House

Dry mash is kept before the hens in troughs below as it is above and where a wet mash is fed part is given down here. All the other activities of the hens except digging and dusting in real dirt are on the upper floor. We have never had any trouble with dampness in this house. The underground room keeps the floor warm and dry, the longer litter is left the drier and dustier it becomes. The importance of plenty of plain old-fashioned window glass in the poultry house is not enough appreciated. Sunshine is the great dispeller of dampness. Openings, if too large, let in too much cold along with the light and sunshine.

The more nearly conditions in the poultry house can approximate those of the early springtime, the better will be the prospect for heavy and continued egg production. This house has been in use for seven years and has proven very satisfactory. When my plan of farm management calls for one thousand instead of five hundred hens I expect to build another just like it.—Herbert Allen, New York.

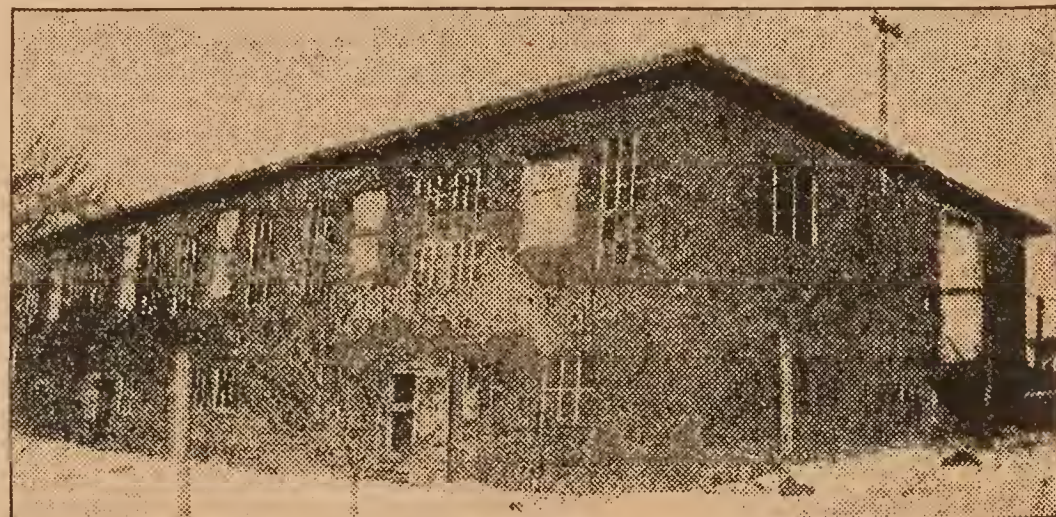
Milk for Coccidiosis

PRACTICALLY every farm where poultry is kept, even a new poultry plant on virgin soil, is likely to be infested with the dreaded coccidiosis-spreading parasite, microscopic in size, which causes the deaths of millions of baby chicks each year. Recommending strictest sanitary conditions, Dr. J. R. Beach of the University of California advises that while the feeding of milk is of value it is often difficult to get chicks to drink enough liquid milk to give the best results.

Dr. Beach says that milk in the form of dry skim milk is very palatable and is relished by the chicks. When dry skim milk is fed he recommends a mash consisting of 40 lbs. dry skim milk, 30 lbs. yellow corn meal, 20 lbs. ground barley and 10 lbs. wheat bran. Ground rolled oats may be used in place of the barley.

Chicks Appear Sleepy

The mash should be fed as soon as the
(Continued on Opposite Page)



Mr. Allen's henhouse which has an underground shed.

BABY

CHICKS

(Continued from Opposite Page)

disease appears. The first symptoms are sleepy, unthrifty appearing chicks with droopy wings. The chicks show a marked loss of appetite. The droppings may be soft, light yellowish, and in some cases tinged with blood. The parasite which causes the trouble lives in the small intestine and blind pouches of the chick and severely injures the delicate lining in passing from one cell to another. The special dry milk ration used to check coccidiosis and build resistance to the disease will cause more or less of a watery diarrhea which is not harmful to the chicks.

If scratch feed was being fed when the disease appeared the amount should be restricted to from one-third to one-half the weight of the dry milk-mash consumer.

Daily removal of soiled litter is important. If the dampened litter is left on the floor ideal conditions are created for further spreading of the disease. The soles of shoes that have come in contact with such litter should be disinfected. Contamination is easy unless every caution is used. This risk can be greatly reduced by wearing a special pair of rubbers and by having a pan of disinfectant outside the brooder house to use when entering and leaving.

How Fast Should Chicks Grow?

How fast should my chicks grow? Poultrymen who want to know whether their young stock are making normal growth frequently ask this question. The New Jersey Agricultural Experiment Station, recognizing the need for accurate information on the question, has weighed large numbers of chickens and used the data thus collected in preparing growth standards.

As applied to the Leghorn breed, these standards show that each chick should average one pound in weight between the ages of six and seven weeks. By the end of the ninth week their average weight should be one and one-half pounds, and at 12 weeks approximately one and three-quarter pounds each. Pullets only, of the Leghorn breed, should average two pounds at 15 weeks, three pounds at 20 weeks, and three and one-third pounds at 24 weeks.

Heavy breeds such as the Rhode Island Reds and Barred Rocks, according to the growth standards, ought to average one pound each at seven weeks, a pound and a half at nine weeks, and a fraction over two pounds at 12 weeks. Pullets alone, of these heavy breeds, should average two and one-half pounds at 15 weeks, and four pounds at 23 weeks.

Where New York City's Eggs Come From

It is interesting to note the states from which eggs are shipped to New York City. For example, recent figures from the U. S. Department of Agriculture for April, show that Iowa was the heaviest shipper of eggs to New York city with nearly 230,000 cases; that Illinois was second and that Indiana was third. New York State is a bad fourth with not quite 93,000 cases.

Plans for laying houses, colony brooder houses, catching crates, trap nests, indoor and outdoor dry-mash feeders, and outdoor feed hoppers are available in bulletin E 139, "Plans of Cornell Poultry Houses and Their Appliances," recently reprinted by the office of publication, state college of agriculture, Ithaca, N. Y.

Lameness is one of the first symptoms of tuberculosis in poultry.



To Kill Poultry Lice - Just Paint it on the Roosts!

No matter how big the flock or how lousy, only a small paint brush and a can of "Black Leaf 40" are needed to rid a flock of lice.

Does Away With Individual Handling
Old laborious and disagreeable methods of dusting, dipping or greasing are eliminated. No longer necessary to disturb the birds.

Treat Whole Flock in a Few Minutes
Simply "paint" "Black Leaf 40" on top of roosts. When birds go to roost, fumes are slowly released, penetrating the feathers and killing the lice. "Black Leaf 40" is sold by poultry supply dealers, druggists, hardware and seed stores, etc. The \$1.25 size treats 100 feet of roost. Ask your dealer.

Tobacco By-Products & Chemical Corp., Inc., Louisville, Ky.

"Black Leaf 40"
WORKS WHILE CHICKENS ROOST



CHICKS with vim and vigor

Hatched by men with 19 years experience, from culled flocks. 100 per cent live delivery guaranteed by Prepaid Parcel Post at the following prices:

PRICES FOR JUNE AND JULY

S. C. White Leghorns.....	9c each—\$	80.00	per 1000
S. C. Brown Leghorns.....	9c	80.00	" 1000
Barred Rocks.....	10c	90.00	" 1000
S. C. R. I. Reds.....	12c	110.00	" 1000
S. C. Black Minorcas.....	12c	110.00	" 1000
H. B. Mixed.....	9c	80.00	" 1000
L. B. Mixed.....	8c	70.00	" 1000

\$1.00 will book your order. Catalogue free.

THE PENNSYLVANIA HATCHERY
LIVERPOOL, PA.

CHERRY HILL CHICKS

S. C. W. Leghorns—Wyckoff Strain.....	100
S. C. Everlay Brown Leghorns.....	8.00
Barred Rocks and R. I. Reds.....	10.00
Heavy Mixed.....	8.00
Light Mixed.....	7.00

½c less per chick in 500 lots, 1c less in 1000 lots. For less than 100 chicks add 2c per chick. 100% live arrival guaranteed. Parcel post prepaid. Bank reference. Order direct from this adv. or write for free circular.

CHERRY HILL POULTRY FARM,
WM. NACE, Prop., Box A, McALISTERVILLE, PA.

PENNA. "State Supervised" CHICKS



Flocks inspected by officials from the Penna. Dept. of Agriculture.
S.C. Wh. & Br. Leghorns.....11c ea.
Bd. Rocks & Bk. Minorcas.....12c ea.
S.C. Reds 14c. Assorted 8c & 9c ea.
\$1 books order. 100% live del. guaranteed. Our 19th yr. Catalogue free.

THE KEYSTONE HATCHERY,
(The old reliable plant) Box 80, RICHFIELD, PA.

SPECIAL SUMMER PRICE REDUCTION 200,000 CHICKS 1929

GOODLING'S SUPER QUALITY

White Leghorns.....	25	50	100	500	1000
"Barron & Tancred Strains".....	\$2.75	\$5.00	\$9.00	\$42.50	\$80.00
Bd. Rocks & S.C. Reds.....	3.00	5.50	10.00	47.50	90.00
Broilers, Heavy Breeds.....	2.75	5.00	9.00	42.50	80.00
Broilers, Light Breeds.....	2.50	4.50	8.00	37.50	70.00

Order direct. Prepaid. 100% Live arrival guaranteed. \$1.00 will book your order. Circular free.

THE VALLEY HATCHERY, Box A, R. No. 1, RICHFIELD, PA.

BABY CHIX THIS IS MY 11TH YEAR OF EXPERIENCE

Cash or C. O. D.....	25	50	100
Barred Rocks.....	\$3.00	\$5.50	\$10.00
Tancred Strain S.C.W. Leghorns.....	2.50	4.50	8.00
Heavy Mixed.....	2.75	5.00	9.00
Light Mixed.....	2.25	4.00	7.00

These chicks are from free range and heavy egg producing flock. 100% live delivery guaranteed to your door. Write for Special Mating prices.

FRANK NACE, Cocolamus, Pa., Box No. 120

Quality Chicks at Low Prices

Variety.....	100	500	1000
United Strain Leghorns.....	\$7.50	\$36.00	\$70.00
Barron or Wyckoff Leghorns.....	8.00	37.50	75.00
Special Leghorn Wyckoff only.....	9.00	42.50	80.00
Barred Rocks.....	9.00	42.50	85.00
Mixed Chicks.....	7.00	34.00	65.00

L. E. STRAWSER, McAlisterville, Pa.



Klines Barred Rocks

Healthy stock, Penna. State College males. Strong chicks guaranteed. Prompt del. C.O.D. \$10.00-100. \$90.00-1,000. Write or wire.
S. W. Kline, Box 40, Middlecreek, Pa.

Hall's Chicks

Leghorns·Reds·Rocks·Wyandottes

W. LEGHORNS
12c

S. C. REDS,
15c

B. ROCKS,
16c

W. WYANDOTTES
18c

For orders of 25 chicks add 75c. For orders of 50 chicks add \$1.00. Special Mating chicks, \$2.00 per hundred extra. From New England Accredited stock, free from White Diarrhea. 100% delivery guaranteed. Circular. HALL BROS., Poplar Hill Farm Box 59 Wallingford, Connecticut

WOLF SELECTED CHICKS

CHICKS C. O. D.

Send only \$1.00 and pay Postman the balance

Special pen mated and extra high bred chicks at slightly higher prices. Shipment made any time you wish.	25	50	100	500	1000
S. C. Wh. Br. & Buff Leghorns, S. C. M. Anconas.....	\$2.25	\$4.25	\$8.00	\$38	\$75
Bd. & Wh. Rocks, S.C. & R.C.R.I. Reds, Bl. Min.....	2.50	5.00	10.00	48	95
White Wyandottes, Buff Orpingtons.....	3.00	5.00	11.00	52	100
Jersey Black Giants.....	4.50	8.50	15.00	72	140
Heavy Mixed.....	2.75	4.50	8.50	40	80
Light Mixed.....	2.00	4.00	7.00	34	68

LAST HATCH JULY 1st.

WOLF HATCHING & BREEDING COMPANY, Box 1 Gibsonburg, Ohio



IMMEDIATE DELIVERY

STOP! LOOK! LISTEN!

Cash or C.O.D.....	25	50	100	500	1000
Wh. Wyandottes.....	\$3.50	\$6.50	\$12.00	\$57.50	\$110
Rocks or Reds.....	3.00	5.50	10.00	47.50	90
Wh. Leghorns.....	3.00	4.50	8.00	37.50	70
Heavy Mixed.....	3.00	4.50	8.00	37.50	70
Light Mixed.....	2.50	4.00	7.00	32.50	65

From carefully selected free-range flocks. 100% arrival. Postpaid. Valuable illustrated 96-page booklet FREE. Telling all about poultry.

The Commercial Hatchery,
Box 75-A (The dependable plant) Richfield, Penna.

BABY CHICKS

From Heavy Laying Free Range Flocks

S.C.W. & Br. Leghorns.....	\$2.50	\$4.50	\$8.00	\$37.50	\$70
S.C.W. & Wh. Rocks.....	3.00	5.50	10	47.50	90
Buff Orpingtons & Reds.....	3.00	5.50	10	47.50	90
White Wyandottes.....	3.00	5.50	10	47.50	90
Assorted Chicks.....	2.25	4.00	7	32.50	60

100% prepaid safe delivery guaranteed.

Order from this ad. or write for circular
Box 161
J. N. Nace Poultry Farm RICHFIELD, Pa.

TAKE NOTICE 150,000 CHICKS FOR June and July Delivery

S. C. White Leghorns.....	25	50	100	500	1000
Barred Rocks.....	\$2.50	\$4.50	\$8.00	\$37.50	\$70
Rhode Island Reds.....	3.00	5.50	10.00	47.50	90
Silver Laced Wyandottes.....	3.50	6.50	12.00		
Light Mixed.....	4.00	7.00	32.50	60	
Heavy Mixed.....	4.50	8.00	37.50	70	

From carefully selected free range flocks. 100% arrival. Postpaid. Write for illustrated catalogue.

The Richfield Hatchery, Box 80, Richfield, Pa.

BABY CHICKS ORDER DIRECT from this ad. and save time.

Free Range Bred.....	25	50	100	500	1000
Wh. & Brown Leghorns.....	\$2.25	\$4.25	\$8.00	\$39.00	\$75.00
Anconas & Black Leghorns.....	2.25	4.25	8.00	39.00	75.00
White & Barred Rocks.....	2.75	5.25	10.00	49.00	95.00
Col. Wyand. & R. I. Reds.....	2.75	5.25	10.00	49.00	95.00
Heavy Mixed Broilers.....	2.50	4.75	9.00	44.00	85.00
Light Mixed Broilers.....	2.00	3.50	6.50	31.50	60.00

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Ferris Strain White Leghorns.....	50	100	1000
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Basom's Barred Rocks.....	5.50	10.00	90.00
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hatched by the best system of incubators from high class bred-to-lay stock. White, Brown, Buff Leghorns, Anconas \$11.50 per 100; Barred, White Rocks, Minorcas, Reds \$13.50 per 100; White Wyandottes, Buff Orpingtons \$14.50 per 100; Giants \$17.00 per 100; Heavy Mixed \$10.00 per 100; Light Mixed \$8.00 per 100; Pekin Ducklings \$30.00 per 100. Add 25c on orders for less than 100. Safe delivery guaranteed by parcel post.

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White Leghorns.....	\$2.75	\$5.25	\$8.00	\$37.50
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Heavy Mixed.....	2.75	5.25	8.00	37.50
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In effect June to October.....	25	50	100	500	1000
Large Type Wh. Leghorns.....	\$2.00	\$4.00	\$8	\$38.50	\$75
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Barred Rocks.....	10 per 100
S. C. Red.....	10 per 100
Heavy Mixed.....	9 per 100
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500 lots ½c less; 1000 lots 1c less.

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AMERICAN AGRICULTURIST

Dramatics Contest Plans Are Announced

Soon the Preliminary County Contests Will be Held

ALREADY plans for the 1930 Community Dramatics Contest for New York State have been completed and announced. As in former years the contest begins in the counties which are grouped according to districts. The communities of a county compete against each other for first place, often at the county fair. November 15th is the date set when all county contests

York State College of Agriculture. County home bureau committees and in one county the Pomona Grange will carry out the plans in the counties. The districts with their contesting counties are as follows:

Western Dist.	Chenango County
Erie County	Broome County
Genesee County	Tompkins County
Wyoming County	Northern Dist.
Allegany County	St. Lawrence
West Central Dist.	County
Ontario County	Jefferson County
Steuben County	Oswego County
Schuyler County	Eastern Dist.
Chemung County	Ulster County
Central Dist.	Dutchess County
Madison County	Saratoga County

As an aid in selecting plays, not only for the contest but for all community activities, the Rural Social Organization Department of Cornell at Ithaca, New York has a list of approved plays which they send to people who request it. They also have a loan library of plays which may be borrowed for selection purposes.

A recent news report of the progress of the next contest is as follows:

Erie County is holding its county contest June 28th at the County Field Day at Hamburg. This is an annual event in the Erie County Field Day which has created considerable interest.

St. Lawrence County is using the device of the entry fee this year to prevent withdrawals for trivial causes. The county committee had a meeting recently, at which rules for the county contest were drawn up and plans for holding the contest were discussed. The rule on entry provides that each community entering deposit two dollars with the application. This money is refunded to the community after the play has been judged. Four communities have paid their deposits and six more have signified their intentions. We hope they all come through.

Ulster County reports that four communities have already entered their county contest. This is a good start for a contest that will be held in November.

The Tompkins County Committee met recently to confer with the Secretary of the Tompkins County Fair. The contest will be held in connection with the Little Country Theatre at the

Ithaca fair August 6, 7, 8 and 9. The fair association is giving splendid co-operation in providing a building.

Useful Pamphlets

The following booklets can be secured by addressing Household Department, AMERICAN AGRICULTURIST, 461 Fourth Ave., New York City.

How to Make Crepe Paper Costumes—10c.
How to Make Crepe Paper Flowers—10c.
How to Decorate Halls, Booths and Automobiles—10c.
Weaving with Paper Rope—10c.
Sealing Wax Craft—10c.
Betty's Scrapbook of Recipes for Little Cooks—10c.
Fashion Catalogue—12c.
Art of Embroidery, teaching all the important stitches used in embroidery—25c.
Yarncraft—directions for making many kinds of sweaters, caps, afghans, and coolie coats, both knitted and crocheted—25c plus 5c for mailing.

More of Betty's Letters

Dear Betty:

Would you please send me one of your scrapbooks with the first two issues already in it.

Your friend,

A. Q., New York.

P. S.—I saw a recipe for rhubarb and I wish you would try this one.

Cut your rhubarb up (about two quarts when all cut up).

Add about a cup of water and cook without very much stirring until soft.

When cooked add about 1½ cup sugar and stir up well. A little spice may be added.—A. Q.

* * *

Dear Betty:

I do not have any little girls to use your recipes but I do have four sons who wish to learn to cook. They are saving each page of recipes and are anxious to get the scrapbook for which I enclose ten cents.

I believe these pages are a fine thing for all little folks, boys as well as girls and I hope every mother who reads the AMERICAN AGRICULTURIST will save the recipes and interest their children in using them.—MRS. A. A., New York.

* * *

Dear Betty:

I am sending ten cents for a cooking scrapbook. I want to keep all the

recipes printed in the AMERICAN AGRICULTURIST. I've tried them all but I like the cup cakes best. The other day I made twenty-one and they were gone the same day. I have three sisters and a brother and we all like cake. I am nine years old but I have never done any cooking till I found your page in the magazine. I think it's lots of fun, I'm going to keep on cooking. Hoping to be a good cook, I am—F. S., Conn.

* * *

If you want a lovely scrapbook just the right size for pasting the Little Recipes into send ten cents for one to Betty, c/o American Agriculturist, 461 Fourth Ave., New York City.

Another Boy's Recipes

Nut Cake

1 cup of sugar
½ cup of butter
Add two eggs well beaten
½ cup of milk



PORCH PILLOW No. B5167 is modernistic in its design of orange colored oilcloth with patches of green, light and dark blue oilcloth cut ready to applique on. Package includes black piping for trim together with oilcloth back and patches. Price 50c. Address Embroidery Department, American Agriculturist, 461 Fourth Ave., New York City.

1½ cups of flour
2 teaspoons of baking powder
1 cup of chopped nuts

Mocha Icing

¼ cup of butter creamed with 1 cup of powdered sugar
2 teaspoons of cocoa
2 tablespoons of strong hot coffee
L. N., New York.

Pictures You Want To See

(Recommended by National Board of Motion Picture Review.)

(hs means suitable for high school age.)

(j means suitable for juvenile audiences)

hs—THE BLUE DANUBE—Pathe—7 rls.

—Leatrice Joy—A romance laid in Austria at the time of the World War in which a baron falls in love with an inn-keeper's daughter. Good settings. (Original screen story by John Farrow.)

j—THE CANYON OF ADVENTURE—First National—6 rls.—Ken Maynard—Romance laid in California. How a young American joins a band of outlaws in order to save a Mexican and his daughter from the clutches of a villainous pair who are trying to get possession of their ranch. Lovely horse. (Original screen story by Marion Jackson).

hs—THE COP—Pathe—8 rls.—William Boyd—The hero, a bridge watchman, shelters a gunman who departs with his overcoat and cash. He becomes a policeman and runs down the gunman and his gang although under suspicion from his superiors who at the time think he is in league with the gunman. (Original screen story by Eliot Clawson).

j—EASY COME, EASY GO—Paramount—6 rls.—Richard Dix—Comedy in which a young man becomes an innocent accomplice of a pickpocket and gets into trouble. In the end he hands over the culprit and wins the girl he loves. (Play by Owen Davis).

j—THE FIFTY FIFTY GIRL—Paramount—7 rls.—Bebe Daniels—Comedy of a boy and girl who given a gold mine make a bet. She is to do the man's work and he the woman's to prove a woman's equality. Fun develops but all they prove is their love for each other. (Original screen story by John McDermott).

For the Smart Matron



2833

STYLE No. 2833 embodies the best of the season's styles together with the requirements of the full figure. Unlike many "stylish stout" designs, this one is very smart and up-to-the-minute in all its details. Printed voile, chiffon, georgette, or the attractive artificial silk fabrics lend themselves to the daintiness of this pattern. It cuts in sizes 16, 18 years, 36, 38, 40, 42, 44, 46, and 48 inches bust measure. Size 36 requires 3½ yards of 39-inch material with ¾ yard of 35-inch white and ¾ yard of 35-inch dark contrasting. PATTERN PRICE 13c.

TO ORDER: Write name, address, pattern sizes and numbers clearly and correctly and enclose with correct remittance in stamps or coin (although coin is sent at own risk). Add 12c for one of the new summer fashion catalogues and send to Pattern Department, American Agriculturist, 461 Fourth Ave., New York City.

must be finished. The winning group then competes against other county winners in the district contest. The state contest is held at annual Farm and Home Week in February at Ithaca with the district winners as contestants. A first prize of fifty dollars will be paid to the group winning first place in the state contest by Mrs. Henry Morgenthau, Jr., through the AMERICAN AGRICULTURIST. A bonus of twenty dollars will be paid to each district competing in the final contest. The groups will decide which of their community enterprises they will benefit by the prize or bonus money and it goes for that purpose. In several cases the money has gone for books in the local library; in another case they purchased school playground equipment, in still another fire-fighting equipment was purchased.

The contest is directed by Miss Mary Eva Duthie, of the Rural Social Organization Department of the New

The New Shadow Applique



Pattern number 550 (20 cents post-paid) furnishes wax transfers of the tulip designs used in the shadow applique, that is between layers of the white dimity which give a charmingly dainty effect in both the wide bottom hems and valances. These are so easy to do in the first place and as simply laundered as a handkerchief. Colors are yellow, orange, and green, or pink, and orchid could be substituted for another room. Full instructions for making accompany the patterns.

Bright colored organdie or percale are needed for the tulips. We furnish them stamped on brilliant orange, green and yellow fast color A. B. C. percale, together with the needed three colors of thread, enough for one pair of curtains and valance at 40c. We can also supply crisp, small check, white dimity at 25c a yd. It takes about a yard for the valance. Order either pattern or materials from Embroidery Dept., American Agriculturist, 461 Fourth Ave., New York City.

Aunt Janet's Counsel Corner

Fame Makes Personal Privacy Hard to Secure

HOW hard we make life for our heroes! If they happen to be modest and like privacy, how we make them suffer! Right now when our national hero, Lindbergh, wants above all else to be left alone with his private affairs, he has to go to sea to get away from curious people who insist on forcing themselves on him.

Not everybody is as thoughtful of those they would honor as former President Coolidge's Vermont neighbors were of him. Once when the Coolidges were in his father's home for a time, reporters asked some of the townspeople if they had yet visited there. The answer was, "They will let us know when they want to see us."

Self-contained, thoughtful people were they and yet no doubt would have been just as glad to satisfy a little personal curiosity as any of those who make it so hard for the Lindberghs, now that there is a Mrs. too.

Some of the men who travelled with Colonel Lindbergh on his tour of the United States in the interest of aviation have written stories about the ordeals the public put him through on that trip. One story was that half the time the Colonel's laundry came back with more than half of it missing. Shirts and even his underwear were kept by souvenir hunters! That is only one minor thing that was done to him; sometimes his very life was endangered by the curious and thoughtless.

And now that he has taken unto himself a wife just as modest and retiring as himself, she too has to suffer the punishment inflicted by people who just will satisfy their own curiosity regardless of the feelings of others.

The truest honor we can do to the Colonel and Mrs. Lindbergh is to give them a chance to live their own lives in their own way without intruding

ourselves upon them. No doubt this is what they desire more than anything else in the world.—AUNT JANET.

Plan What You Will Can

CANNING only the surplus of garden or fruit trees may be an economical thing to do, but the diet needs of the family are better served if some definite plan of canning is carried out. Call it a canning budget if you like; it is nothing more nor less than a plan which helps to have a balanced ration rather than having too much of any one kind of fruit or vegetable and not enough of another.

Since in this climate we can expect fresh fruit and vegetables for about four months of the year, we have to

Fresh Product	Canned in Quart Jar
1½ quart plums	1
1½ quart blackberries	1
1½ quart red raspberries	1
1½ quart cherries	1
2 quarts strawberries	1
1½ quart tomatoes	1
2 quarts peas (in pods)	1
3 pounds spinach	1
2 pounds chard	1
2 pounds string beans	1
2 pounds lima beans, shelled.....	1
30 to 40 small beets	1
30 to 40 small carrots	1
8 small ears sweet-corn	1
1 bushel apples	20
1 bushel peaches	18
1 bushel pears	30

Ball Blue Book.

plan to stock our cellars to take care of the other eight months, partly at least. A balanced diet calls for two fruits and two vegetables other than potatoes each day. This makes a total of 730 servings of fruit and 730 servings of vegetables each year. Greens four times a week and fresh fruit or vegetables daily are suggested to supply the necessary vitamins.

Quantity to be canned is based upon the number of servings required and the number in the family. A pound of greens or cabbage provides four servings while a pound of other vegetables serves only two people. A quart gives eight servings of vegetables and six servings of fruit. If children are served, smaller servings are given.

The accompanying table gives an idea as to how much raw food material is needed to fill a quart jar. Then for each adult in the family allow a supply of nine quarts of spinach or other leafy vegetables, four quarts of green peas or green lima beans, three quarts of corn, five quarts of string beans, fifteen quarts of tomatoes and thirty-five quarts of canned fruits of different varieties. The stored foods such as squash, carrots, cabbage, potatoes, beets, onions, turnips, celery, apples and dried fruits supplement the canned goods. Then too if oranges and grapefruit are used, it is not necessary to have so many canned tomatoes.

Rush Seating

THE seating of chairs with native rush and flag was one of the household industries of the pioneers. At present it is used by a few manufacturers who copy the furniture of earlier periods, and a few who produced simple furniture of good proportion and construction with which the rush seat is especially pleasing.

"The cattail is the material most commonly used for this purpose. There is a three-cornered rush that grows in the edge of lakes, that is sometimes used and corn husks or "shucks" were used in the South. Raffia, a heavy paper twine, and bark have also been made use of.

"The cattail leaves are gathered when they have made their full growth—any time from late July to early September seems satisfactory. Only the groups of leaves that do not have the "tails" are cut, and cut high enough from the root that the leaves will separate with-

cut pulling. They should be dried in a loft, garret or barn scaffold or under the trees, if put under cover at night.

"The dry leaves are prepared for use by thoroughly wetting and rolling them

Lady's unbleached muslin apron No. 1621 is stamped on best quality unbleached muslin with an additional patch in applique for the hat design. It will be most attractive when completed. The price of this apron is only 50 cents postpaid to any address. Address Embroidery Department, American Agriculturist, 431 Fourth Avenue, New York City.



in a wet cloth over night. Just before using, run leaves through a clothes-wringer two or three times, to remove the water and air and to soften the fiber.

"The rectangular or square seat is composed of one long strand, made by adding new leaves at the corners as the weaving proceeds. The strand may be twisted one way all the time or the twist may be reversed at the corners—always twisting out away from the adjacent leg. As in twilled cloth the warp and woof are often twisted in opposite ways to emphasize the twill. Only the parts of the strand which show on the upper surface are twisted except where it is necessary to add new material."

If you haven't one of those handy utensils for dicing onions, pickles and other salad materials try slicing them onto a board and using a small sharp butcher knife for the dicer. Hold the knife handle in one hand and grasp the blade with the other.—BETTY.

Take this economy hint...

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How much wiser, on washday, to save your precious strength than a few pennies! Fels-Naptha brings you... not more bars... but more help. The extra help of two cleaners instead of one. Naptha, the dirt-loosener, and good golden soap, the dirt-remover. Working together, they make your washing easier. Fels-Naptha is a bargain in washday help. Save yourself! ... buy it today at your grocer's.

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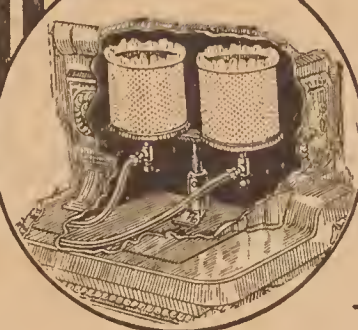


2823



BLOUSE PATTERN No. 2823 with its smartly fringed scarf is just as practical as it is attractive. Dull crepe satin in the new eggshell shade is very handsome worn with a black skirt for afternoons. For sports use, it may be of linen or of the popular cotton with matching or contrasting skirt. The pattern cuts in sizes 16, 18 years, 36, 38, 40 and 42 inches bust measure. Size 36 requires 2½ yards of 39-inch material with ½ yard of fringe and 2 yards of binding. PATTERN PRICE 13c.

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The Plains of Abraham *By James Oliver Curwood*

During the half minute or so preceding Toinette's well-intended but mismanaged blow, Jeems had felt the discomfort of an increasing lack of wind, and would have made testimony that either Paul or Toinette, or both, were hammering him with wooden mallets similar to the one he had seen employed by the auctioneer. This impression was created solely by Paul's fist, animated to redoubled strength and action by the fact that Jeem's teeth were fixed in a vulnerable part of his anatomy. Paul had recovered from Toinette's blow before Jeems could take advantage of it, and what happened during the final round of contention remained largely a matter of speculation in Jeems's mind. He was sitting up, after a little, and there was no one to strike at. Paul and Toinette were out of his reach yet he heard their voices, and, turning his head, he discovered them, oddly indistinct, moving in the direction of Lussan's house. He tried to call out, thinking that Tache was escaping like a coward, but something in his throat choked him until it was impossible for him to get breath enough to make a sound. He made an effort to rise that he might pursue his beaten enemy. The earth about him swam dizzily. He was gasping, sick at his stomach, and blood was dripping from his nose.

A horrifying thought leapt upon him, and so sudden was the shock of it that he sat staring straight ahead, barely conscious of two figures emerging from the concealment of a thick growth of brushwood twenty paces away. The thought became conviction. He had not whipped Paul Tache! Paul had whipped him—and his enemy's accomplishment had been so thorough that he could still feel the unstability of the world about him as he drew himself to his feet.

His eyes and head cleared as the realization of defeat swept over him. Then he recognized the two who had appeared in the edge of the open. One was his Uncle Hepsibah, the other Toinette's father. Both were grinning broadly at the spectacle which he made, and as they drew nearer he heard Tonteur's voice in what was meant to be a confidential whisper.

"Is it really your *petit-neveu*, friend Adams, or one of Lussan's pigs come out of its wallow? Hold me, or what I have seen will make me spilt!"

But Jeems heard no response from Hepsibah, for the trader's face suddenly lost its humour, and in place of it came a look which had no glint of smile or laughter in it.

CHAPTER V

HALF an hour later, Jeems was scrubbing himself in a hidden pool of creek water not far from Lussan's place while close to him his uncle cleaned his battle stained clothes.

Hepsibah Adams talked as he worked.

"I say it again—that with a few tricks o' the trade you'd have cleaned his batter good, Jeemsy. And those are the tricks I'm going to make you acquainted with from this day on. It's fists you want to use and not so much the Frenchy woman's way o' teeth and nails. Biting is all right if you can get hold of an ear or some other killing thing, but when you set out to bite off a leg or an arm, why, Jeemsy, you're likely going to die at that post of duty, unless the other fellow has lost the use of his driving hams. And that's mostly what you were doing, lad, biting when you weren't kicking or scratching, and a mighty good job you made of it, too! If that little cat Toinette hadn't jumped in after she got your handful of mud, you'd have had more to your credit still, for if ever your hair got a tugging it was

the little lady herself who did the job, and pulled your head back so that Paul had good driving space and something to hit each time. You got a good roasting, Jeems, a trouncing and basting as good as I ever saw, especially the last part of it; but it's a matter of education to be fustigated like that and nothing for which you need blush with shame. Why, when I came to my senses I gave that Albany Dutchman the primeest beaverskin west of the Hudson for walloping me! It was a joy I shall never forget, and taught me a lot. A man must be flayed now and then to keep him in

she must go home bundled up in Jeanne Lussan's clothes, which are seven sizes too large! I swear you have missed the sight of your life in not seeing her at close range, so messed and tangled that she has commanded Madame Lussan to burn her riding suit and everything that goes with it. But if you have missed this spectacle, which I would not exchange for the half of a seigneurie, you have at least won our wager, for it is true your *petit-neveu* is the greatest fighting man of his size and weight I have ever seen, and has placed my daughter *hors de combat* for many a day,

that being the case, I'm telling you there never was another tribe like the tribe of Adams, in spite o' what you're saying about the noble dames in your family, and this Jeems you are tongue-tying into hard knots is an Adams, and a good one, too, though his mother had the misfortune to marry a Frenchman when I wasn't looking. From the day Old Nick put his hoof into the Garden of Eden, the Adamses have been the flower of the human flock. We've been fighters from the time fighting began, and when the contention of man gives way to everlasting peace there'll be an Adams, and not a Frenchman, somewhere about to put a period to the story we've helped to write. So if there is any doubt in your mind as to the quality of this lad you're talking about, you'd best set yourself straight or take a measure or two with me to test the truth of the things I've said!"

Tonteur's face had grown red with indignation.

"What! You dare to insinuate that Jeems's mother dishonoured herself by marrying a Frenchman?" he demanded.

"I didn't go quite that far," said Hepsibah, "but I might make it clear by saying that any Frenchman is a dog for luck when he marries into the tribe of Adams, and this holds good for all and sundry princesses who may go by the name of Tonteur."

Tonteur dropped Toinette's hat to the ground.

"No Frenchman would stand for such such insult, sir," he retorted. "And, to it deeper, are you inferring that my daughter was responsible for the disgraceful scene in Lussan's barnyard?"

"Not entirely responsible," said Hepsibah, "but subscribing to and largely abetting. That is what I would truthfully say."

"Your nephew forced the fight without pretext or excuse!"

"And your daughter jumped in where she had no business to be, just to set the fur flying faster!"

"Jeems struck her with a handful of mud!"

"Which was an accident!"

"It was deliberate, sir! I saw it!"

"It wasn't!" shrieked Jeems. "I didn't mean to hit her!"

But the two men, their fervour inspired by persistent attention to the barrels of flip and strong beer, scarcely heard his protest. They had drawn close to each other, and the seigneur was swelling as if on the point of bursting his waistcoat, while Hepsibah Adams, his round face lighted by a grin of anticipation, began to roll up his sleeves.

"You call me a liar, then?"

"Yes, and all of your tribe of Adams!"

Jeems gave a cry and Odd a fierce growl, for something happened so suddenly that both were startled by it. Hepsibah had made a pugnacious lunge, but faster than his movement, and infinitely more skillful, was that of Tonteur's wooden peg, which rose with vigour and precision and smote him a resounding thwack on the side of the head that knocked him off his feet. With such celerity had the friendliness of the two men transformed itself into belligerency that Jeems stood aghast as he heard the sound which he thought must either be the cracking of his uncle's skull, or the rending of the wood in Tonteur's leg. To see his intrepid relative spread out like this robbed him for a time of the power to move or breathe; but when he saw this fallen idol half on his feet and witnessed Tonteur's hickory

(Continued on Page 18)

Bringing the Story Up to Date

JEEMS BULAIN with his French father and his English mother lived in colonial times near the border between Canada and the English colonies. Their neighbor, Tonteur, is their friend but Madam Tonteur hates Catherine Bulain because of her beauty and her English blood and tries in every possible way to teach her daughter Toinette to hate Jeems Bulain.

Jeems admires Toinette and is deeply hurt by her disdain. He hates Paul Tache, Toinette's cousin from Quebec, because Paul assumes a superior air and because he is in the good graces of Toinette.

Catherine Bulain sees and understands the situation to which her husband is blind. Jeems is brooding over the situation as he, his mother and father and Odd, his dog, walk home from a visit to Tonteur Manor.

On their arrival they find Hepsibah, Catherine Bulain's trader brother who visits them at long intervals. After supper he opens his pack and among the presents he has brought is a beautiful piece of red velvet cloth for Jeems to give Toinette. Jeems attends Lussan's auction the next day and resolves to give Toinette his present and to whip Paul Tache.

Toinette accepts the present but Paul offers to carry it and Jeems sees him drop it to the ground. Jeems attacks Paul and accidentally soils Toinette's fine dress whereupon she also joins in the fight.

shape. For that reason, you're a better man now than you were an hour ago."

Jeems was doubtful of this final statement as he drew himself from the pool. Cool water had refreshed and strengthened him, but one eye was closed, there were bruises and scratches on his face, and his body was lame in many joints and parts. His anger, however, had subsided, and there was something different about him as he came from the water, a change that was slight, but one which his uncle's shrewd eyes did not fail to perceive. The lad was not crumpled by his defeat, nor was there a suspicion of humiliation or embarrassment in his attitude. The cold and steady light which gleamed in his good eye delighted Hepsibah. To that individual, exultant over the Adams spirit which he had seen displayed so energetically in the fight, Jeems seemed to have grown an inch or two in height and to have added twice as many years to his age. Even Odd, who was in their company, appeared to regard his master with a new and inquisitively analytical respect.

Jeems was drying himself in the air and Hepsibah was absorbed in his monologue on the art of fighting when a distant crash in the underbrush drew them to attention. This interruption to the solitude of the pool continued until, through a disruption of bushes, appeared Tonteur, who came down to them with such a wild flourish of an object in his hand that Odd gave a contemplative growl. Jeems started with all the power that was left of his vision, and a shiver ran through him, for he beheld in the almost unrecognizable thing in Tonteur's hand what was once the beautiful hat worn by Toinette.

"Look upon it, friend Adams!" cried Tonteur. "Her hat! And every inch her toes to the top of her head. They're toes to the top of her head. They're combing and cleaning her now, Madam Lussan and her girl, and my Antoinette screaming all the time for this little monster of yours that she may scratch out his eyes! It is so funny I can only look at her and laugh—and

though her spirit yearns for a new trial at him!"

Taking notice of Jeems's bruised face and the distress which had come into it, he stumped quickly to him and laid a friendly hand on his shoulder.

"Tut, tut, my man, don't look so blank and miserable! It isn't entirely your fault this fiery minx of mine got into the fight, and a lot of her ego has been lost in her dishevelment, if you know what I mean. If you don't, just bear in mind that her young stalwart is also rigging himself in home-spuns, and that you've left marks of equal merit all along the battle line. Some day you'll put him in the mud and keep him there, and when that day comes, if you'll let my eyes have proof of it, I'll give you a horse to ride home from Tonteur Manor, and you may keep him for your own."

Whereupon, holding the wreck of Toinette's hat before his eyes, Tonteur broke into laughter.

"If only her mother could have seen it," he said, calming himself at the thought and heaving a deep breath of regret. "The patrician blood of the *ancien regime* mingling with the ignoble dirt of a barnyard! The exalted brought to earth at the hands of the lowly Goth and Vandal! The daughter of a noble dame cleaned of her pride and vainglory by a backwoods cub like Jeems Bulain! A peasant and a princess in a battle royal, with the salt of the earth on top, to say nothing of the three-tailed bashaw who is the pet of her sister's eyes—all down in the muck at the same time! Could she have seen that, I would willingly pay the price of being buried alive along with this!"

Hepsibah Adams had given a grunt midway of this speech and now gazed upon the seigneur with a sombre eye.

"I don't make it clear just what you mean by Goth and Vandal, and I can't remember what the Bible says about the salt of the earth, but when you call Jeems a backwoods cub and a peasant, and in the same breath ride him along with the dirt of a barnyard, your language comes nearer to my understanding," he growled. "And

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Orders for these columns must be accompanied by bank references

AMERICAN AGRICULTURIST

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A Place to Buy, Sell or Trade

Classified Ad Schedule

Advertising orders must reach our office at 461 Fourth Avenue, New York City, not later than 14 days before the Saturday of publication date desired. Cancellation orders must reach us on the same schedule. Because of the low rate to subscribers and their friends, cash or money order must accompany your order.

DOGS AND PET STOCK

HURRY if you want a trained hecbiting English or Welsh Shepherd, also young pups starting. GEORGE ROORMAN, Marathon, N. Y.

SCOTCH COLLIES and Welsh Shepherds Puppies. Shipped on approval. MAPLE GROVE FARMS, Pope Mills, N. Y.

SPECIAL CHINCHILLA DOES bred to Castor Rex, the king of rabbits. FIVE PINES RABBITRY, Benson, Vt.

PEDIGREED NEW ZEALAND Red rabbits for sale. MRS. HOWARD ZOLLER, Fort Plain, N. Y.

TEN THOROUGHbred FOX hounds males and females broken, and 12 young hounds. Don't write unless you mean business. I buy young red foxes, 1 pay \$3.50 apiece. FAIRMOUNT KENNELS, Red Lion, Pa.

PAIR FIRST CLASS coon hounds, Fox, stock and rabbit proof, right in every respect, thirty days trial, satisfaction guaranteed, price \$300.00 for pair, other coon dogs, and rabbit hounds. LAKE SHORE KENNELS, Himrod, N. Y.

SHEPHERD PUPS with Shepherd sense \$5, good coonhound pups \$5, foxhound pups \$5, started cooner \$15, started foxhound \$15. Skunk dogs \$10 to \$25, female Beagle A. K. C. papers, can supply all hunters wants, dogs exchanged.

NOTICE

Live Stock advertising is not accepted in these columns.

A special rate of 50c per line on live stock advertising is now in effect.

If you have any surplus stock, advertise in the Live Stock Columns. Send for circular.

POULTRY

Baby Chicks, Breeding Stock, Eggs

SINGLE COMB REDS—Barred Rocks. Eggs. Chicks. Extraordinary matings. Fine type. Bred for winter production. Catalogue. Low prices. GRAMPIAN HILLS POULTRY FARMS, Grampian, Pa.

AMERICAN MOTTLED ANCONAS—Record Layers. Lay large white eggs. Extra large type. Exceptional markings. Fine matings. Low prices. Catalogue. AMERICAN ANCONA FARMS, Grampian, Pa.

SUNNYFIELD EXTRA LARGE Single Comb Black Minorcas. Exclusively. Chicks. Eggs. Stock. Extraordinary layers. Lay exceptionally large white eggs. Two matings. Low prices. Catalogue. SUNNYFIELD MINORCA FARMS, Grampian, Pa.

REGAL DORCAS WHITE WYANDOTTES—Eggs, chicks, stock. 256 egg record. Ledger. North American contest. Winter layers. Excellent type. Fine matings. Low prices. Catalogue. KEISER'S WHITE ACRES, Grampian, Pa.

GIANT LIGHT BRAHMAS—chicks—eggs—extraordinary large breeders—fine color—record layers—standard bred—low price—Catalogue. GIANT BRAHMA FARMS, Grampian, Pa.

PULLETS—Barron and Tanager White Leghorns from four and five lb. breeders. Three to ten weeks old, 27c and up. Free circular. GOODFLOX POULTRY FARM, Leghorn Blvd., Dansville, N. Y.

POULTRY

Baby Chicks, Breeding Stock, Eggs

CHICKS S. C. WHITE Legs. \$8.00-100; Barred Rocks, \$10.00-100. Reds, \$11.00 and White Rocks. Mixed Heavy, \$8.00-100. I guarantee 100% live delivery. All number one chicks. Circular free. JACOB NIEMOND, McAlisterville, Pa. Box A.

CHICKS C. O. D.—100 Rocks or Reds, \$12; Leghorns, \$10; heavy mixed, \$10; light, \$8. Delivery guaranteed. Feeding system, raising 95% to maturity, free. C. M. LAUVER, Box 26, McAlisterville, Pa.

S. C. WHITE & BROWN Leghorns, Barred & White Rocks, R. I. Reds. Strong livable chicks. Low prices. Write for circular, it's free. 2000 White Leghorn pullets, January and February hatched, ready to ship \$1.00 each. PERRY POULTRY FARM, Perry, N. Y.

HATCHING EGGS from thrifty Pure Bred Jersey Giants \$1.50 per 15. \$3.00 per 45. Parcel Post, C.O.D. INDIAN LADDER FARM, East Stroudsburg, Penna.

BABY CHICKS: Our quality chicks are reduced to 10 and 12c. Wyandottes 13c, full count and guaranteed safe arrival. Send for catalog giving instructions. MILTON POULTRY FARM & HATCHERY, Milton, Pa.

CHICKS—9c. From Pure Barron English White Leghorns. Our large trapezoid birds will produce profitable broilers and heavy winter layers. Free Catalog. Reference Farmers State Bank: WILLACKER LEGHORN FARM, Box G., New Washington, Ohio.

25,000 BABY CHICKS WEEKLY. White, Brown, Buff Leghorns \$9.50. Reds, Rocks, Wyandott, Orpington \$11.50 per 100. Also Parrots, J. A. BERGEY, Telford, Pa.

CHICKS, ROCKS 10c; REDS, and Wyandottes 11c. White Leghorns 8c. Mixed 7c. Heavy Mixed 9c. One cent more per chick in less than 100 lots. 100% delivery guaranteed. LONGS RELIABLE HATCHERY, Millersburg, Pa., Box 12.

REDUCED PRICES. Bucher Super Quality Chicks from inspected free range stock. Reds, White Wyandottes, White, Barred Rocks, Giants, Black Minorcas, Anconas, White, Brown Leghorns, Booklet free, low prices. Pure Breeds. BUCHER BROS. HATCHERY, Dept. C, Bucyrus, Ohio.

COLUMBIAN WYANDOTTES. Large handsome heavy layers. Splendid chicks, right prices. INVALE FARM, Rt. 4, Walkkill, N. Y.

CHICKS—Barron W. Leghorns, large size, 7306 egg strain, \$11.00—100. CLOSE EGG FARM, Tiffin, Ohio.

HIGH POWERED PULLETS & Cockerels. Farm Range reared Leghorns. New York Official Supervised. Certified, and R.O.P. grades. Large healthy birds. Superior egg quality. Illustrated announcement. EGG AND APPLE FARM, Route A, Trumansburg, N. Y.

CHICKS C.O.D. Barred Rocks 10c, large Barron Leghorns 8c, reduced on large orders 100% guaranteed. Order from adv. TWIN HATCHERY, McAlisterville, Pa.

SINGLE COMB WHITE Leghorn pullets, Hollywood strain, World's greatest layers. Healthy range raised. NU-BORN FARMS, Jasper, N. Y.

CHICKS AND PULLETS. Legh. Chicks 10c; Reds 12c. Legh. Pullets eight weeks old 80c; 12 weeks \$1.15. Good stock. UNITED EGG FARM, Hillsdale, N. Y.

CHICKS 7½c JULY DELIVERY. From Pure Barron English White Leghorns. Our large trapezoid birds will produce profitable broilers and heavy winter layers. Reference Farmers State Bank. Free Catalog. WILLACKER LEGHORN FARM, Box G, New Washington, Ohio.

POULTRY

Turkeys—Ducks—Geese

MAMMOTH WHITE PEKIN Duck eggs for hatching, ten cents apiece, delivered, satisfaction guaranteed. JOS. KENNEL, Atglen, Pa.

POULTRY

Turkeys—Ducks—Geese

WHITE PEKIN DUCKLINGS \$26 per hundred. Mixed Ducklings \$24. F. B. CANDEE, Nicholson, Pa.

TURKEY EGGS—from our famous pure bred Mammoth Bronze, Bourbon Red, Narragansett and White Holland flocks. Write WALTER BROS., Powhatan Point, Ohio.

POSTPAID BEST STRAIN Mammoth Pekin duck eggs 11 for \$1.50. Jersey Black Giant eggs 10c each. RUPRACHT BROS., Pulaski, N. Y.

BOURBON RED TURKEY eggs 35 cents each from first quality two year old pure bred hens. JOHN T. EAGAN, Lebanon, N. Y.

POULTRY SUPPLIES

POULTRY DRESSERS! Send for catalog of Equipment and Supplies for fattening and dressing poultry. H. G. HAGER, Gossville, N. H.

WANTED TO BUY

WANTED—HAY, GRAIN, Potatoes, Apples, Cabbage, Carloads. Pay highest market prices. THE HAMILTON CO., New Castle, Pa.

WANTED TO BUY old bags. We pay excellent prices. Write for prices. We pay freight. OWASCO BAG CO., Rochester, N. Y.

FARM EQUIPMENT

ROOFING PAPER, 3-ply, \$1.35 per roll, 100 sq-ft. Prepaid. Asphalt shingles, roofcoating, paint. Send for price list. WINIKER BROS., Mills, Mass.

HAVE YOU A FARM FOR SALE?

Tell our readers about it. Over 150,000 every week.

SEEDS—NURSERY STOCK

100 ACRES VEGETABLE PLANTS, Cabbage, \$1.00 thousand; Onion, \$1.50; Pepper, \$2.00; Sweet Potato, \$2.50; 10,000, \$20.00. Tomato, \$1.25; 10,000, \$10.00. Prompt shipments. Good plant guaranteed. FARMERS SUPPLY COMPANY, Franklin, Va.

PLANTS POSTPAID. All varieties: Beet, Cauliflower, Mangle, Lettuce, 3 dozen., 25c; 100, 50c; 1,000, \$3; 5,000, \$10. Cabbage, 3 doz., 25c; 8 doz., 40c; 400, \$1; 1,000, \$2. Sweet Potato, Asters, 3 doz., 25c; 100, 65c. Celery, Tomato, Pepper, Zinnia, 3 doz., 40c; 100, 85c; 1,000, \$6.75. Egg Plant, Coleus, Coreopsis, English and Shasta Daisies, Pansies, Dianthus, Snapdragons, Salvia, Verbena, doz., 40c; 3 doz., \$1; 100, \$2. ROHRER'S PLANT FARM, Smoketown, Pa.

MILLIONS CABBAGE PLANTS, Copenhagen, Wakefield, Succession, Flatdutch, Danish Ballhead, 300, \$1.00; 500, \$1.25; 1000, \$2.00 postpaid. Express \$1.25. 1000. Tomato plants—Baltimore, Matchless Stone, same price. Sweet Potato and Pepper, 500, \$2.00; 1000, \$3.50 postpaid. Satisfaction guaranteed or money refunded. IDEAL PLANT COMPANY, Franklin, Va.

4,000,000 SWEET POTATO PLANTS, Yellow Jersey Big Leaf, and Up River \$1.50 per 1000, shipping paid. Canna Bulbs seven kinds \$1.25 per 100. C. E. BROWN, Bridgeville, Del.

SEEDS—NURSERY STOCK

MILLIONS CABBAGE PLANTS—Copenhagen, Wakefield, Danish Ballhead, Succession, Flatdutch, 300, \$1.00; 500, \$1.25; 1000, \$2.25 postpaid. Express \$1.25. 1000. Tomato Plants—Baltimore, Stone, Matchless, Bonny Best, same price as Cabbage. Sweet Potato and Pepper plants, 500, \$2.00; 1000, \$3.25 postpaid. Quick and good service. GUARANTEED SERVICE PLANT COMPANY, Franklin, Va.

50 MILLION out door grown vegetable plants—Cabbage: Copenhagen, Ballhead, Wakefield, etc., 300, \$1.00; 500, \$1.25; 1000, \$2.00 prepaid. 10,000, \$10.00 expressed. Tomato Plants: Marglobe, Bonnybest, Baltimore, Stone and Matchless, 300, \$1.50; 500, \$2.00; 1000, \$3.00 prepaid. 10,000, \$15.00 expressed. Sweet Potato and Pepper Plants: 300, \$1.25; 500, \$2.00; 1000, \$3.25 prepaid. 10,000, \$20.00 expressed. Shipping capacity ½ million daily. Day and Night service. Our plants must please you or money cheerfully refunded. J. P. COUNCIL COMPANY, Franklin, Va.

GOLD SKIN SWEET Potato Plants 60c per 100; 500 for \$2.00; 1000 for \$3.50 postpaid. BASIL A. PERRY, Georgetown, Del.

CAULIFLOWER AND CABBAGE Plants 100, 40c; 1000, \$2.50 prepaid. Satisfaction guaranteed or money refunded. E. FETTER, Lewisburg, Pa.

FROSTPROOF CABBAGE PLANTS, 75c-1000; Col-lards, 75c; Tomato, \$1.00; Ruby King Pepper, \$2.00; Porto Rico Potato Plants, \$1.50. QUITMAN PLANT CO., Quitman, Ga.

OLD FASHIONED HARDY Flower Plants. Holly-hocks, Delphiniums, Bleeding Hearts, Anemones, Blue Bells, Canterbury Bells, Columbines, Monkshoods, Hardy Carnations, Hardy Chrysanthemums, Hardy Lilies, Hardy Phloxes, Lupines, Hardy Pinks, Oriental Poppies, and 240 other Perennials that will bloom this summer; Pansies, Asters, Salvias, Petunias, Zinnias, Snapdragons and other annuals; Roses, Vines, Shrubs, Hedge Plants; Berry plants, Asparagus roots. Catalogue free. HARRY E. SQUIRES, Hampton Bays, N. Y.

MILLIONS NORTHERN GROWN Hardy Cabbage, Cauliflower Plants, June, July delivery. Best strains Danish seed, chemically treated. Golden Acre, Jersey, Copenhagen, Enkhinzen, Surehead, Succession, Savoy, Flatdutch, Ballhead, Red. Postpaid: 200-65c; 500-\$1.25; 1000-\$2.25. Collect: 5,000-\$7.50. Snowball Cauliflower: 50-40c; 200-\$1.00; 500-\$2.25; 1000-\$3.75. Transplanted Tomatoes: 36-45c; 100-\$1.00; 1000-\$10.00. Bermuda Onion: 200-60c; 500-\$1.00; 1000-\$1.75. PORT MELLINGER, Dept. AA, North Lima, Ohio.

TOMATO PLANTS: Baltimore, Stone \$1.00 thousand; 5000, \$4.25. Cabbage Plants, 75c thousand; 5000, \$3.25. Roots mossed, safe arrival guaranteed. BURGESS FARMS, Pembroke, Ga.

CABBAGE, CAULIFLOWER, TOMATO and Egg Plants. Ready now. Copenhagen Market, Enkhinzen Glory, Early Summer, Succession, All Seasons, Danish Ballhead, Danish Roundhead, Flat Dutch, Danish Round Red and Drumhead Savoy Cabbage plants. \$2.00 per 1000; 5000, \$9.00; Reroated \$2.25 per 1000. Snowfall and Erfurter Cauliflower plants all reroated \$4.50 per 1000; 5000, \$20.00. Transplanted John Baer, Matchless Stone, Greater Baltimore and Dwarf Stone Tomatoes \$8.00 per 1000. Field grown plants same varieties \$3.00 per 1000; 5000, \$13.00. Potted Black Beauty Egg Plants \$30.00 per 1000; \$3.50 per 100. Send for Free list of all plants. PAUL F. ROCHELLE, Norristown, N. J.

Additional
Classified
AdvertisingOn
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HANDY ANDY Says "Here's How"

To Oil a Harness

By Ray Inman

TO OIL A HARNESS WITH-
OUT USING ELBOW GREASE:

① wipe off harness . . .

I HOPE YOU KNOW WHAT YOU'RE DOIN' CALDWELL.

CERTNLY—IM OILIN' UP THIS HARNESS LIKE YOU SUGGESTED



② put it in tub 2/3 full of water and leave 'til thoroughly softened.

YE KNOW, IRV, PUTTIN' THINGS IN WATER FER A SPELL MAKES 'EM AWFUL SOFT

YEAH?—WELL, YOU AINT BY ANY CHANCE HAD YER HEAD UNDER WATER FER A SPELL HAVE YE, PHILPAW?



③ pour a thick film of oil over top of water, ④ pull the harness up through the film of oil

WELL FER CRYIN' OUT LOUD!—WHAT'S TH' IDEA,—OILIN' THAT WATER?

SILLY!—IT SQUEEKS



⑤ the softened leather will absorb just the right amount of oil.

SEE, EGBERT?—IT WORKS LIKE A CHARM

WELL—MEBBY I AINT GOT THE KNACK—BUT I JUST COULDN'T MAKE IT WORK ON MY FLUVER



Additional Classified Advertising

SEEDS—NURSERY STOCK

TOMATO PLANTS, for late planting, millions ready. Large, well rooted, open field grown, damp moss to roots, leading varieties: 500, \$1.25; 1000, \$2.00; 5000, \$8.00 postpaid. Safe arrival guaranteed. **KENTUCKY PLANT CO.**, Hawesville, Ky.

SPECIAL FOR 30 DAYS. 10 Million fine cabbage plants. Copenhagen, Ballhead, Flat Duteh, Wakefield. Tomato Plants, Baltimore, Stone, Bonnybest all at \$1.00 thousand; 5000, \$3.25; 10,000, \$6.50. Sweet Potato and Pepper plants \$2.00 thousand. Prompt shipments, absolute satisfaction guaranteed or money cheerfully refunded. **OLD DOMINION PLANT CO.**, Franklin, Va.

CAULIFLOWER PLANTS. READY. Finest strains of seed. We grow only first class plants. Catskill Mountain Snowball, Long Island Snowball, Extra Early Erfurt \$4.50 per 1000; 5000, \$20.00; 500, \$2.50; 300, \$2.00. Cabbage Plants, Ready. Danish Ballhead (we have grown 21 tons per acre with this strain) Copenhagen Market, Enkhinzen Glory, Surehead, Succession \$2.00 per 1000; 5000, \$9.00; 500, \$1.50. 31 years selecting strains of seed. Millions of plants. Safe delivery guaranteed. No business done on Sunday. **F. W. ROCHELLE & SONS**, Chester, N. J.

FARMS FOR SALE OR RENT

IN ADIRONDACKS—Farms for chickens, vegetables, fox, muskrats, summer boarders, hunting camps, gas stations. 130 acres 7 rooms, cellar, other buildings, \$2100., \$900 cash, 6 years. Booklet. **EARL WOODWARD**, Hadley, N. Y.

50 ACRE POULTRY and dairy farm, 700 hens; 7 cows, could carry 10. Fully equipped for hatching and brooding chicks, grade A milk, and tools. Good buildings and land. On account of poor health will sacrifice for quick sale. **ADELBERT CARTER**, Groton, N. Y.

DEL-MAR-VA—6,000 SQUARE MILES FINEST AGRICULTURAL OPPORTUNITIES. Within three to ten hours by motor truck over splendid concrete highways to New York, Philadelphia, Baltimore and Washington markets. Pennsylvania Railroad System permeates entire Peninsula. Mild, equable climate. Very little snow and freezing. Farms, town and waterfront homes, low-priced. Good schools, low taxes. Handsome descriptive booklet, FREE. Address 164 Del-Mar-Va Building, Salisbury, Md.

\$1500 DOWN GETS FARM. 126 Acres. 15 cows, horses, hens, pigs, tools, crops, \$6500, \$250 yearly. **MR. DOUGLAS**, Herkimer, N. Y.

HERE IS THE PLACE TO SELL YOUR FARM

Reach over 150,000 interested people at a cost of only 7c per word. Write now to the Farm Dept.

BARN EQUIPMENT

CRUMB'S STANCHIONS are shipped subject to trial in the buyer's stable. Also steel stalls, stanchions, and partitions. Water bowls, manure carriers and other stable equipment. Tell me what you are most interested in, and I will save you money. **WALLACE B. CRUMB**, Box A, Forestville, Conn.

CORN HARVESTER

RICH MAN'S Corn Harvester, poor man's price—only \$25.00 with bundle tying attachment. Free catalog showing pictures of harvester. **PROCESS CO.**, Salina, Kans.

CLIPPING MACHINES

CLIPPED COWS mean clean milk.—Improve the health of cattle, horses, mules, etc.—use a "Gillette" Portable Electric Clipping Machine. A postcard will bring you prices and interesting information. **GILLETTE CLIPPING MACHINE CO.**, Dept. A-1, 129-131 W. 31st Street, New York City.

HELP WANTED

WANTED—SINGLE MAN to work on dairy farm where fox ranch is being started. Must be good milker, no bad habits and reliable. Reference desired. State wages expected. **BARNEY FOX RANCH**, Dryden, N. Y.

FEEDING PIGS

SPRING PIGS FOR SALE

Buy where quality is never sacrificed for quantity. We sell only high grade stock from large type Boars and Sows, thrifty and rugged, having size and breeding. Will ship any amount C.O.D.

Chester & Yorkshire—Berkshire & Chester 7 TO 8 WEEKS OLD \$4.50
8 TO 10 WEEKS OLD \$4.75

Also a few Chester barrows 8 wks. old, \$6.50 each Satisfaction guaranteed or money refunded. 10 days trial allowed. Crates supplied free. **A. M. LUX**, 206 Washington St., Woburn, Mass. Tel. Wob. 1415.

228 PIGS FOR SALE

87 handsome Yorkshire and Chester crossed; 100 Berkshire and O.L.C's; 41 Big heavy Poland China crossed with Yorkshire—Two months old, Price \$6.00 each. Express prepaid on 25 or more. These pigs have had the best of care and breeding and certainly show it. Jim Short hog-breeder from Iowa, on a visit here, remarks: "Mr. McCadden your hogs look fine." Terms: Check, money order or draft or C.O.D. on approval. Ship in lots to suit—1 or 50. Inquiries gladly answered. Orders promptly filled. **MCCADDEN BROS.**, Cambridge, Mass. Office: 16 Seven Pines Avenue.

SITUATIONS WANTED

DO YOU NEED FARM HELP. We have Jewish young men, able-bodied, some with, but mostly without experience, who want farm work. If you need a good, steady man, write for an order blank. Ours is not a commercial agency. We make no charge. **THE JEWISH AGRICULTURAL SOCIETY, Inc.**, Box A, 301 E. 14th Street, New York City.

LET THE AMERICAN AGRICULTURIST HELP YOU

sell that farm. Just write us giving details and we will write your copy. Do it this week.

PRINTING—STATIONERY

WEDDING INVITATIONS, ANNOUNCEMENTS—Latest styles. Best workmanship. Moderate cost. Samples free. **HOWIE STATIONER**, Beebeplain, Vt.

WOMEN'S WANTS

PATCHWORK 7 POUNDS Percales, Gingham \$1.00. 3 pounds silks \$1.00. 4 pounds cretonne samples \$1.00. 3 pounds Corduroy remnants \$1.00. Nile Green, Pay Postman plus postage. Silks or Velvets Large Package 25c postpaid. **NATIONAL TEXTILE CO.**, 93 B St., South Boston, Mass.

STREET DRESSES! Lovely tubfast Prints, only \$1.98. Send your measurements to **BENNETTS DRESSES**, Schuylerville, N. Y.

LADIES' FINE LISLE STOCKINGS 3 pair \$1.00. Black, grey, beige, nude, French nude; sizes 8½-10. Good openings for agents. **A. H. TALBOT SALES COMPANY**, Norwood, Mass.

MISCELLANEOUS

WANTED USED BAGS any quantity and grade. Highest prices and freight paid. **HOFFMAN BROS. BAG CO.**, 39 Gorham St., Rochester, N. Y.

USED CIVIL WAR ENVELOPES with flags, designs, etc., \$1 to \$15 paid. Other stamps on envelopes before 1871 bought. Three-face lamps and old glassware bought. **W. RICHMOND**, Cold Spring, N. Y.

COTTON DISCS for your milk strainer. 300 sterilized 6 inch discs at \$1.30, postage prepaid. **HOWARD SUPPLY CO.**, Box 30, Canton, Maine.

RUBBER TUBING for all makes of milkers. Attractive prices. Cotton strainer discs (sterilized) 300 in package 6 inch \$1.40, 6½ inch \$1.60 Postpaid prepaid. Tubing and cotton discs very highest quality obtainable anywhere. **ANDERSON MILKER CO.**, Jamestown, N. Y.

WANTED SMALL CREAM Separator, 110 volt. **BATTERSON**, Filmore, N. Y.

FOR SALE: Alamo Electric Engine with batteries, good condition. Phone 31, Davenport, N. Y. Will sell cheap. **E. W. VAN WAGENEN**.

TOBACCO

GUARANTEED HOMESPUN TOBACCO. Chewing. 5 lbs. \$1.50; 10-\$2.50. Smoking, 10, \$1.75. Pipe Free. Pay Postman. **UNITED FARMERS**, Bardwell, Ky.

LEAF TOBACCO—Good, sweet chewing, 3 pounds, 90c; 5, \$1.25; 10, \$2. Smoking, 3 pounds, 60c; 5, 90c; 10, \$1.50. **UNITED FARMERS**, Mayfield, Ky.

WHAT! NO SWANS

We have a party who desires to purchase a pair of swans. Whom shall we refer to? Not a Swan advertisement in the paper. Now folks send in your advertisement at once. Many Swans will be sold through these columns. Write to **BOX 20, American Agriculturist**.

With the Poets on Memorial Day

(Continued from Page 5)

for Memorial Day" by the negro poet, Paul Laurence Dunbar.

Done are the toils and the wearisome marches,
Done is the summons of bugle and drum.
Softly and sweetly the sky overarches,
Shelt'ring a land where Rebellion is dumb.
Dark were the days of the country's derangement,
Sad were the hours when the conflict was on,
But through the gloom of fraternal estrangement
God sent his light, and we welcome the dawn.
O'er the expanse of our mighty dominions,
Sweeping away to the uttermost parts,
Peace, the wide-skying, on antiring pinions,
Bringeth her message of joy to our hearts.

Listen to what James Whitcomb Riley, the beloved poet of common folks, wrote in his "Monument For the Soldier."

A monument for the Soldiers!
Built of a people's love,
And blazoned and decked and panoplied
With the hearts ye build it of!
And see that ye build it stately,
In pillar and niche and gate,
And high in pose as the souls of those
It would commemorate!

But in all the thousands of Memorial Day talks and addresses that have been given since the Civil War—enough to make a mighty library, there is one which is second only, in my opinion, to Lincoln's Gettysburg Address, and that is "A Vision of the Past", by Robert Ingersoll. It concludes as follows:

We see them all as they march proudly away, under the flaunting flags, keeping time to the wild music of war—marching down the streets of the great cities, through the towns, and across the prairies, to do and to die for the eternal right. We go with them, one and all. We are by their side on all the gory fields, in all the hospitals of pain, on all the weary marches. We stand guard with them in the wild storm and under the quiet stars. We see them pierced with balls and torn by shells in the trenches by the forts and in the whirlwind of the charge, where men become iron with nerves of steel. We are at home when the news reaches us that they are dead. We see the maiden in the shadow of her first sorrow. We see the silvered head of the old man bowed with the last grief.

Those heroes are dead. They sleep under the solemn pines, the sad hemlocks, the tearful willows, and the embracing vines. They sleep beneath the shadows of

the clouds, careless alike of the sunshine or of storm, each in his windowless place of rest. Earth may run red with other wars—they are at peace. In the midst of battle, in the roar of the conflict, they found the serenity of death. I have one sentiment for the soldiers living and dead: Cheers for the living, tears for the dead.

Perhaps I am prejudiced, but it seems to me that the following is worthy of a place in any Memorial Day recital. It is entitled "The Last Call" and was written by my brother, known to many of you under his pen name, "George Duff."

No more for him the reveille
Shall ring in camps afar;
No more the fanfare call him on
In endless paths of war
No more the rally and the charge
On stricken field shall call—
Blow, bugle, blow
And echo low
Lights out—and silence all.

Yet Maytime's pitying grass shall green
The turf above his breast,
And hallowed memory green the heart
Of one who loved him best.
Lights out! Tomorrow he shall be
Promoted to the Line—
Blow, bugle, blow
And echo low
Where Heaven's Watchfires shine.

In a lonely valley in the heart of the Adirondacks, just a few miles from where I stand here in Schenectady, lies the body of John Brown, a man whose life was stormy, and full of trouble, and who knew no rest, a man who created a great tempest in his time, an uncompromising and fierce old patriot, who was finally hung by the State of Virginia at Harper's Ferry for fighting the institution of slavery which he hated. Let me then close this little review of Memorial Day poetry by reading a verse of the song to which thousands of Union boys marched, and died:

John Brown's body lies a-mouldering in the grave,
John Brown's body lies slumbering in his grave—
John Brown's soul is marching with the brave,
His soul is marching on.

And with him marches the unconquered host of America's honored dead.

The Plains of Abraham

(Continued from Page 16)

peg as it made another vicious assault upon Hepsibah's pate, knocking him flat again, Jeems's pent-up breath released itself in a yell and he began to hunt for a club. By the time he had armed himself, Hepsibah, half stunned, had contrived to avoid a third swing of Tonteur's underhung weapon, and the two men were hugged in a fierce embrace, choking and gouging each other at the sheer edge of the pool. Desperately Jeems manoeuvred to employ his club, but before he could get in a blow the soil gave way and the combatants plunged into the water, out of which, after a turmoil in which Jeems thought that both must drown, Hepsibah came floundering and puffing ashore dragging the baron after him.

Then to Jeems's amazement his uncle stood back and, surveying Tonteur, who had also clambered to his feet, doubled himself over with laughter. With his brain cooled by the chill of the water, Toinette's father seemed in no way resentful of this; and while Jeems stood with his stick half poised, ready to deliver a *coup de grace*, he was treated to the spectacle of the two men, so recently at each other's throats, closely gripping hands.

Dropping his club he hurried to his clothes and began to put them on, while Odd stood beside him, sensing the presence of a situation which was beyond his comprehension. The merriment of the two who had been fighting became greater until, at last, seizing upon an inspiration, Tonteur proclaimed that only one thing could fittingly put a cap to the incident and that was a bottle of Madame Lussan's wild plum brandy.

Jeems waited until they were gone

in the direction of Lussan's house, having made no answer to the recommendation that he remain where he was until his uncle returned. This he had no intention of doing. Even the comradely praise which Hepsibah had given him before Tonteur's arrival, and afterward the unexpected embroilment which resulted from their meeting, had not abated the painful sensations in his breast. That his uncle had commended him for the valiancy of his fight with Paul Tache and had championed him to the point of blows with their neighbour filled him with courage and pride. At the same time, there was an ache within him that overshadowed these things and that became a poignant misery as he looked upon Toinette's battered and desecrated wreck of a hat.

He stooped and picked it up. The jaunty feather was gone. The rim was broken. It was caked with mud that was beginning to dry. Yet Jeems's fingers had never thrilled as they did when he held it in his hands and looked cautiously about to make sure no prying eyes were watching his act. A lump came in his throat, and Odd, standing quietly with his eyes on his master's face, saw the starting of tears. Jeems blinked these away. Then he knelt at the edge of the pool and washed the hat until it was a shapeless mass in his hands, but with some of its softness and lustre revealed again. Completing his task, he returned to his father's cart for his bow and arrows. He did not feel he was running away when he left on the homeward trail without letting his father or uncle know.

(To be Continued Next Week)



The Service Bureau

A Department Devoted to the Interests, Welfare
and Protection of A. A. Readers



Good Work by Federal Trade Commission

THE Federal Trade Commission has recently taken action against a number of companies, charging the use of misleading advertising. Among these companies are the Fayro Laboratories, Inc., which advertises to reduce weight without dieting, the Brooks Rupture Appliance Company, and the Restoral Company, which advertises a tonic for gray hair, and which, it is claimed, prevents falling hair.

At the same time, the literature of the Glover Institute, which has been advertising a method of increasing height, has been refused the use of the mails, and publishers of periodicals have been notified of a number of questionable fake home work schemes and naturally reliable publications will refuse to accept their advertisements. Included among them are the Davie Henry Company, of Meadville, Pa., the Tropical Service Bureau of Detroit, Michigan, E. L. Hammond, of Asheville, North Carolina, the South American Information Bureau of Chicago, Norman Swanford, of Galata, Montana, the Superior Specialty Company of New York City, and the Bureau of Tropical Information, of Milwaukee, Wisconsin.

Although the American Agriculturist Service Bureau has investigated hundreds of home work schemes, we have yet to find one satisfactory to subscribers. We are heartily in sympathy with this excellent work the Federal Trade Commission is doing.

Policy Missing Yet Estate Gets \$1,000 Check

I want to compliment you upon the insurance feature which goes with a subscription to the American Agriculturist.

I represent the estate of Patrick H. Morey, who was killed last year in an automobile accident. His brother, Thomas F. Morey, came to me last month with a postal card from the subscription department of the American Agriculturist, stating that the subscription of Patrick H. Morey as well as accident insurance policy would expire May 1st. This was the first intimation that anyone had that Mr. Morey had an accident policy.

We have never been able to find the policy but nevertheless within a week after I filed proof of Mr. Morey's death by accident I received a check of \$1,000 from the North American Accident Insurance Company. I am sending you this letter so that you may know how much we all appreciate the prompt, honest and efficient service which was rendered by your paper, and this insurance company, in this case.

I thank you very much for your personal interest in this matter and want to compliment you and your newspaper and your insurance company.

(Signed) EDWARD A. CONGER,
Attorney at Law.

THE above letter which is self-explanatory, was received from Mr. Conger of Poughkeepsie, N. Y., following some correspondence with us on the case of Mr. Morey. Having received no notification of Mr. Morey's accident, we sent him a card of notification, that his insurance had expired.

Had his family not received this card, no claim would have been entered for the money due his family. Following the first letter from Mr. Conger, the matter was quickly and satisfactorily closed up, by a check from the North American Accident Insurance Company.

Who Has Seen This Young Man?

FREDERICK MCCANN, JR. of Short Hills, N. J., member of the Sophomore Class at Amherst College, and of Phi Gamma Delta Fraternity, Amherst, Mass., mysteriously disappeared May 3, 1929. Following is a description of him: Age 20 years, appears slightly younger; is 5 ft. 6 inches in height, weight

about 129 lbs., face well formed, a little thin; complexion sandy and freckled; hair, heavy and dark reddish brown; eyes, grayish-blue. When walking, leans forward. When last seen wore gray topcoat, sweater with 1931 initials, gray flannel trousers, brown shoes, but no hat. Also has brown windbreaker Jacket. Attire possibly different now. Any one having information of his whereabouts please notify nearest Police or Frederick McCann, Short Hills, New Jersey, or Room 1610, 90 West Street, New York City.

Orange County Chicken Thief Sentenced to Sing Sing

TENDER feelings entertained by residents here for their tender pullets and Plymouth Rocks have more weight with Supreme Court Justice Morschauser than the feelings of rela-

We Are Glad to Help

I WISH to say that your assistance in the matter of a collection from the _____ Company was greatly appreciated. I received a check from them just four days after the matter had been placed in your hands.

Your paper has been in our home for years, and shall continue to be so, as our subscription is now paid until 1932.

I wish to thank you for your help in this matter and to tell you that you and your paper have my hearty good wishes.

tives of Eban R. Smith, who began a term in Sing Sing on Monday for chicken stealing.

Counsel for Smith asked for leniency because Smith's relatives would suffer.

"What about the feelings of owners of the stolen chickens?" Justice Morschauser asked. "They are entitled to be considered when they lose their hens."

Smith's arrest and conviction followed an epidemic of poultry thefts in this little village.

Agreement is Binding

"Can you give me any information on the Gloria Light Company of Chicago. Are they reliable and do their burners sell well?"

OUR investigation shows that the Gloria Light Company is financially responsible. They advertise somewhat as follows: "Wanted—Manager for store, experience unnecessary; \$1,250 cash deposit required on goods; \$400 up monthly."

Technically, the Gloria Light Company is not offering employment as might be believed from their ad, but are attempting to sell merchandise in quantity lots and requiring a cash deposit on orders. We are informed that a number of complaints have been made by dealers who have signed an agreement with this company and who have later been unable to sell the merchandise. At this point they discover that the agreement is binding and that the company does not assume responsibility for any verbal representations of its salesmen.

Check Cashed—No Ducks Sent

On March 20, I sent an order for 50 baby ducklings to the Maplehurst Stock & Poultry Farm, West Mansfield, Ohio, and enclosed a check to cover the cost



"Be Fair to the Kids!"

Weather-worn, sun-cracked outside walls . . . finger-smudged, shabby interior surfaces. No wonder "Huck" Finn played "hookey." Unkempt schoolrooms react upon the character and health of children regardless of modern training methods. But . . . solution to this problem is easy!

NOW is freshening-up time. At little expense you can Valspar-proof your schools against unsanitary, dingy, colorless surroundings. Valspar House Paint (for inside and outside woodwork), Valspar Flat Wall Paint (for interior walls) and Valspar Clear Varnish or Stain (for desks and floors), will make your school-house spick and span for Fall.

Put it up to the school-board now to get this work started at once with Valspar Paints and Varnishes. All Valspar Finishes are—

Waterproof—Wearproof—Weatherproof

VALENTINE & COMPANY, 386 FOURTH AVENUE, N. Y. C.

of same. The check has been cashed. It was cashed on March 26, but I never have received the ducklings, or the return of my money. I have written them three or four times, but get no reply. The return address was on the envelopes, so I know the letters were delivered. Please write to them for me.

ALTHOUGH we have written several letters to the Maplehurst Stock & Poultry Farm, we have been unable to get any reply from them. We are therefore printing this as a warning to other subscribers, against doing business with this firm. We are also calling the facts to the attention of the Post Office and suggesting, that some action be taken in this case.

This complaint again points out the advisability of doing business with American Agriculturist advertisers.

Texas Man Buys Farms—Checks Returned Marked "No Funds"

I JUST read in a local paper where a man from Texas had bought three farms in Wheeler, N. Y. The coincidence is so similar to what happened here last fall that I am wondering whether it is the same man or not.

A man came along here and bought two farms, representing he had a ranch in Texas and had just sold his farm in Mexico, N. Y. He carried his bluff through until the checks he had given to pay for these farms were returned marked "No funds in Bank." When it was looked into it was found that he had bought a farm from a widow in Mexico, put her to considerable expense and then stepped out.

After he was cornered down he said he was an ex-service man. We understand the government says he is crazy but still he is allowed to chase around the country buying farms, borrowing what money he can and swinging a big bluff generally.

This is a general description of The

man (Harry Browning) if he is using that name now. He is about five foot two, sandy hair, fat, red face, blue eyes, impediment in speech, quick walk, two warts on back of neck.

He disappeared from this country a week or two ago and perhaps it is the same man. If it is I would advise farmers not to spend their valuable time on him at this busy season. —A SUBSCRIBER.

Watch Your Local Taxes!

"It seems to me that what was accomplished in New York State for farm relief should be of help, but the thing that looks bad to me is the continual salary raising of local officials. We elected our town board to serve at \$4.00 a day which means about two hours work. All the candidates were very anxious to be elected but a short time after election they decided they were working too cheaply so they raised their pay to \$7.00 a day. I told our supervisor what I thought of this action and he said they could not afford to work at the old price.

"I told him that I could fill the town hall with farmers at \$4.00 a day any day he wanted me to."

WE have frequently pointed out that the heaviest tax burden with farmers is a local one. Perhaps there is no connection between the action of this town board in raising their pay and the recent New York State farm relief legislation. Perhaps it is only a coincidence, yet we wish to again emphasize the necessity for extreme care on the part of our readers to see that the entire savings made by the state legislation are not expended by your local officials instead of being passed on to you.

We believe that this question is one which should be considered in Grange meetings and other meetings and that definite action should be taken to demand that local officials follow the good example of the state in lowering local taxes rather than in increasing them at this time.

With the A. A. FARM MECHANIC



Checking Up on the Ignition System

IT is essential that the ignition system be in good condition in order to enjoy the maximum comforts of motor-ing.

Overhauling the ignition is a simple job that consists of the following:

See that battery connections are tight, and not corroded.

Clean and adjust distributor points.

Check all ignition wires to see that they are not oil soaked.

Inspect starter.

Check spark plugs; adjust gap. Replace plugs if old ones have gone 10,000 miles.

Check lights; see that connections are tight, insuring good service. Replace bulbs if they are dim.

Bad Habits That Cause Fuel Waste

THE following bad driving habits and improper care of the car are often responsible for abnormal consumption of gasoline:

Letting the engine run at high speed while idling in traffic. Many drivers have this bad habit.

Uneven acceleration, that is, stepping on the accelerator unsteadily.

Racing the engine in spurts when waiting for the traffic "go" signal.

Driving with fouled spark plugs. This wastes about 20 to 25 per cent of the gasoline used for every plug that is out of commission.

Dashing up to a stop street and then jamming on the brakes. Also this is hard on a car and is a dangerous practice.

Dragging brakes waste gasoline and wear out brake linings.

Driving too long in first and in second gear before shifting to high.

Careless drivers frequently pay no attention to simple warnings of coming trouble in their car. What would usually amount to a minor repair if attended to at once often is permitted to grow into a large one. This is why the periodical car inspection and overhauling is necessary to keep cars in the best operating condition.

What Our Readers Want To Know About Lime

(Continued from Page 3)

thoroughly it can be mixed with the soil. At the same time, it costs money to grind it and it is not ordinarily felt that the extra value is worth the extra cost. It is generally recommended that at least 90% should pass through a screen which has 20 meshes to the inch, and 10% of it should pass through a screen which has 100 meshes to the inch.

What is the meaning of the term, PH 7, as applied to soil acidity?

In recent years, scientists have adopted a new method for expressing the acidity of soil. PH. 7 is the figure which they have applied to a neutral soil. If the figure is lower than this, it refers to an acid soil, while any figure above this, refers to an alkaline soil. For example, a soil which is classed as having a reaction of PH. 8, has an abundance of lime, and a soil that has a reaction of PH. 5, is ten times as acid as one which has a reaction of PH. 6. The advantage of this method is that the degree of acidity in soils can be accurately determined and stated.

How can lime be applied most economically on the average farm?

There are a number of very good methods. Recently one manufacturer of manure spreaders has put out an attachment which can be used for applying lime. Even before this attach-

ment was perfected, many farmers used a manure spreader by putting a layer of straw on the bottom, and putting the lime on top of this. Another method that works well is an end gate distributor. This is attached to the end gate of a wagon, and the lime is shoveled into the distributor as the wagon is driven across the field. There is another method of application that is familiar to most farmers, which is by what is ordinarily called a lime sower. At one time considerable lime was spread with a shovel, but this is costly, and it is very difficult to spread it evenly.

Is it not better to grow crops that will grow on acid soil than to attempt to add lime to a very acid soil?

There is a difference of opinion on this question. For example, it has been

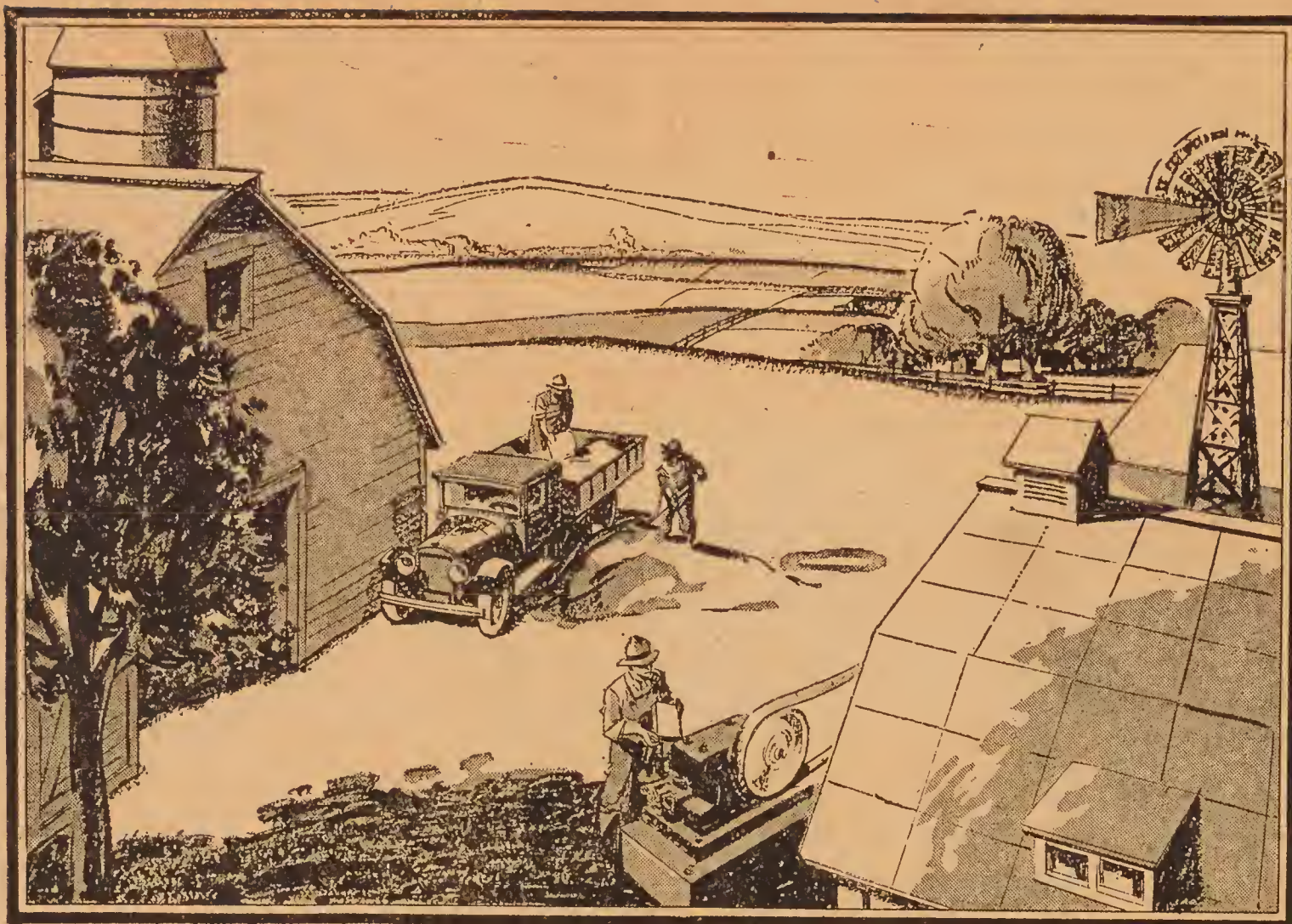
pointed out that on many pastures which would undoubtedly be benefited by an application of lime, it would require more lime than the value of the land, to meet the lime requirements. In general, it has been shown that a prosperous agriculture has almost always been found on limestone soils, and almost never on soils that have a distinctly acid reaction. We are inclined to feel that lime can profitably be added to most Eastern farms. If lime cannot be added profitably, it is possible that the farm could be put to better use by reforesting it, than by attempting to make a living on it by farming.

In what ways does lime increase production?

Calcium is an element that is required for plant growth and is required in especially large quantities by many

of the legumes, particularly alfalfa. In fact, alfalfa is usually a total failure unless the soil is well supplied with lime. Alfalfa and clover help soil fertility by adding to the nitrogen content of the soil as nitrogen is taken from the air by bacteria which grow in nodules on the roots. There are also a number of other benefits from lime. Indirectly, lime helps the soil fertility because crops grow better, and therefore add to the humus content of the soil. The application of lime also improves the physical condition of many soils and also makes the soil favorable for the development of bacteria that help to make plant food available for the use of crops.

We will be glad to answer to the best of our ability, any lime problem you may have which is not covered by the above questions.



This Special Gasoline proves best for farm machinery

TRUCKS and tractors that used to be hard to start, now start with one turn of the crank.

Portable engines, too, start easier with Socony Special Gasoline in the tank.

Socony Special is a real high-test gasoline. Used in your farm machinery it insures quicker starting, greater power and economy of operation. That's why so many farmers in New York and New England now use no other gasoline.

And remember, when you go to your Socony dealer, ask for Socony Parabase Motor Oil. It is made only from paraffin base crudes, which lubrication experts agree is the finest base from which a motor oil can be made.

Socony products in your farm machinery means smoother running, greater power and longer life for your motors.

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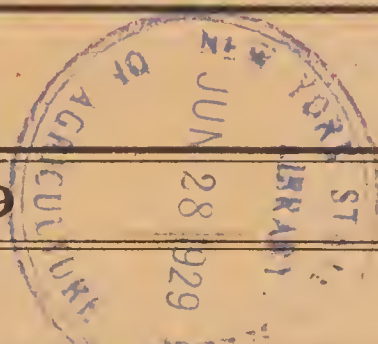
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Beauty Spots of the East—*The Lure of the Road*
See Camping Story On Page 2 and Editorial

—Courtesy, Allegheny State Park Commission

SPECIAL ISSUE FOR WOMEN

Let's Recreate

How to Get Fun Out of a Camping Trip

By EARL A. FLANSBURGH

EDITOR'S NOTE—More farmers every year are finding time to slip away for at least a few days for a little camping trip. Many, however, never go again because they come back worn out from the experience.

Here is an article which will tell you how to go camping and enjoy it every minute by our friend, Earl Flansburgh, who, with his wife, has been all over

must travel hotel de luxe, why don't read further for these suggestions are for those who have some adaptability and are willing to pay its price. One of the humiliating features of human nature lies in the fact that we magnify little things that irritate us

camp life are good food and a clean bed. It is possible to have both.

Just a don't or two on food. It has been my observation that motor campers load up their car upon leaving home with provisions as though they expected to go on an expedition to the interior of darkest Africa. I recall the first trip we made, we took a supply of canned goods along and for some reason we carried a large number of cans of stringed beans. I juggled these cans around so much that I wore out the labels. I became so disgusted that I am unable to this day to look a can in the face without a feeling of aversion.

Fresh food is always best. Canned goods may be needed at times, but a supply is easily available. Why clutter up the car by carrying a lot along. So many people are patronizing chain stores these days that they are accustomed to a certain brand of goods. In all probability your chain store will be along a route you are traveling. If you are using advertised brands, they too are easily available. I recall pulling over a very desolate prairie country of central Texas last February and remarked what a place for a human being to live. A short distance ahead we came into a forlorn looking village and on "Main Street" I saw a familiar chain store. "Whoa," I shouted, "We are in civilization after all." The farm markets and the home baked goods are everywhere available. Don't pass them up. They are the best.

Some Suggestions About Food

Another don't. Go easy on food that you are unaccustomed to. My suggestion would be to use the same type of food you have at home, only less of it because when touring you are less active than at home. If at home you are accustomed to eating quantities of hot dogs, from the roadside

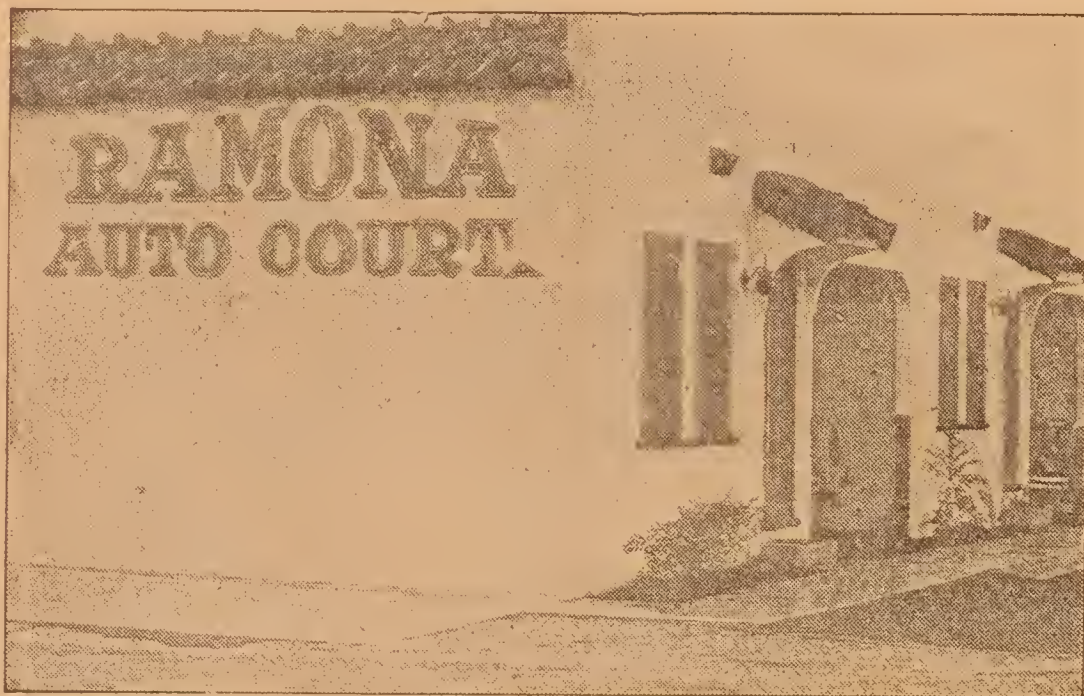
stands, that are decorated with mustard from a community mustard pot, with a liberal sprinkling of road dust, and then washed down with sweetened water slightly flavored, why of course do it on a camping trip. This is no disparagement of clean roadside stands which serve a mighty useful purpose, nor of hot dogs well cooked under sanitary conditions. But can't you hear John saying, "I like my potatoes for dinner." If so, give them to him. The modern camp gasoline stove will cook practically everything that you can cook at home, from popovers to roast beef, to say nothing of the food that is usually cooked on the top of the stove.

Little Space Needed for Utensils

And then some one says I don't like to camp because I don't like to eat off tin dishes. Most people don't like to either, if they told the truth. There are a great many martyrs who eat from such dishes simply to be rustic. Many think they can not safely carry China dishes so must resort to tin. This is unnecessary. The modern car is really a home on wheels. You can do about as you would at home. On our trip we encountered all kinds of roads and broke but one dish and that was in the usual domestic fashion of dropping when it was being wiped. In addition to the undesirability of using tin is that many an unwary mouth has been burned. Of course the trip was spoiled then and there. If you do not care to use the china dishes which you have at home, the five and ten cent store offers an unusual supply.

We found that the modern gasoline stove, a nesting cooking utensil set, and a refrigerator basket which will not only hold food but dishes and knives and forks as well, gave us about all we needed. The nesting sets are made in sizes to serve two to six-person parties. The three dollar set which we have serves four people admirably.

(Continued on Page 6)



The high grade cabin camp has come to stay. It is replacing the tawdry camp ground. This particular one is at Oldtown, California.

America, seldom stopping at a hotel. Mr. Flansburgh is assistant county agent leader of New York State and is well known to thousands of our readers.

It has taken years of experience to bring a lot of people to the belief that older folks, like youngsters, are happier and more efficient when there is a moderate indulgence in recreation. You know and I know many people who still believe that nothing is worth while that is not drab in color. And how often you hear someone say that they will go here or there when they have made their pile. Waiting for a day which is really at hand. The motor car is opening up a whole new chapter in opportunities for seeing the country at a cost that is within the reach of most people, provided of course they study, really study, how it can be done.

Right now hundreds and thousands are planning on how they may spend a few days camping while they are away from the routine of the farm, the shop, the kitchen, or the store. In talking this question over with Mr. Eastman, he asked some questions which are on his mind with respect to this subject, and I know these same questions are on yours. The only reason I am passing along some suggestions is that we have just completed a 17,000 mile auto trip covering a variety of circumstances and seeing a lot of people who have been camping. This is not advice, for advice is poor stuff. These are suggestions. The main difference between advice and suggestions is that the former tells you how or what to do, with the idea that you will follow it; suggestions lay experiences before you with a take-it-or-leave-it attitude. What follows is strictly in the latter class.

Your "State of Mind" Is Important

Motor camping, as the term is used today for the average motorist, has a much broader meaning than formerly. It may mean a tent, a cabin camp, or both with frequent use of the tourist home. Possibly a real camper would not make this all inclusive, but I am talking to the average man who is not a real camper, but who wishes to see some of the country and has but a few weeks or days to do it in and does not care to spend very much money in doing it. He will probably use all of the methods I have enumerated.

Let me say at the outset that successful camping is largely a matter of state of mind. If you feel that you

with little gratefulness for the things we should appreciate. So if you can retard the dislikes and accelerate the likes, the battle is half won. Modern conveniences are very desirable; we wish every person could have more of them; but in camping an ordinary hand wash basin may become a most respected institution, and a few kettles may admirably serve the needs of a party who at home require a cabinet full of cooking utensils.

The two most important things in

THIS is the story of an unconscious criminal, a severe name to apply to a man who never knowingly harmed a living thing.

He walks into this story because I have known him for twenty odd years. He is a farmer and came from a race of farmers. He had health and ambition, and, after the way of his kind, bought a farm, mortgaged it and then married. It was a love match—a farmer boy wedded a farmer girl, and so they assembled their hopes and their property and started along the long road that leads to somewhere.

She was small in stature, active, a peaches-and-cream kind of a girl, who was willing to do anything, no matter how great the hardship, in order to get along. She worked. I'll never be able to find words to tell you how that woman toiled. She took care of the house and kept it spotless. She did the washing. She mended the clothing. She hoed in the garden. She helped milk twenty-six cows. Often, when help was hard to get and even harder to pay, she helped her husband in the fields.

I have seen her, fork in hand, bedding down cattle, scampering like a squirrel up the ladder that led to the hayloft, carrying swill to the hogs and pulling weeds, when every effort must have meant an aching back. You see, she was what they call a "willing hand."

SHE lost her pretty looks and her active ways. How could it be otherwise? Children came and so the duties multiplied. She tended them and mended them; she nursed them through measles and quinsy and

A Man and His Wife

By A. M. HOPKINS, Cincinnati Post

croup, and all the multitude of child ills.

She was their comrade and friend, and everything that a mother should be, and from sun-up until the hour when she heard her little brood say their prayers and tucked them away for the night, she never rested a minute.

"She is as strong as an ox," the husband boasted to me. "She a wonder."

He didn't know, and I doubt if she did, that all the votes for women and all the women's rights in the world cannot make of woman physically anything other than the weaker end of the marriage partnership. The sick horse in the barn received more consideration than did the girl who once reminded me of sweet peas and apple blossoms. She didn't dare to be sick. She hadn't the time.

Of course, magazines and books, music, trips, a permanent wave and a visit to the beauty shop were as foreign to her as is the Malay Archipelago. You can't take care of twenty-six cows and play with romance, nor can you load hay and husk corn and maintain an interest in personal appearance. It can't be done.

At forty—and the birthday came last summer—the wife was an old woman, and he was strong, big of voice, and body, tanned, and mighty proud of the fact that the mortgage had been lifted, his stock improved, the house painted and the boys on the way to manhood.

AND then the wife broke down. She had reached the end of the road, and it was left to a friend, a physician, to tell her husband what had

happened and why it had happened.

He sat in the cow barn and cried like a baby. "I've always loved her," he said. "I haven't been away from her a night in twenty years. She's the very soul in my body. I wouldn't want to live if she should go, not even for the children. My God! It never occurred to me that she was doing much. She has carried all of her load and a good half of mine."

And so the farm was leased and there was an auction of stock and household goods—and a pitiful affair it was, too—and now, a week later the family is at the station, armed with tickets that will take them to a far place where there are relatives. He, in his Sunday suit, looked uncomfortable and worried; the children were wildly enthusiastic, and the only one in the party whom I could see was the wife. She is the ghost of a woman. She has lost her voice, and when she speaks it is a croak. Her hands move nervously, constantly. "I know I'll be all right," she said to me. "I have trouble getting my breath, but don't say anything for I wouldn't have him worry; he's so good to me."

That is the story to date. Why do I write it? Why does a newspaper print it? Because, when seed is blown by the winds, who can say where and when it will find fertile soil?

Possible some two-fisted man will read it. Out in the kitchen his wife is doing the dishes prior to attacking the basket full of stockings to be darned and things to be mended. Possibly he will lay down his pipe and think—think—and then say: "May the good Lord forgive me for I have read my own story."

We Learn More About Furniture

Both Old and New Types Require Knowledge of Handling

ATTRACTIVE and suitable furniture is a pleasure to behold as well as to use. The prime requisite of furniture is that it be useful. It should be sturdy enough to fulfill its mission without causing a feeling of apprehension that it *might* give way. It is quite possible to make furniture strong enough and still have beautiful lines. The sturdy, simple chairs made in early America are still attractive and useful. Made of hickory or other tough wood and with seat made of rushes, corn shucks or splints, these chairs were intended to stand up under years of wear. No gimcracks or fussy trimmings were stuck on to mar their lines and consequently we turn to them as an example of what is honest and beautiful in its own simple way. Consequently, those same chairs are in just as good "style" right now as when they were first made.

Since those days America has had many fads for furniture, some good and some very, very bad, artistically speaking. In practically every generation some furniture idea was advanced and from it came a few lovely pieces and a great many poor pieces.

The tendency has always been to go from one extreme to the other. From the very simple the pendulum swung to the ornate, shown in the much be-carved walnut and be-stuffed furniture of, say, 50 or 75 years ago.

From the highly ornate the pendulum swung to the mission type of furniture which had its

vogue 15 or 20 years ago. It was a distinct reaction from what had just gone before it, but it was too heavy and unwieldly and people tired of its straight, square lines. From it was evolved a type of furniture simple in style, comfortable to use, easy to handle and yet with enough curving lines to satisfy the sense of beauty.

Then the vogue for overstuffed furniture descended upon us and some of our living rooms bear witness to the fact that even though it be fashionable, not all of it is good. Some of it is far too bulky for medium or small rooms. In a warm climate the wool covered thickly padded chairs are comfortable to use only a few months during the year. On the other hand, when carefully selected, they may add a note of richness and beauty to an otherwise plain-looking room.

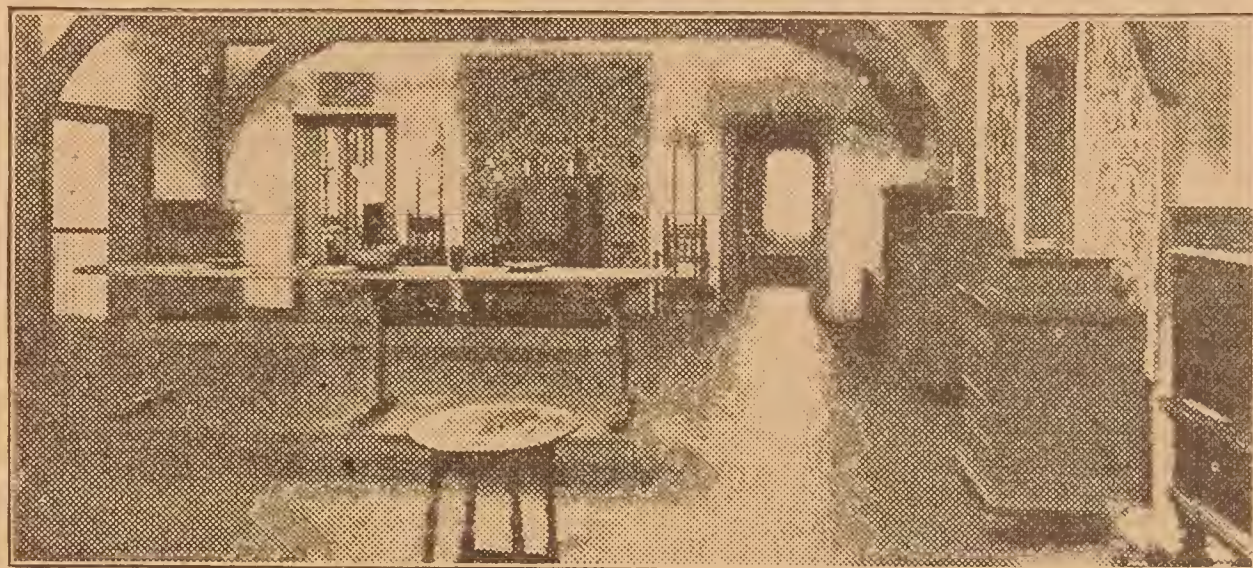
And if the climate is as one resident of Northern New York described his home county "Nine months of winter and three months of d— late fall", the coziness of a stuffed chair is welcome.

Beauty of the Early American

The opening of the American Wing of the Metropolitan Museum of Art also opened our eyes to the real beauties of much of our old American furniture. Although antique dealers have made most people aware of the value of their old furniture, if they happen to have any, there are still many home-makers who wish to keep their pieces for themselves and their families. Most of these old pieces need "doing over" if their fine points are to be brought out. Sometimes a chair or a table could be made

the pride of the household by being refinished. Then too in almost every household, especially of several years' standing, there seems to be a collection of odd chairs, tables, desks, or miscellaneous furniture that just won't go with anything. Consequently, the odd piece unless "tied" to the rest of the furnishings by some means sticks out like a sore thumb and offends because it does not give a feeling of beauty or of comfort. It is not necessary to have all the pieces "matched" in a room: in fact the cleverest decorators avoid having too much of a sameness. We see more and more of what is called

(Continued on Page 10)



Furniture on exhibition in the American Wing of the Metropolitan Museum of Art reminds us of the simple styles of our early pioneers. The table was literally a "board" or two. The chests of drawers had to take the place of the luxurious closets or built-in cupboards of today.

What is Done With the Mentally Ill

Readers Have Asked for Some General Information About Handling Insane Cases

READERS have written asking for information as to how people are put into insane hospitals, how long they are kept there and how they are discharged. No doubt all the states have laws more or less similar regulating the method of handling people who are mentally sick, but it happens that the answers to questions listed here were given by the New York State department of Mental Hygiene for patients in New York State.

Although it is to be hoped that all our readers can keep in good mental health, many families at some period of their history need all the information they can get as to how to care for one of their number suffering from nervous or mental disorders. Many times the right treatment would effect a cure whereas neglect would only lead to a more permanent form of the disease. Fortunately, clinics are held at all the state hospitals for the insane, in New York at least. Here anyone can come for examination or interview or can bring a relative or friend for that purpose. Certain days are set apart for such clinics and doctors and nurses are there especially for examining purposes.

Certain types of people may *not* be admitted to a state hospital. These are clearly listed in the regulations, (a) idiots, (b) other feeble-minded persons not insane, (c) inebriates not insane, (d) drug addicts not insane, (e) epileptics not insane. There are two general classifications of insane, the criminal and civil insane. The criminal insane are sent to Matteawan and Dannemora State Hospitals while civil cases may be sent to the other state

or licensed private institutions. The state hospitals for the civil insane are at Binghamton, Brooklyn, Buffalo, Central Islip, Kings Park, Middletown, Utica, Poughkeepsie, Gowanda, New York City, Ogdensburg and Willard.

Before a person is committed to one of these hospitals he must be examined by two qualified examiners registered with the Department of Mental Hygiene.

Upon what basis are people committed to State Hospitals for the insane?

The requirements are: (a) Petition of relative or friend or certain public officials; (b) Certificate of lunacy made by two physicians who are qualified examiners; (c) Order of commitment signed by the Court.

Must they appear before any certain physician or will the recommendation of any physician suffice?

Must be personally and jointly examined by two physicians who are qualified examiners.

Does the doctor receive a fee for his services in committing the patient? Would it make any difference financially if he failed to commit a person after examination?

Physicians are entitled to a fee in either case the same as for any other professional service.

Is jury action necessary in order to commit a patient?

No. There is no provision for a jury commitment in New York State. There is this provision for rehearing: "If the person ordered to be committed or any relative or friend in his behalf is dissatisfied with the final order of a judge or justice committing him, he may, within 30 days after the making of such order, obtain a rehearing and review of the proceedings already had from the order of commitment upon petition to a justice of the supreme court other than the justice making the order of commitment, who shall cause a jury to be summoned and shall try the question of the insanity of the person so committed. Proceedings under an order of commitment, however, are not stayed, pending an appeal except when specially ordered by a justice of the supreme court."

Who determines how long the patient shall stay in any of these institutions?

The superintendent or physician in charge, subject to order of the Commissioner or Judge of Court of Record.

What is the legal status of a person on parole from an asylum? Discharged from an asylum?

No change in legal status whether in or out of institution unless a committee of person or estate or both has been appointed by the court. In other words a patient loses no civil rights by reason of commitment to an institution for the insane.

Does the institution profit financially by keeping a patient's name on its list?

No. The parole period is limited to one year unless the commissioner by special request in each individual case grants an extension. In State

(Continued on Page 11)



The Hudson River State Hospital farm showing patients assisting in taking care of the rutabaga crop. Such activities are considered to be of help to a patient in regaining his normal balance. The women patients often help with serving meals or other light duties not too great for their strength.

Editorial Page of the American Agriculturist

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Too Wet Or Too Dry, Thus Goes the Farmer's Job

PERHAPS you might be interested in the observations on crop conditions gained from a trip during the middle of June across several New York counties.

Of course, no one needs to be told that it is very dry. It always seems to get dry very rapidly after heavy rains, and that was the case this spring. Farmers are complaining that it is difficult to plow, and many crops are having their growth seriously checked. We have never seen clover looking any better than it does this spring. Pastures also are doing fairly well, although if we do not get rain soon, the good feed will not last long. Old meadows did not come through the winter well. Possibly they will show up better by haying time.

Spring grains are not looking well, either, and there is a comparatively small acreage of oats due to the fact that the weather would not allow farmers to get them into the ground. For the same reason, most crops are from one to three weeks late. Corn is just nicely showing the rows on most farms. However, we never worry much about corn because if there is a good stand, it can make all of the growth needed during July and August.

Another thing that impressed us is the larger number of calves and young stock in the pastures. Of course, we did not travel far enough this time to make too general an observation, but it does seem as if nearly every farm now has several more head of young stock coming on than it has had before in years. This checks with the recent dairy survey taken in the New York milk shed which would indicate a very decided increase in the number of calves.

If this is true, we will soon not be worrying about milk shortages, but rather about how we are going to sell all of the milk we have on hand.

Good Farm Conditions in the East

IN spite of early rains and other minor worries, farmers of the East are feeling more optimistic than they have before in several years. There is good reason. The chief farm enterprises here are dairying, poultry, fruit growing, and truck gardening, and these are the ones that have been

doing better than any other kind of farming in recent years.

Dairy products account for some \$2,000,000,000 a year, or roughly one-fifth of our total national farm income, and dairying has been growing steadily better each year. In fact, dairy and poultry products were responsible for the major part of the gain in the total farm income in 1928.

New York is first in the amount of whole milk sold; first in the income from dairy cows; third in the number of dairy cattle; second in the value of dairy cows; and second in the number and value of purebred livestock. More than two-fifths of the income of New York farmers is from fluid milk. Several other eastern states are leaders in profitable farm enterprises.

The recent declines in the price of western grain have caused a big drop in the price of dairy feeds, averaging in recent months a saving of seven or eight dollars a ton. New York dairymen buy more than a million and a half tons annually. Figure the saving for yourselves.

Of course, it is foolish to be too optimistic. We have pointed out repeatedly that there is danger ahead. Good prices are always apt to be followed by low ones. There are more heifer calves being raised than before in years, and there are some other indications that we may have a greater surplus, making milk prices lower in a year or two so it is a good time for the wise man to watch his step.

But at the same time, we believe it helps occasionally to count our blessings and certainly living and farming in the old East have a good many advantages. This is especially true now when such a large number of farmers in other sections are pessimistic almost to the point of despair because of the low prices that are received from grain and for many other of their products.

The Lure of the Road (See Cover)

ON our cover page this time we are giving you another picture in our series, "Beauty Spots of the East."

This time it is a bridge and winding highway in Cattaraugus County, furnished through the courtesy of the Allegany State Park Commission.

What is more alluring than an old road stretching on and on over the hills and through the valleys of our eastern farm country? Turn to the picture and see if it does not make you want to forget the troubles of the workaday world and go "distant countries for to see."

Farm Relief Bill Now a Law

THE bill known as the Agricultural Marketing Act has been passed by Congress, signed by President Hoover, and therefore is a law. Since its passage, Congress has also voted an appropriation of \$151,500,000 to the farm aid fund to be administered by the Federal Farm Board created under the new farm relief bill. Therefore, "farm relief" is an assured fact.

As we have explained before in A.A., the bill provides among other things for a farm board consisting of eight members appointed by the President. The members of the board are to be paid \$12,000 a year. The Federal Farm Board will have the power to make loans under certain restrictions to certain agencies for the purpose of improvement in the marketing of farm products, especially to prevent fluctuations of prices downward. The bill provides for close cooperation between the Federal Farm Board and existing cooperative marketing organizations. The cooperative associations are invited to form commodity advisory committees. For example, there may be an advisory committee of representatives of cooperatives selling cotton, another for milk cooperatives, another for fruit organizations, etc.

In addition to the provision for loaning money, the board has many other powers and duties. It

is directed to promote education concerning the principles and practices of cooperative marketing; to encourage the development of organization of cooperative marketing associations; to keep advised on crop conditions; and to investigate and report on the best uses of land for agricultural purposes, as well as the reduction of unprofitable land under cultivation, and methods for developing by-products and new uses for agricultural products. The loans from the revolving fund may be made by the board to any cooperative farm organization for the purpose of effective merchandising, to buy, build or lease storage facilities, to form clearing house associations, or to extend the membership of the cooperative associations by giving information to producers.

As our readers know, we have not been enthusiastic about this farm relief bill. Now that it is passed, however, we believe that it should be given support and have a fair trial.

We believe that cooperative associations must be careful to see that the responsibility for the failure of this new farm relief act is not placed on them. There is danger that it may injure instead of helping the whole cooperative movement. We believe also that, as we have before stated, eastern farmers must watch carefully to see that their interests are protected, or they will be overshadowed by other sections. What is good for the West very likely may not be good for us, but there may be certain fundamental principles that can be worked out by the new Federal Farm Board that will advance the interests of all American farmers. We certainly hope so.

What the World Requires of Us

BEFORE conferring degrees upon 921 people at Cornell's Commencement this year, President Livingston Farrand gave an address on "The Discriminating Mind." He said that national and international situations as well as modern developments in science and industry are demanding of people a high and trained capacity. To be successful under these conditions one must learn "to inquire with zest, to weigh with care, to judge with soundness and to act with vigor."

Dr. Farrand further said that America's failure to solve some of her great problems came not as a failure of ideals but as a failure of intelligence and action.

Excited discussion of such far-reaching subjects as our economic situation only stir-up trouble unless one has informed himself upon the facts on both sides. Narrow religious prejudices and suspicion of all peoples in their relations with other nations, make it all the more necessary to judge with accuracy events which are entirely new in our experience. It has been written of the late Marshal Foch that the reason he was one of the world's greatest generals was that he possessed the ideal combination of being able to see clearly the heart of a situation and then to issue orders to meet it. To see, to decide, to act—these three are the qualities of great men and women everywhere.—G. W. H.

Aunt Janet's Chestnut

THE little girl who had been told to write about boys and girls turned in the following:

"Boys are men that have not got as big as their papas, and girls are women that will be ladies by and by. Man was made before woman. When God looked at Adam He said to Himself: 'Well, I think I can do better if I try again.' And He made Eve. God liked Eve so much better than Adam that there have been more women than men.

"Boys are a trouble. They wear out everything but soap. If I had my way, half the world would be girls and the rest dolls. My papa is so nice that I think he must have been a little girl when he was a little boy."

Where Would You Live ?

Aunt Janet's Contest Brings Letters from Hosts of Readers

IT is certain that many of our readers are convinced that their own home farm or town is the very best place in the world for them to live. And it is not because they have never lived elsewhere. As you will see in some of the letters below, the writers have travelled much or lived elsewhere, yet have finally found their land o' dreams which suits them best.

We wish you could read every one of the splendid letters which came in response to the contest, they are so full of fine spirit and understanding. But we shall have to be content with the prize letters and as many other representative ones as we can find space to print.—AUNT JANET.

From City To Country

First Prize Letter

BREEZES laden with scent of lilac and newly turned earth, glad voices of little children at play, soft tinkle of the cow-bell heralding the herd's home coming, soft murmur of the creek, joyous trills of many birds, soft hum of insect life—all drift to me through the wide open western windows as the last rays of the setting sun casts purple and golden shadows over the densely wooded hill-side.

And my mind harks back to other even-tides, many years ago, but still poignant in my store-house of memories. Well can I remember sitting on the house steps facing a wee strip of yard, earth baked hard and dry; that, and hot brick pavements were my playground, shared with many other poor little city youngsters. Rows and rows of houses, all the same. No particularly distinguishing mark that it was home—only a number in a row. Clang of street car bells, shrill of locomotive and factory sirens, sounds of babies everywhere crying in the stifling heat. When I was ten I ran away one hot August afternoon over what seemed to me endless miles of scorching hot pavements, in search of a Paradise I had found once before, a tiny square of green grass and a few trees. My arms were breaking with the weight of the baby sister I carried, and just as I reached my goal a burly, six-foot guardian of the peace bellowed. "Hey, you kid, get off the grass." As my terrified eyes travelled down the giant's length of blue uniform, brass buttons, club, immense brogues, my aching arms and trembling knees gave out completely and I sank to the ground, the baby sprawling at my feet clutching gleefully at the grass. A heart somewhere within the blue uniform softened and the giant mumbled "Sure kid, sit down and rest yez a minute."

So for the entire afternoon I revelled in that tiny plot of green. At evening, reaching home with a now hungry and screaming baby I was soundly thrashed. I still remember howling rebelliously that when I was big I was going to live in the country forever. I did.

From experience I know there is no better place to live than in the country. It has more advantages to the hour than city living or living anywhere else could have in a week, nay, a year. I would not exchange for anything else on earth that country which I chose and which has spelled such great content to my heart.

My home nestles in a valley, wooded hillsides rising sentinel-like about me, low flying ridges, valleys between and higher summits beyond. Here and there fertile fields and growing crops. In the far distance a rising haze of bluish smoke shows where the railroad winds its way; near, but not too near. In the nearer distance a red tiled roof gleaming among the green. Neighbors. I feel that I hold my little domain and all that is dear in the palm of my hand. Much the same that I feel that God holds all he has created,—"Thy will be done." Weather and climate we must take wherever we are, as our Creator planned it. Our neighbors are our own

to make or mar. We sometimes forget that we are all God's children. "Do unto others as ye would be done unto."

And what a wealth of knowledge lies at the door of every country child. The wonder of new life every day. My seven-year-old son aptly expressed Nature's teachings when he remarked to me, as I found him placing kernels of corn in the crotch of an apple tree for Mother and Father Squirrel, "We must always be good to all Mother things." Lo and behold! There was a family of five darling little squirrels scampering around.—MRS. E. M. Y., New York.

* * *

The Home of My Choice

Second Prize Letter

BACK on the farm is where I would be if conditions that forced us to move into the adjacent village, temporarily, might be changed. Having lived here as a girl, I know our boy's chances for normal development would be more favorable at the old home—stead. Familiarity with nature's laws and knowing the joy of honest work well done, are two of the farm boy's greatest assets. Fortunately, our son's interest in "Dad's" farm, less than a mile away, and his 4H Club, with poultry project, occupy most of his spare time—baseball excepted—and check the tendency to adolescent discontent and consequent mischief that mars small town life.

However, I recognize the superior educational and cultural opportunities that city wealth makes possible. Contact with master minds and their achievements is important to all who would join the world's genuine aristocracy. Our youth must not be isolated from the world outside. The "rube" is the fellow who, self-absorbed, is ignorant of his place in the larger group and of his responsibility as one of that group. He may be found on Broadway as well as on the farm.

Earlier residence in a New York suburb, and later in a large western

city only strengthens my choice of our farm home. And travel on this continent and in Europe has not shaken my faith in the ideal conditions of a Western New York farm home such as ours—comfortable, roomy, modernized though modest, only an hour's trip from a city with exceptional educational facilities. And from our lawn, the outlook over a fertile valley with wooded hills beyond, the village church spire in the distance, is a landscape a millionaire might envy us, and is a daily reminder of the wonder of God's work and His devotion to us.—MRS. G. F. A., New York.

* * *

New York City for Him

Third Prize Letter

OF all the many places upon this terrestrial globe upon which I have traveled and much of which I have seen, one spot there is wherein I would love to live until the end of Time, and that is New York City.

You ask me why? Because to me it is the hub of the Universe, where there is more doing than in any other city. London, Paris, Geneva, Rome and other Continental cities have their charm, but New York combines them all with many additions. There are many cities, but only one New York.

I love it all, its rush and bustle, its life and general air of activity and excitement. The hurrying, skurrying crowds of humanity like a mighty army playing a game of "Pussy wants a corner", it all pleases and interests me, being like one grand big picture show, a panorama of real life.

Last and by no means least, if one tires of the excitement, the noise and confusion, how easily he can get away in a short time.

It has many advantages with beautiful picturesque Long Island so near, or one can sail up the historic Hudson, with its scenic splendors, or over into New Jersey with its varied resorts and

* * *

Finds Country Village Life Pleasant

I AM the child of farmers for many generations back, and the love of the open fields, and cool shady woods is deeply bred in me.

My earliest memory brings the old farmhouse, with its long sunny porch, facing the south, where beautiful mountains could be seen a few miles away, a row of father's bee-hives, the bees humming in the orchard just above the house, mother's row of rose-bushes, peonies, and old fashioned flowers blooming in succession from early spring until late fall, the winding stream, that flowed toward the lake of which we could catch a glimpse from the kitchen window.

In memory I see again the tall maples, and beech wood, which yielded the sweetest sugar in the springtime and beech-nuts aplenty in the golden October days.

No method of transportation has ever brought a greater thrill to my soul than the wild rides which my brother and I used to take, across the fields, and through the woods, on a pair of colts which father raised on the farm.

I now live in a home of my own, in the country town, (made up to a great extent of retired farmers). Here with one half an acre of land, and a comfortable house with lights, furnace, running-water, bath, I find time to work in the garden, and plant the flowers which I love to watch grow from day to day. From my kitchen window I can see the rows of peas, radishes, lettuce, and sweetcorn break through the earth and mature into food for my family.

Nearer the street where my neighbors may see as they pass by, are growing roses, lilies, peonies, larkspur, and the wild honey-suckle, jacks-in-the-pulpit, and lady-slipper. While I work there I forget the vexing problems of life, and my soul finds rest and joy. And then when "The Garden Club" meets we exchange ideas, and talk over the best methods of planting and arranging which is a benefit to all.

Here, with my family, where country, and town life combine, surrounded by green trees, singing birds, good neighbors where I can attend Grange, or go trout-fishing is like paradise to me, and the finest place to live that I know.—MRS. A. E. H., New York.

* * *

Would Live Right Where She Is

WHERE would I live, city or country, north, south, east or west? Why, right where I do live, in eastern Pennsylvania, Bradford County, on a little farm of thirty some odd acres. Here I can make garden to my heart's content. Here I can keep my cow and horse, pig and chickens, without which it wouldn't be natural. Here my children can play and live out-of-doors but under my watchful eyes, and with no danger from passing motorists. And when the children are grown and gone the place will still hold many happy memories. The neighbors, most of them, are old friends, people I've always known. The weather doesn't al-

(Continued on Page 7)

Send In Your Favorite Poem

AGAIN we call your attention to your opportunity to have your favorite poem published here in AMERICAN AGRICULTURIST and broadcast over Station WGY, General Electric Company's station at Schenectady. Every Thursday at noon, a series of readings, prepared by E. R. Eastman, editor of A.A., "Visits With the Poets of Farm and Home" are given over Station WGY. I hope you will listen in, and tell us whether or not you like them, and also give us your favorite poem, that it possibly may be included in later broadcasts.

Mrs. T. H. Barber, of Gansevoort, N. Y., sent in a poem, and writes about it as follows:

"The following poem is my favorite because the reading of it has comforted me, and strengthened my faith.

"I am sending it, hoping that if you print it, others may receive help from reading it."

Here it is:

Your Red Sea Place

Have you come to the Red Sea place in your life
Where in spite of all you can do,
There is no way out, there is no way back,
There is no other way but—through?
Then wait on the Lord with a trust serene
Till the night of your fear is gone;
He will send the wind, He will heap the floods,
He will say to your soul "Go on".

And His hand will lead you through—clear through
E're the waters roll down,
No foe can reach you, no wave can touch,
No mightiest sea can drown.

The tossing billows may rear their crests,
Their foam at your feet may break
But over their bed you shall walk dry shod,
In a path that your Lord will make.

In the morning watch, 'neath the lifted cloud,
You shall see but the Lord alone
When He leads you on from the place by the sun
To a land that you have not known.
And your fears shall pass as your foes have passed,
You shall be no more afraid;
You shall sing His praise in a better place,
A place that His hand has made.

—A. J. Flint.



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A.A.'s Western New York Farm and Home Talk



"It Is a Busy Life"

MID-June and it is still dry here

By M. C. BURRITT

along the Lake Ontario although light showers have fallen to the south of us. On land plowed early and worked over there is still good moisture. But men

who have been trying to plow for beans or cabbage during the past week have had a hard time of it. Some have had to give it up. Good rains are badly needed.



M. C. Burritt

Most of the corn and some beans have been planted during the past week. We finished our bean planting on June 15, but the majority of the bean acreage in this section is still to be planted. Unless good rains occur during the coming week the stand of beans is bound to be poor on the late plowed land. Practically no cabbage has been set to date but most of the domestic and some Danish will be set during the coming week. Plants are late but the situation is better than last year. In the big cabbage area of Ontario County to the southeast more than half the planting is reported as having been done.

Farm Improvements

All property needs careful attention just to keep it from rapid deterioration. It seems sometimes that this is particularly true of farm property. Farmers with extensive buildings are realizing the cost of upkeep more than ever before. And no testimony as to farm income and prosperity is more forceful than the neglected and run down condition of many—an increasing number—of farm properties. Both the mere repairs to keep buildings and fences and the like usable, and those alterations and additions which keep the plant efficient and in line with modern needs are important. All too many of us find neither time nor the money to do both and some of us neither.

After thinking over this problem and making a list of the necessary upkeep repairs and of desirable improvements, two or three years ago, I laid out a program for several years ahead and try to make some substantial progress toward its realization each year. An amount of money sufficient to do the necessary things is put into the budget each year and regarded as a part of the farm cost for that year. Operating income must be planned to meet this expense.

Under necessary upkeep buildings come first. They must be shingled and painted. It is a satisfaction to say that we have these two big and expensive jobs nearly done during the past two years. Then there is the repair of building walls, house chimneys, stable floors, etc. Fences always need attention both for replacement when rusted out and to clean up hedge rows, weeds, etc. These have been very generally neglected during the past few years. On farms where there are many stones these must be picked off regularly after every plowing or the fields become less efficient. And there is need for the stones for farm roads, barn floors, walls and other improvements. All these things must be continually looked after just to keep the plant up to par and prevent it from deteriorating. Persons who buy farms where these things have been neglected soon realize their importance and cost.

In addition to these repair and upkeep items there are always many improvements which it is desirable to make to keep a farm in good condition and efficient. Some of these are: new

stone farm yard roads to hold the

heavy trucks and tractors in use now-a-days, grading and planting of yards and grounds to make more attractive, tile draining land especially low wet spots, replacing wood barn and stable floors with concrete floors, building cement sidewalks, replacing old fruit trees with new trees and orchards of better varieties, and many others. Only by such a program of constant improvement can a farm plant be kept up to date. It all costs much money, energy and time, all of which are hard to find these days.

* * *

We picked our first strawberries on June 14, this year and they are wonderfully large and fine in spite of the dry weather. Right after the early rains in the spring we mulched the bed heavily with strawy manure between the rows and this is counting now in holding the moisture. First cutting alfalfa is practically ready now and so the harvest is on again even before the planting is finished. It is a busy life.—M. C. BURRITT, Hilton, N. Y., June 16, 1929.

Let's Recreate

(Continued from Page 2)

The utensils fit inside each other and the entire package is no larger than a milk pail. Such a kit contains two pails, a fry pan, a coffee pot, four cups, four plates, and a salt and pepper shaker. This eliminates at one fell swoop most of the favorite kettles and pots which are used in the kitchen.

Go easy on heavy food at noon. The warm sun, the purr of the car, and a full stomach are all plotting to put you to sleep. If you are driving, it is dangerous; if merely a passenger, you can't see the scenery if you are asleep.

Go easy on drinking water unlike what you have at home. Warm weather and strange water are bad for the digestive organs. Unless you are familiar with the full life history of the stream, avoid its water for drinking purposes. Avoid wells of deserted farmhouses. They may be good, they might be bad. In general you are safe in using water local residents are using. Until one travels it is hard to appreciate that there is such a variety of water. We struck water in Texas that tasted like a mixture of road oil and soap suds. It was pure, no doubt, but hardly palatable. When in doubt as to water, we found oranges eaten California style were a very effective thirst quencher. These oranges were prepared by cutting off a small slice from one end. By means of a knife cut the inside pulp. A greater part of the orange can then be sucked out and you do not get a shower bath which so frequently happens when an orange is dissected.

A Good Night's Sleep

Just a word about beds. We have converted our car into a Pullman. It is done in this fashion: the front seats of the coach are turned down, the back seat is brought forward on the foot rest of the back seat and then a dummy cushion is put in place of the back cushion. A camp mattress covers the whole affair the same as a Pullman sleeper. The lean-to tent makes an excellent dressing room. Modern tent equipments have many beds which are as comfortable as the one you have at home. Some are a part of the framework of the tent and others are detached. Whatever is elected, don't let any queer being who takes an unholy joy in being uncomfortable, who dotes on sleeping on a rock pile, running short of provisions and the like, influence you that anything short of a good bed is desirable. Motor

(Continued on Opposite Page)

For the Fourth

DON'T let the 4th be just a youngster's day at your home but make plans for the whole family to celebrate—take a day off and enjoy the commemoration of National Independence Day.

There are picnics, fishing trips, games and many other things that bring a welcome relief

from the monotony of everyday work. Come to this "Farm Service" Hardware Store and get outdoor sports goods to help you celebrate. You will find everything for baseball, tennis and other games, as well as fine assortments of fishing outfits and camp equipment.

Come to a "tag" store where you can "see before you buy" as a matter of economy and satisfaction.



Look for this tag in their window.



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Chester and Yorkshire—Berkshire and Chester

7 to 8 weeks old	\$5.00
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All husky, healthy, fast growing stock. MY GUARANTEE—YOU MUST BE SATISFIED. Will ship any number C.O.D. on approval. If dissatisfied, return at my expense. Crates free of charge.

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Berkshire and Chester, 8-9 weeks old, \$4.50
Also few Chester Whites 8 weeks old \$5.00, and some Jersey Red Durocs, 8 weeks old, \$5.00. Sold C.O.D. Keep them 10 days, if not satisfied, return them and your money will be refunded. No charge for crating.

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Let us suggest to you as breeders the best kind of a pig to start to raise is a good one. You save time and money. We sell all pigs with a trial of two weeks, and then if dissatisfied, return pigs and we will return your money.

7-8 wks. old, \$4.50 ea.; 8-10 wks. old, \$4.75 ea.
Breeds—Chester and Yorkshire cross, and Berkshire and Chester cross. Crating free. These prices F.O.B. our depot. Will ship any number C.O.D. or send check or money order.

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P. S. No pigs sold at the farm; only by appointment.

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AMERICAN AGRICULTURIST

(Continued from Opposite Page)

camp life when properly conducted is not roughing it.

Elegant trailers and camping trucks are for sale at reasonable prices, but they are primarily designed for those who camp a great deal.

What to Wear

What about clothes? Hasn't your opinion of campers been formed sometimes in the past by crazy outfits some of them wear? The truth of the matter is that most of these people do not enjoy these outfits but they think that camping requires some unusual dress. These folks are not campers; they are gypsy actors. My whole theory of camping is to spend as little as possible for things that you could not use at home. This would apply to clothes also. An old business suit is ideal for motor camping. You are then ready for a visit to any point of interest without feeling conspicuous. When dirty work is to be done around a camp, a pair of unionalls serves well. I found my unionalls and a pair of boots make a good working uniform, and an ordinary suit was adequate to wear anywhere. Why spend money for equipment that will be used for only a few days if it can be avoided?

I can just hear some of you over-boiled masculines say, "I would like a little camping trip, but my wife couldn't stand it." Don't fool yourself, Mr. Sophisticated One, your wife will be a better sport than you are, and unless my observation is not typical, she has a lot more adaptability. And you, Mrs. Wife, you have yet to discover how clumsy your dear spouse is until you get him into camp. Putting a collar button in that stiff shirt band is mere child's play compared with what you may expect. Let him get a meal or two, if you can live through it. It will do him good. Of course he may burn his fingers cooking, but you can save his feelings from utter ruin by the application of a little soda after he has stormed around a while. When he returns home he may appreciate that home-making is as much an art as man's work. Now don't get excited, you ladies with model husbands. This is not for you. Bless you, we could not improve on your selection.

Now to those who have camped, all this is not news. To those who want to possibly these suggestions may be encouraging and save you some effort. Remember this, however, that no matter what you learn about camping, there are still many more chapters. Remember also that no matter how carefully you weed out your load, you will always take too much along.

Where Would You Live

(Continued from Page 5)

ways suit, of course, but is there any place where the weather is *always* perfect? These woods and fields, hills and valleys, are as beautiful as anyone could ask for. I worked in the city once and *I don't like cities. I like living here.* It's home, and I'm no wanderer, I'm a homebody. So my choice is to live right here for the rest of my days for "Home is where the heart is" and mine is settled and content.—MRS. P. M. B., Pa.

To Cure a Horse from Pulling at the Halter

I USE two discarded inner tubes of an auto which I split and roll tightly together. I then wind them with a stout cord or fine wire and place a snap in each end. The result will be an instrument of cure for a horse which pulls at the halter. As the horse pulls back the tubes will stretch until the animal strikes the wall when the cord will gradually tighten and draw the unruly horse back to place.

After a horse tries this treatment a few times it will be willing to submit to the regulation halter.—J. W., New York.

The remedy for diseased animals which promises to cure all ills usually ends by curing none of them.

Livestock Breeders

FISHKILL FARMS
offer the following
Bred Heifers

FISHKILL MARTHA COLANTHA INKA Born Mar. 20, 1927—Bred Feb. 11, 1929	FISHKILL CLOTHILDE LILA MAY Born May 12, 1927—Bred Dec. 27, 1928
FISHKILL HENGERVELD LADY Born Feb. 11, 1927—Bred Jan. 21, 1929	FISHKILL MAY INKA COLANTHA Born Nov. 13, 1927—Bred Feb. 27, 1929
FISHKILL BEAUTY MAY COLANTHA Born Apr. 7, 1927—Bred Jan. 4, 1929	FISHKILL INKA HENGERVELD Born Dec. 9, 1927—Bred Apr. 22, 1929
FISHKILL KORNDYKE MAY SEGIS Born May 8, 1927—Bred Jan. 22, 1929	

These fine specimens of the Holstein breed are sired by FISHKILL SIR MAY HENGERVELD DE KOL. His sire is HENGERVELD HOMESTEAD DE KOL 4TH sire of a 1056 lb. cow, he out of JENNY LINN COLANTHA (30.95 lbs. butter in 7 days at 4 years), she being a grand-daughter of that greatest of all milk sires COLANTHA JOHANNA LAD, through his best son, our former herd sire, DUTCHLAND COLANTHA SIR INKA. On his dam's side FISHKILL SIR MAY HENGERVELD DE KOL's ancestry is just as impressive. His dam WINANA SEGIS MAY 2ND (27.42 lbs. butter in 7 days at 3 years, 11 months, 14 days), is a daughter of KING SEGIS PONTIAC HERO a full brother to that "Marvel of all Sires" KING SEGIS PONTIAC COUNT whose daughters have broken over 100 world's records.

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FISHKILL MARTHA COLANTHA INKA—Traces twice to Colantha Johanna Lad. Her dam has a splendid record in Class B, she a daughter of Dutchland Colantha Sir Inka, sire of eighteen 30 lb. daughters.

FISHKILL HENGERVELD LADY—Out of a grand-daughter of "Old Dutch" and holder of a fine series of records (22.19 lbs. butter at 2 yrs., 10 mos., 1 day). Traces three times to Colantha Johanna Lad.

FISHKILL BEAUTY MAY COLANTHA—Out of a daughter of the great Dutchland Colantha Sir Inka. Every sire in her pedigree has a list of proven daughters and five of the dams have proven records.

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FISHKILL CLOTHILDE LILA MAY—She embodies two great transmitting families on each side of her pedigree, tracing twice to Colantha Johanna Lad and twice to King Segis Pontiac Hero, a careful blend of high producing lines.

FISHKILL MAY INKA COLANTHA—She obtains 50% of her blood from Hengerveld Homestead De-Kol 4th, sire of a 1,056 pound cow. Also she traces three times to Dutchland Colantha Sir Inka. There is real production back of this animal.

FISHKILL INKA HENGERVELD—Her dam and sire are both by the famous Hengerveld Homestead De-Kol 4th. Three times she traces to Dutchland Colantha Sir Inka. Her dam has excellent records in every day dairy work, she being from a 24 lb. cow averaging 80 lbs. milk per day.

These highly bred heifers are offered subject to prior sale at **\$3000.00** Each Write to the address below for the pedigrees, terms, etc.

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7 to 8 Weeks Old	\$4.50 each
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All pigs have the size, quality and breeding. Will ship pigs C.O.D., ten days trial, if not satisfied return at my expense. No charge for crates.

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Large type Poland China—Chester White Cross. Yorkshire and Chester Cross.

Also a few Duroe & Berkshire cross sows and Barrows.

Pigs 6 to 7 weeks old	\$5.00
Pigs 8 to 9 weeks old	\$6.00

These are all good Bloeky Pigs. Are weaned and will make large hogs. Will crate and ship C.O.D. for your approval. Visit us or mail your orders to

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Buy where quality is never sacrificed for quantity. We sell only high grade stock from large type Boars and Sows, thrifty and rugged, having size and breeding. Will ship any amount C.O.D.

Chester & Yorkshire — Berkshire & Chester

7 TO 8 WEEKS OLD	\$4.50
8 TO 10 WEEKS OLD	\$4.75

Also a few Chester barrows 8 wks. old, \$5.25 each. Satisfaction guaranteed or money refunded. 10 days trial allowed. Crates supplied free. A. M. LUX, 206 Washington St., Woburn, Mass. Tel. Wob. 1415.

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AGAINST TRESPASSERS

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Reviewing the Latest Eastern Markets

Milk

The following are the June prices for milk in the basic zone of 201-210 miles from New York City.

Dairymen's League prices are based on milk testing 3.5%. Sheffield on the basis of 3%.

Class	Dairymen's League	Sheffield Producers
1 Fluid Milk...	3.37	3.17
2 Fluid Cream		1.95
2A Fluid Cream	2.16	
2B Cond. Milk..		
Soft Cheese...	2.41	
3 Evap. Cond. Milk Powder		
Hard Cheese	2.20	1.95

4 Butter and American cheese. Based on New York City Market quotations on butter and American cheese.

The Class 1 League price for June 1928 was \$2.90 for 3.5% milk and Sheffield's \$2.70 for 3%.

The above prices in each class are not the final prices the farmer receives. The final price received from the dealer is the result of the weighted average.

Easier Undertone in Butter Market

CREAMERY	June 19, 1929	June 12, 1929	Last Year
SALTED			
Higher than extra...	44 1/2-45	44 -44 1/2	44 1/2-45
Extra (92c)	44 -	43 1/2-	44 -
84-91 score...	40 -43 1/2	39 1/2-43	40 1/2-43 1/4
Lower Grades...	38 1/2-39 1/2	38 -39	39 1/2-40

At this writing, June 20, before the market has taken shape today there is an easy undertone in the butter trade that looks very much like a recession to last week's prices. It will be observed that current quotations are a half cent above a week ago. For the last couple of days it looked as though the advance could not hold. There was considerable opposition to the advance in the first place, many being of the opinion that it would obstruct many of the outlets and that in the end no net gain would be experienced. Whether it is the price advance or the extremely hot weather we do not know, but it is a fact that the last few days have seen a lighter consumptive demand. The extreme heat is undoubtedly responsible to some extent. It has not only affected the retail end of the business but has taken a lot of pep out of the wholesale market. Since the price advance, the market has been without the life that was characteristic of the trade a week ago. Many buyers have ceased to operate, waiting to see how the wind is blowing.

Receipts are extremely heavy, approaching record marks, and the indications are that they will continue for

a while. It looks as though the last week in June will see the peak. The storage activities have been brisk. Most of the storing has been done by receivers, although speculators have been taking large quantities of fancy marks which constitute the bulk of the arrivals. Storage holdings are about 50% heavier than they were last year.

Fresh Cheese Goes Higher

STATE	June 19, 1929	June 12, 1929	Last Year
FLATS			
Fresh Fancy.....	24 -25	23 1/2-	25 -26 1/4
Fresh Average.....			
Held Fancy.....	27 1/2-29 1/2	27 1/2-29 1/2	30 -32
Held Average.....			29 -30

The opinion we expressed last week, namely that indications were for higher prices for fresh cheese, has been borne out. There is a car of fresh flats being offered at 24c for the fanciest and specials are being held at 25c. There is some high cost New York State cheese here bought on the basis of milk prices, costing 25 1/2c in the country, but there is little likelihood of this being sold to local dealers at a profit at present since Western cheese can be bought for less money. However, all along the line there has been a disposition to ask more money for recent receipts showing full grass.

Cold storage holdings on June 13 in ten cities making daily reports totaled 11,480,000 pounds, compared with 8,868,000 pounds on the same day a year ago.

Weather Hits Egg Market

NEARBY WHITE ..	June 19, 1929	June 12, 1929	Last Year
Hen'y Sel. Extras...	37 -40	38 -40 1/2	37 -39
Hen'y Av'ge Extras...	35 -36	37 1/2-	36 -37
Extra Firsts.....	34 -34 1/2	35 -36	33 -35
Firsts.....	33 -33 1/2	33 -34 1/2	31 1/2-32
Undergrades.....	31 -32	32 -33	30 -31
Pullets.....			
Pewees.....			
NEARBY BROWNS			
Hennerly.....	34 -40	35 -40	36 -37
Gathered.....	31 -33 1/2	32 -34 1/2	30 -35

The hot wave that swept the entire East left its mark on the egg trade. The hot weather was unfavorable to the free use of eggs and prices made a fractional retreat. Extremely heavy receipts added emphasis to the discouragement of the demand that accompanied the hot weather. White eggs seem to have suffered a little more than browns. On the whole however, most of the jobbers report lighter orders for current use. Naturally with an easier demand and full supplies prices have got to give ground.

On June 14, the ten cities making daily reports had over 700,000 cases less in storage than they held on the same day a year ago. Therefore, in spite of the temporary loss in the market the situation continues favorable. Poultrymen are urged in these periods of extreme heat to use every precaution conceivable to avoid loss of interior quality because of exposure to heat; frequent collections, storage in a cool well ventilated cellar and quick delivery to market during the cool of the day to avoid any undesirable quality.

Live Poultry Market Off

FOWLS	June 19, 1929	June 12, 1929	Last Year
Colored.....	26-28	29-31	26-27
Leghorn.....	24-25	25-27	-20
CHICKENS			
Colored.....			
Leghorn.....			
BROILERS			
Colored.....	38-48	30-50	28-45
Leghorn.....	25-34	20-33	20-33
CAPONS			
TURKEYS.....	20-30	20-30	
DUCKS, Nearby.....	20-25	-25	20-22
GESE.....	16-17	16-17	

Extremely warm weather is having the usual effect on fowls and the live poultry market rules unsatisfactory. Where broilers can help their sale the situation is better but the live fowl market as a whole is generally on the "basis of concessions."

The broiler market, although it is on a slightly lower level than it was last week, is in very good shape. There is an excellent demand and by far the major part of the offerings of both colored and Leghorns are at top quotations except in those cases where they

help to sell fowls. The express broiler market is in the seller's favor. There is an active demand especially for Reds, this being due to the wide differential between Reds and Rocks.

Fourth of July is going to be a broiler market but only for the better class stuff. Shippers are urged to grade their birds by breed and according to weight, and to get into the market not later than Monday night. Tuesday morning will undoubtedly be a good trading market, but late Tuesday we may see the market beginning to slacken off, so time your shipments accordingly.

Feeds and Grains

FUTURES	June 19, 1929	June 12, 1929	Last Year
(At Chicago)			
Wheat (Sept.).....	1.13 1/4	1.10 1/4	1.39 3/4
Corn (Sept.).....	.92 3/4	.91 1/4	.96 1/2
Oats (Sept.).....	.45 3/4	.42 3/4	.45 3/4
CASH GRAINS			
(At New York)			
Wheat, No. 2 Red..	1.39 1/4	1.29 1/4	1.82 3/4
Corn, No. 2 Yel....	1.07 1/4	1.07 3/4	1.18 3/4
Oats, No. 2.....	.56 1/2	.56	.80 1/2
FEEDS			
(At Buffalo)			
Grade Oats.....	32.00	32.00	
Spring Bran.....	26.00	25.50	34.50
Hard Bran.....	28.50	27.50	36.50
Standard Mids.....	26.00	25.00	38.50
Soft W. Mids.....	33.50	33.00	45.00
Flour Mids.....	31.00	30.50	44.00
Red Dog.....	33.50	34.00	
Wh. Hominy.....	38.50	36.50	43.50
Yel. Hominy.....	38.50	36.50	45.00
Corn Meal.....	38.00	38.00	42.00
Gluten Feed.....	38.50	38.50	44.75
Gluten Meal.....	46.00	46.00	
36% C. S. Meal.....	38.50	37.00	58.00
41% C. S. Meal.....	41.50	40.00	66.00
43% C. S. Meal.....	43.25	43.00	68.00
34% O. P. Linseed			
Meal.....	49.00	49.50	52.00

The above quotations are those of the local Buffalo market and are F.O.B. They are reported in the weekly letter of the N. Y. State Department of Agriculture and Markets.

HIDES & SKINS—Steers and cow-hides, green No. 1, 8c per pound; No. 2, 7c per pound; cured hides 10% above. Calf skins, green trimmed, New York City, No. 1, 19c per pound; No. 2's 17c per pound. Weights 9-12 1/2 pounds No. 1 \$2.00; 12-14 pounds No. 1 \$2.30 each; 14-18 pounds No. 1 \$2.50 each; 18 pounds and up No. 1 \$3.55; No. 2's buttermilks and branded proportionately less on the foregoing weights. Deacons \$1.00-1.25 each.

HONEY—Market steady. Per pound, clover extracted, in bulk, white 12-12 1/2c; amber 11-12c; buckwheat, extracted, in bulk 9-9 1/2c.

MAPLE SYRUP—Market steady. United States commercial standard graded and filtered per gallon, No. 1 \$2.25-2.35; No. 2 \$1.75-2.25; No. 3 \$1.65-1.75. (Farmers run equivalent to No. 3) Sugar in casks, farmers run 20-25c.

ROOTS & HERBS—Wild Ginseng: well-dried, New York and Eastern States, per pound; \$18.50. Cultivated Ginseng: according to quality, New York and Eastern States, prices given on examination of a two-pound sample. Goldenseal; Clean and well-dried, New York and Eastern States, per pound; \$2.80. Goldenseal; Leaves and stems, New York and Eastern States, per pound: 60c.

Briefs on Fruits

The fruit crops in New York are irregular, with mostly fairly good conditions in Western New York and poor conditions in the Hudson Valley. On June 1st most fruits were not far enough out of bloom to justify a forecast in this state. Apples had a reported condition of 79 percent compared with 78 last June and 78, the ten year average. Prospects will be shaped up better by July 1st. For the United States, prospects are somewhat below last year and below average.

Peaches are starting out with a condition somewhat above average in the state, indicating, on a gradually declining acreage, a crop of 1,810,000 bushels which is about average though only three-fourths of last year. With poor crops in Georgia and California and no excessively large crops in prospect in any of the northern states, it now appears that competition in New York's market with peaches from other

states may not be as keen as in some recent years.

Pears are starting off with rather poor prospects, both in New York and most of the other important states, except Washington and Oregon, where increasing acreage may result in production above average, though below last year.

Cherries in New York are very poor in the Hudson Valley and apparently fairly good in Western New York, with an average condition of sweet cherries of 61 percent compared with 49 last June and sour cherries with a condition of 62 compared with 72 last June.

At the close of the week the demand for strawberries was more active and prices sharply advanced especially on fancy large fruit in a decidedly stronger market. Supplies were moderate and Hudson Valley offerings as a whole were more attractive than those from competing states.

Trend of the Farm Markets

(Special to A.A. from the U. S. Dept. of Agriculture, Bureau of Agricultural Economics, Market News Service)

Washington, D. C., June 18, 1929—Crops are making steady progress, with no more than the usual setback except from late-ness or excessive rain in parts of the West. Markets have acted well this month, although grain and feed prices continue irregular. Live stock, dairy and poultry products have held market values well. Most vegetables show only the usual seasonal declines and the new fruit season begins at firm prices.

GRAIN—The grain market was unsettled up to mid-June and beyond, ruled largely by weather conditions and varying reports of crop developments in important producing areas. A domestic winter wheat crop about 43 million bushels larger than last season was indicated by the June 1 report. This is materially more than was in prospect at the first of May, as a result of favorable growth of hard winter wheat. Harvesting of new winter wheat is under way.

FEED—Prices of wheatfeeds, cottonseed meal and hominy feed advanced. Gluten feed and alfalfa meal averaged about unchanged. The linseed meal market was unsettled, with price advances at some points offsetting declines.

HAY—Prospects are better than usual in most States east of the Mississippi River, but are poorer than usual in the western States. Timothy markets were slightly irregular in mid-June. Demand for good quality hay was active at eastern markets and prices strengthened with limited offerings.

CATTLE—Scarcity was the factor that galvanized the Chicago cattle market into action in mid-June, an acute shortage of common and medium steers being the influence that lifted kinds of value to sell at \$14 downward during the season when the June break is usually on. In fact, practically all steers suitable for slaughter sold within a range of around \$1.50, and most of the fairly well finished kinds within a dollar price spread. Killers seemed willing to pay \$15 to \$15.25 for the big, rough bullocks which were being peddled at \$13.25 to \$13.50 a month earlier.

HOGS—Top price on hogs at Chicago was \$11.55, reached about mid-month for a load or two of 165-180 pound weights. The bulk of the better grade 160-220 pound weights sold within a range of \$11.25 to \$11.50 at the best time.

LAMBS—Native lambs sold at Chicago from \$15.50 to \$16, yearlings mostly \$11.50 to \$12 and fat ewes \$6 to \$6.50. The range of price was slightly below that of early June, owing to increased supply.

WOOL—The Boston wool market slowed up to a considerable extent, business being confined largely to fleece wool lines. Fair sized quantities of Ohio Delaine wools sold at 39c to 40 cents in the grease which was 95 to 98 cents scoured basis.

POTATOES—Carlot potato shipments from Norfolk district were expected to gain rapidly after the middle of the month, while Eastern Shore of Virginia would increase to perhaps 2,000 cars for the week, if weather and market conditions were favorable. Prices were lower, especially in city markets. Rains were hindering mid-June carlot movement in some potato districts.

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Gov. Roosevelt Sends Message to League Meeting

Wishes to Keep Market for Eastern Producers

One of the outstanding events at the great annual meeting of the Dairymen's League Cooperative Association at Syracuse on June 20 was Gov. Franklin D. Roosevelt's message to dairymen on keeping western milk out of New York markets.

The message was read by Henry Morgenthau, Jr., Chairman of the Governor's Agricultural Advisory Commission and publisher of AMERICAN AGRICULTURIST. It was most enthusiastically received as shown by the hearty applause several times while it was being read. Here is what the Governor said:

Governor Roosevelt's Message

"I am glad to take this opportunity to extend my greetings and congratulations to the Dairymen's League Cooperative Association, assembled in its annual meeting, and to all of you individual dairymen from every section of our great State.

"Because of our large cities and immense industries, many do not realize that New York State has a greater diversity in its agriculture and is a leader in the production of more individual crops than any other state in the Union.

"New York State is:

- 1st in amount of whole milk sold
- 1st in income from dairy cows
- 3rd in number of dairy cattle
- 2nd in value of dairy cows
- 2nd in value and number of pure-bred livestock
- 1st in income from hay
- 2nd in production of apples
- 2nd in production of pears
- 2nd in production of grapes
- 1st in production of cabbage
- 2nd in production of potatoes
- 5th in commercial acreage of all vegetables
- 4th in income from poultry and eggs
- 4th in value of farm implements
- 6th in cash income to farmers
- 4th in number of farms operated by owners.

"The cash income of New York's farmers is more stable and has increased more over the last fifteen years than that of any other state in the nation. Its stability is largely due to dairying, since dairying is the backbone of New York agriculture, and since New York farmers have at their door the best market in the world, New York City.

"Let us keep this market. Let us maintain this great agricultural supremacy of the Empire State and also let us all work together to keep our New York City milk market for the dairymen of the New York milk shed.

"Last fall in speaking at Owego on October 18, 1928, I said:

"Back in 1926—two years ago—western milk and cream from distant states were admitted to New York City. It was sold at low rates to New York City and metropolitan district dealers. This was bootlegged into the city through bribery of corrupt officials, and was a grave potential source of danger to the public and a serious blow to the honest farmers who could not compete with cheap western milk."

"The present city administration exposed these corrupt practices. They stopped the bootlegging of milk and cream from uninspected, unapproved and sub-standard farms of the west. Three guilty officials are now in jail. The farmers of this state have as a result of that action been freed from dangerous and unfair competition and the public has been protected from possible diseases."

"The health commissioner two years ago called together the representatives of the farmers in New York and vicinity, and wholesale distributors—the big buyers agreed to measures by which every large company agreed to give an increase of approximately twenty per cent. to every farmer for six months of the year above the standard price for each hundred pounds of milk. Increased production by New York State farmers was stimulated by measures proposed and carried through by the Health Depart-

ment. This was again adopted—readopted this year, and the annual increase in income of the farmers through increased production and higher prices has been a boon to them, and has served to stop milk bootlegging, because the milk and cream shortage of previous years has been overcome. The farmers, through their representatives, had constant contact with the Health Department to discuss proposed health ordinances and prevented the adoption of laws by any State department that would work a hardship upon them. The confidence of the public in milk and cream produced by New York and vicinity by the farmers of our own State was restored and even greatly increased by these reforms, and by the public education which was conducted at the same time."

"During the last half century, we have seen some of New York State's old farm enterprises crowded off of our farms by western competition. There was a time when we led in the production of wool and mutton; there was a time also when eastern apples and other fruits and vegetables predominated in eastern markets. But now many of these products are shipped hundreds and even thousands of miles from other sections and sold almost under the very noses of eastern producers. Let us highly resolve that eastern dairying will not have the same history.

"I have been delighted at the splendid cooperation and the hard work, not only of your organization, but of many other agencies, to assure our New York markets of an adequate supply of high quality milk at all times.

"Let the good work go on, and in conclusion, let me say that you can count on me to cooperate with you to keep your present market intact. Also you can be assured that I want to do everything within my power to put farming on an equitable basis with other industries and to maintain the supremacy and leadership of the State in agriculture."

Commissioner Wynn Asks Cooperation in His Address

Dr. Shirley W. Wynn, Commissioner of Health of New York City, took the long trip to Syracuse at the invitation of the League to address the meeting.

Dr. Wynn said that he was not in favor of bringing in western milk providing an adequate supply of good quality milk could be produced in this milk shed. He warned the dairymen, however, that it was his duty to see that the city received enough milk and

that he would not lower standards any to get it.

The Commissioner stated that the Department of Health's rules for the inspection of milk plants and dairies are being simplified and the revised rules will soon be published. AMERICAN AGRICULTURIST will print the new rules in an early issue as soon as we can get them.

Dr. Wynn said that because the Department of Health had adopted high standards for milk production, the Department had a responsibility to farmers. On the other hand, said the Commissioner, farmers also have a responsibility to consumers. So it is a problem of fair play and cooperation on all sides.

The Commissioner was cheered repeatedly during his address.

Meeting Largest Yet

More than twenty-five hundred dairymen attended the League meeting which was probably the largest farmer's meeting ever held in the East. The spirit and enthusiasm was splendid, it being very evident that members are solidly behind their organization.

Resolutions Passed

The resolutions were not very important—among the three of interest was one asking President Hoover to appoint a New York State man on the new Farm Board for farm relief; one pledging League members to maintain the milk supply during the short periods of production; and one urging proper tariff protection for dairy products. A resolution for consideration of the question of raising the pay of League Directors was defeated.

In the afternoon the dairymen listened to an address by Harry Hartke, President of the National Milk Producers Federation. The speaker seemed to be enthusiastic over the new federal farm relief law and what it will do for farmers. Dairymen hope that he is right but are wondering what "farm relief" will do to the price of dairy feeds.

Hot Weather Increases Milk Consumption

A NUMBER of weather records have been broken in New York City during the past week. Those who have looked back over past records of the Weather

New York County Notes

Cattaraugus County—Over 600 people attended the community gathering in the high school, Cattaraugus in connection with the June session of Pomona Grange. The debate "The Present is a Good Time to Buy a Farm in New York State" was won by the affirmative. E. N. Rehler, Olean, presented a county map to winners. Eight members called by death during the past year were remembered in memorial service and carnations placed on altar and later on their graves. The autumn session will be held in Dayton. Roy Babcock, West Valley, will entertain the State Grange delegates on a picnic July 6. Louis J. Taber, Master of National Grange will speak at the County Farmer's Picnic on June 29.—M. M. S.

Genesee County—The Farm Bureau, Home Cooperative, Granges and 4H Clubs will co-operate in a two day fair and field day at the Prole farm on the Klipnock Road, August 14 and 15. Committeemen of the organizations will meet June 19 to make out premium lists and plans for the different exhibitions and departments. Implement manufacturers will demonstrate plows and other farm implements. We are badly in need of a good rain. The ground is too hard to plow and everything is at a standstill.—MRS. R. E. G.

Chemung County—Corn growth about normal in spite of rain. Oats are looking fine. Wheat in this section is not up to the average and is showing effect of too much rain. New seedlings of clover, timothy and alfalfa are very good—above average but old meadows look very poor. Farmers are in the midst of tobacco set-

ting. The acreage is larger than last year. Pasturage is good and there is a large production of milk in every dairy.—J.G.G.

Rensselaer County—An interested group of farmers gathered on the Rensselaer County Fair grounds June 12 to witness the practical demonstrations by Mr. King and talks on the deterioration of sheep by the existence of parasites in the intestines. A sheep was slaughtered and a post mortem revealed the destructive work of these parasites. Other subjects of interest to cattle men were discussed. The much needed rain has come. Corn planting is under way.—E.S.R.

Saratoga County—Today is the funeral of Hubert Palmer, a prominent granger, also member of town Board of Moseau. June 14 we had a very heavy thunderstorm and hard winds which blew down trees and buildings and a number lost chickens. Gardens and oats are growing nicely. Corn nearly planted now. Some early strawberries are beginning to ripen. Butter 45c, eggs 30c. County schools close next week. Clover beginning to blossom. Haying soon.—MRS. L.W.P.

Sullivan County—About \$24,000 are to be spent to repair highways in eastern Sullivan. Summer traffic is getting very heavy and there are many auto accidents. The past couple of weeks have been dry and warm and farmers are busy caring for their crops. Strawberries are ripening and sell very reasonable. Corn is \$2.20, calves are bringing a reasonable price but cows are very high. Few farmers have commenced haying but all reports show a very poor crop. Rhododendrons are just beginning to come out.—P.E.

Bureau find that recent temperatures have not been equaled on corresponding dates for years. There have been a number of deaths both from heat prostrations and from drownings.

There is a bright side to this so far as milk producers are concerned as hot weather has resulted in a big increase in consumption. Mr. Wellwood of Sheffield Farms estimates that their sales have been from 15 to 20 per cent greater than average during the past week. The Dairymen's League office reported an even greater increase in their fluid sales. At the same time, producing sections report that hot weather has cut production, thus bringing production and demand closer together than is usual at this time of year.

Farm Relief At Washington

FOLLOWING a rollcall vote by the House of Representatives on the Farm Relief Bill, the Senate voted to accept the conference report which eliminated the debenture plan and the bill was immediately signed by the President and became law. Upon the recommendation of President Hoover that an appropriation be made to immediately carry out the provision of the bill, Congress on June 17, passed an appropriation of \$151,500,000, the sum asked for by the President. The Farm Relief Bill calls for an appropriation of \$500,000,000 but it is reported that President Hoover felt that the entire sum did not need to be made available at once. One hundred and fifty million dollars of the appropriation will go into the revolving fund and one and one-half million dollars is to take care of immediate administrative expenses.

The next step will be the appointment of the Federal Farm Board of eight members by the President and it is expected that these appointments will be made in the near future.

Tariff Now Has Center of Stage

The passage of the Federal Farm Board Act apparently does not end the fight on farm relief. Senator Borah recently introduced a resolution directing the finance committee to restrict its consideration of tariff changes to agriculture and directly related schedules. This resolution was defeated in the Senate by a vote of 39-38. It has been claimed in some sections that President Hoover was not entirely pleased at the extent of the proposed tariff changes.

There has also been considerable dissatisfaction on the part of farm organizations who feel that the proposed tariff increases on farm products are not large enough and who also feel that tariff increases on other products which the farmer must buy will offset any advantages he may have from increases on his own product.

On the other hand, it is pointed out by those who opposed Senator Borah's resolution that the President's message called for tariff revisions on farm products and on the products of industry where conditions for the past few years have made it impossible to maintain prosperity.

On June 17, the Senate took a recess until August 19, while the House of Representatives voted to extend its recess until September 23. This, of course, means that tariff revision will not be acted upon until fall.

Broome and Delaware Pomona's Meet

ON Saturday, June 15th, the Pomona Granges of Delaware and Broome Counties, New York, met at Deposit in one of the finest Grange meetings it has been my pleasure to attend in a long time. After a business meeting in the morning, a program of music and speaking was held in the afternoon, with talks by Miss Elizabeth Arthur, lecturer of the New York State Grange, and myself. Miss Arthur gave a particularly pleasant and instructive address and was very well received by her audience.

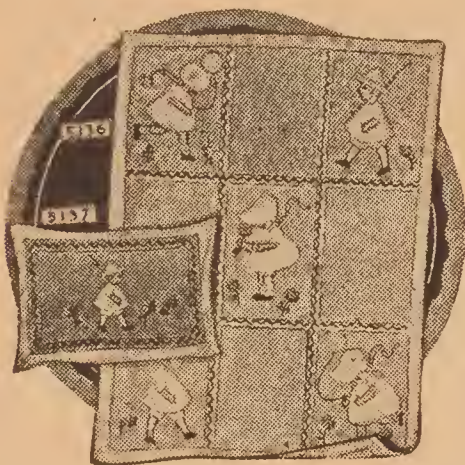
The custom of neighboring county Pomona's holding joint meetings is a very commendable one. It brings to the members from each county what is being done in Grange work in the other county, and, what is more important still, it leads to an understanding of one another's problems, and friendships which are the foundation of all good progress.—E. R. E.

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"Mothers and Babies First"

Federal Aid Provided by the Sheppard-Towner Bill Has Ceased

HOW to secure proper medical care is one of the gravest problems before our rural communities and in no case is this problem more serious than for the mother and her baby. A systematic nation-wide attempt to save the lives and improve the health of mothers and children under a year old has been going on for seven years under the Sheppard-Towner Act which comes to an end June 20th, 1929. A bill for the continuance of this work has been introduced at the special ses-



NURSERY CRIB SET composed of crib cover NO. B5136 and pillow NO. B5137 comes either in fast-color pink or blue percale with white border stripe. Tinted white patches stamped for applique and embroidery form the cunning little figures shown in the illustration. Floss for working also included. Cover \$1.50. Pillow 75c. Address Embroidery Department, American Agriculturist, 461 Fourth Ave., New York City.

sion by Senator Jones of Washington and Representative Cooper of Ohio (S. 255; H. R. 1195).

We all understand what it has done for the United States to have the federal government spend money for good roads; for improving fruits and vegetables and grain; for stamping out cattle tick; for teaching us how to feed cows. But important as these matters are, not one, nor indeed any other, is so important as the saving of mothers and babies and making them well and strong. The appropriation for killing gophers is just the appropriation asked for the maternity and infancy work, \$1,000,000, while roads had \$80,000,000 in 1927. Until every state board of health understands this and every state legislature is ready to supply the necessary funds so that every mother has a chance at proper medical advice and care and every baby a chance for life and health, we must not let go the incentive that has come to the states through the educational work by the Children's Bureau made possible by the Sheppard-Towner Act.

Death Rate in U. S. High

It is perhaps due to our wide distances and scattered homesteads that the death rate of mothers in childbirth and babies under a year old has been higher in the United States than in many civilized countries. Under Julia Lathrop, who began the study of this problem when the Children's Bureau was opened in 1912, and of Grace Abbott, under whom the Sheppard-Towner work has been organized, much has been accomplished in teaching doctors and nurses and mothers the best way of caring for babies. But as yet no great headway has been made in saving the lives of mothers. It is computed that 15,000 die annually in the United States, and these largely from causes that would have been prevented by competent care.

The Sheppard-Towner Act has allowed each cooperating state an amount equal to its own appropriation for this particular division of the work done by its department of health. This plan has left the states free to carry out the plans best fitted to their individual needs, but has given incentive for larger appropriations, and has put at their disposal the experience of doctors and nurses and scientific experiment in all parts of the country.

Classes to give special training to

public health nurses, classes for mothers, for little and big sisters indeed, are spreading the knowledge of how to keep the mothers and babies well. Doctors even have asked for training by specialists for themselves, and clinics for mothers and children are held where specialists and local doctors work together to bring the best scientific aid to isolated communities. All but three of the states, Massachusetts, Connecticut and Illinois, have been doing this work with the help of the Children's Bureau. In few of them is it yet on a permanent footing, so that the withdrawal of federal aid will mean curtailment of this merciful service, needless suffering, and deaths that might have been prevented.

The work will continue if the women of the country let their representatives know that they believe in it.

A report of maternity welfare work done in New York State was recently published in the U. S. Daily. Definite figures showing accomplishments were as follows:

"New York accepted the Sheppard-Towner grants in 1923, and this 1927 report shows how great was the need and what we may hope for if the work goes on.

"In 1922, seventy-seven babies out of every 1000 died. In 1926 the rate was 70.5. The provisional figures of 1927

give the rate as 59.4. The 1927 figure for the deaths of mothers are not yet available but in 1922 it was 60.2 per 10,000, in 1926, 56.5. There is a pitiful difference between the rural and the urban rates, it being so much easier to get proper care in the cities, but in the years that the Sheppard-Towner funds have allowed the rural counties and the state to work together on this problem the deaths of mothers in the rural districts have fallen twenty per cent."—Eveline Brainerd, Editor Weekly News, N. Y. League of Women Voters.

We Learn More About Furniture

(Continued from Page 3)

the "occasional" chair, one which is different but whose colors blend with the color scheme and whose lines add to the attractiveness of a room.

Yet it is upsetting to look into a room or on to a porch and see perhaps an oak table, some painted chairs, some dingy willow or wicker or other collection of mismatched furniture. And that is where paints, lacquers, and the colored varnishes literally "shine." It would be a pity to take a good old piece showing beautiful grain of wood and cover it all over with one of these

opaque finishes, but for getting general harmony out of a hodge-podge of colors and for finishing new unpainted furniture, certainly women never had a better opportunity to do this than right at the present time.

Preparing the Surface

The first thing to remember is that all these finishing materials are made up differently and each requires its own kind of handling. But directions are always clearly given and anyone with horse sense and the ability to do what she is told can use them. Another good thing to remember is that all of them require a smooth, dry surface to start with, that is, if you hope to have a smooth surface when the job is finished.

Sandpaper or steel wool may be used to smooth down rough places. If for any reason the previous coat of finish needs to be removed entirely, various methods are employed. In some cities, there are places which steam off paint or varnish. This or any other water treatment swells the grain of the wood somewhat, but sandpaper remedies that. If the furniture is not choice, a common household method of paint removal is to use lye. This is effective but the person doing the job has to guard her hands carefully or there will be painful burns. The grain of the wood is swelled by this process. The commercial paint removers which may be bought from anyone dealing in paint supplies are best for any furniture that requires delicate handling. They do not swell the wood and therefore cause less risk of coarsening a beautiful grain. Furthermore, they are easy to use.

Brushing lacquers dry within thirty minutes and shellacs dry within twenty minutes while some of the new varnishes dry within two to four hours. Where time is no consideration two or three foundation coats of paint finished off with a coat of enamel will give a lovely finish and one which is very easy to keep clean. Each coat must dry thoroughly, that is, for 24 to 48 hours, before applying the next. The pretty stencils and decalcomanias make it easy for even the inexperienced painter to get lovely decorative effects. These are to be bought from practically all who deal in paint supplies and come in various sizes. There is almost no limit to the stencil idea of decoration, ranging from tiny trays down to a border around the painted floor.

For new unpainted furniture, a paste filler should be used before applying any varnish or shellac. If this filler has been applied at the factory, no more is needed.

Varnish and Wax Finishes

A very satisfactory finish for dining table tops is a spar varnish. One objection to it is that it is too shiny. This may be overcome by rubbing down lightly with the finest steel wool or by a cloth dipped in rubbing oil, then in rottenstone. Little rubbing is necessary; a sort of patting motion is better. Two or even three coats of the spar varnish give a surface which resists both hot dish and water marks. It can be washed and dried just like enamel.

But the most exquisite finish, the most luxurious of them all because it requires such tender care is the waxed surface. Start with a beautiful smooth wood of lovely grain, fill with paste filler, rub down smooth and apply wax in a very thin coat. Rub with a flannel cloth until you are sure it is enough, then rub some more, as one adviser says. Three or four coats should be applied. After that there is no limit to the number of times an article may be waxed and rubbed. In rare old pieces which have been kept waxed for generations, a mellow richness of texture develops which is not seen in other finishes. But a waxed finish will not stand the rough treatment some of the other finishes will take. The colored paints, varnishes and lacquers also make it possible for a woman to change the color scheme of a room, furniture included, as often as she likes.

Something Different in Aprons



In the workaday group of aprons, No. 101, there is a garden apron, the original of which was yellow chambray—medium dark blue could be used—brown bias tape binding, and basket handle, brown stripe or check pocket with red-orange tulips, and light-blue morning-glories.

A large pocket is convenient in house-tidying as well as for outdoor tasks. Smiling Dinah was designed especially for a laundry day assistant. Her cap and apron are to be bright applique patches, face and shoes anything from maple to dark chocolate with eyeballs embroidered white, a few French knot curls, and an ample red mouth.

The Dutch pair make a most distinguished apron, of blue, green, or apricot chambray. It, too, is applique and embroidery, a combination that ranks first for stunning effects, quickly achieved and safe to launder. His kerchief, her cap and apron which forms the pocket are white; his cap, trousers, her sleeves and shoes are orange or tan. Outline stitch in all black or with naturalistic colors as red mouth and yellow hair. The small windmill pattern may be used on an apron bib or on a matching dust cap.

The holders are a padded and quilted nasturtium and pansy in natural colors and regulation size, and the two-handed lifter you will like immensely. Cutting pattern is given for this as well as for its blue-bell design which may be quilted or appliqued. Pattern No. 101 (wax transfers in black) contains this entire group of designs and their applique parts, but does not give cutting patterns for the aprons themselves; any favorite pattern is used. Price for entire group, 20 cents. Address Embroidery Dept., American Agriculturist, 461 Fourth Ave., New York City.

Aunt Janet's Counsel Corner

A Change is Refreshing Both to Body and to Mind

SUMMER, about which the poets love to write, is with us. On the farm where things grow so fast, both crops and weeds, it sometimes seems that a vacation is absolutely out of the question. But it is so easy to go stale in body and in mind, so easy to fall into the rut of least resistance that before we know it we are hopelessly stuck.

Some sort of vacation or play time is needed by every one, young or old. Nature usually takes care of it with the young and their instinct for play makes them persist enough that most children get a fair amount of it. The psychologists and social workers who study large groups of children tell us that children who do not play develop all wrong. Through play they learn self-control and how to co-operate with others: besides that, the exercise helps to give them healthy bodies.

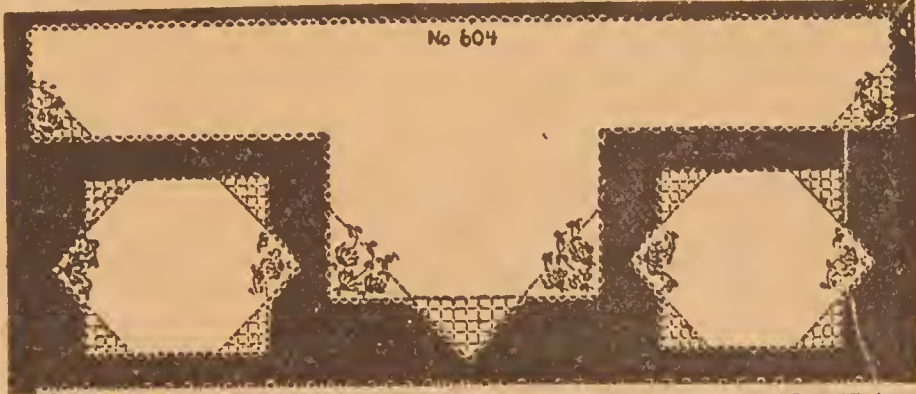
We older folks who seem to get the idea that the world rests on our individual shoulders have to plan a little if we get the play time we need. It does not need to be anything very formal in order to furnish pleasure.

A very fine young woman remarked once that some of the most pleasant memories of her childhood were the fishing jaunts she and her sisters and brothers had with their mother. She couldn't remember that mother ever caught a fish, but a little jaunt to the woods was a great occasion.

A change of mind is often as good as a long trip. One sure thing is that the long trip will do little good if the mind is upset. A complete change of scene and people is refreshing. One

can return to the old tasks with renewed vigor and enthusiasm. Many of the little things that look large and annoying shrink to their right proportion by being away from them. Two weeks or more are necessary to

stopping wherever things look interesting, the experience is different from the routine and rush of every day life. And it should be different for mother as well as the others. Since her days at home are so filled with food



SCARF AND BUFFET SET NO. 604 novel both in shape and design comes hemstitched and stamped on excellent quality white material. The set may be had in either of two sizes priced as follows: set with scarf 18 by 45 inches, only 65c; set with scarf 18 by 54 inches, \$1.00 postpaid. Address Embroidery Department, American Agriculturist, 461 Fourth Avenue, New York City.

get really relaxed and in a vacation mood.

But to some, even if money were available for such a vacation, it is not possible to make home arrangements for such a long absence. Then the occasional day or two or three-day jaunt becomes more important than ever. Instead of trying to cover a great deal of territory in such short time, the true vacation spirit is far more enjoyable.

If nothing more than tenting beside the lake, or motoring slowly along,

thoughts, she should not have a single responsibility about food on the trip. Plenty of roadside stands and tourist homes make it possible for her to be relieved of this duty. But if the party wants to picnic along the way, then the others ought to get the food and prepare it. Going visiting to other people's homes is not the change a home-maker needs most. Unless there is plenty of help in the kitchen—which usually there isn't—few women could take their ease and let their hostess tire herself out “doing for” them. On the other hand for girls who spend their time in offices or at schools, the novelty of running a house or camp may be the change they need.

So after all, a vacation means a change and each must decide what sort would give him the greatest pleasure, whether it be wandering in the wilds, or among the more crowded haunts of men. But anyhow, everybody needs to get a change in some way.—Aunt Janet.

What Is Done With the Mentally Ill

(Continued from Page 3)

institutions food supplies are allowed on a ration basis only for those in residence.

Is it ever possible for an unscrupulous person to have a patient committed unjustly to such an institution?

No. There are too many persons involved, including two doctors.

Can the hospital keep a patient regardless of the wishes of his family and friends?

Yes, if committed, subject to the order of the Commissioner or an appeal to the court. In practice an institution never retains any patient unless dangerous to himself or others in the judgment of superintendent.

Who actually determines whether a patient is sane or insane.

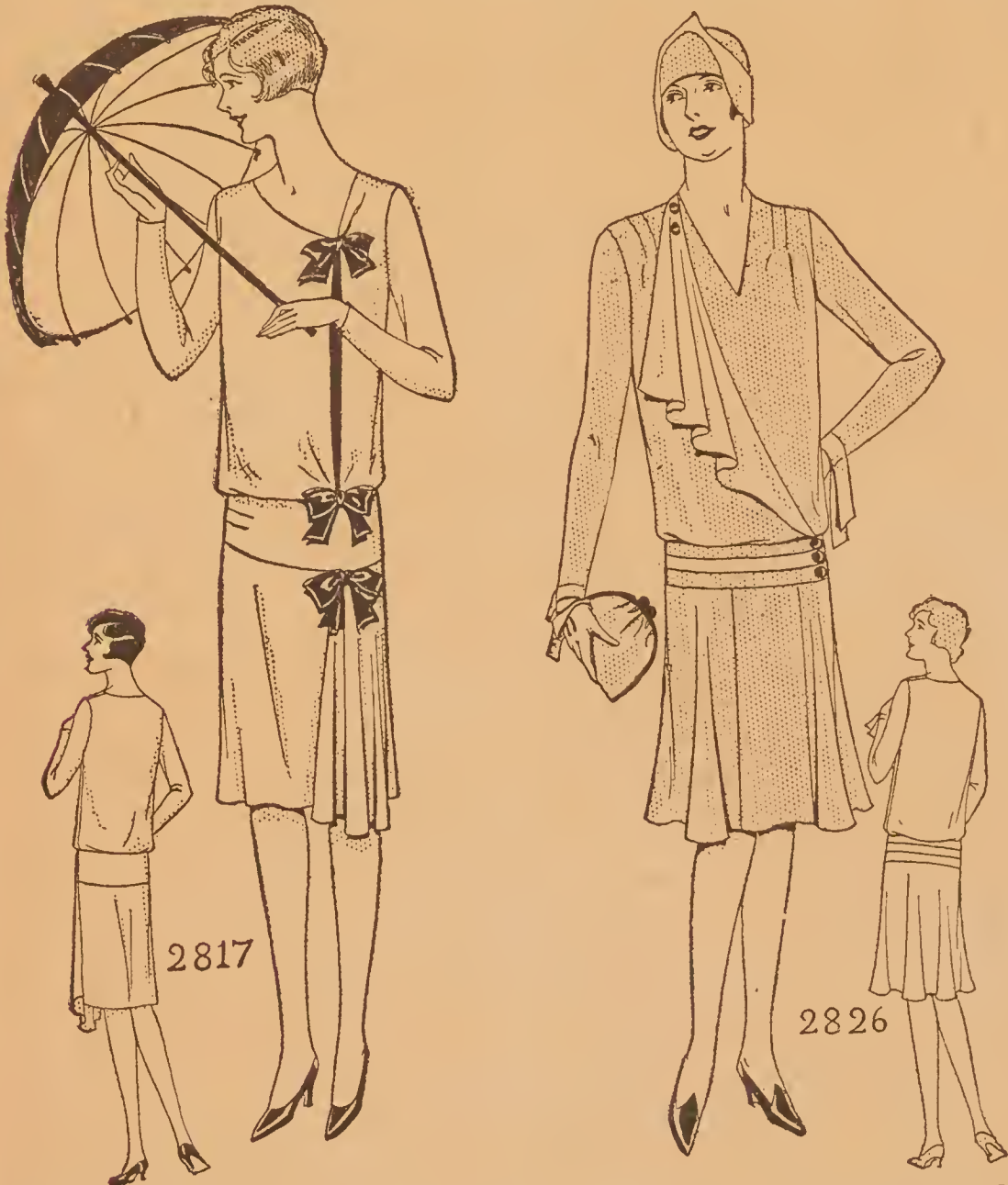
The committing judge in the legal sense; the qualified examiners and the superintendent and his medical staff in the medical sense.

How could a sane person get released in case a mistake had been made in committing him into the insane hospital?

Superintendent will discharge if study of the case shows no insanity. In the year ended June 30, 1928, there were 8,614 first admissions; 2,239 readmissions, a total of 10,853 admissions. In the same year there were discharged 90 patients as not insane, substantially less than 1% of the admissions. Practically all of these 90 patients were alcoholic or drug cases, or old people whose childishness had not progressed to a point which would warrant treatment in a mental hospital. These figures are typical of previous years.

Clothes should be damper for an ironing machine than for ironing by hand.

For Full Figures and Those Not So Full



STYLE NO. 2817 dips its side in graceful flared fullness and uses very feminine bows which give it a characteristic touch of this season's styles. Tucks nip the right hip and give the yoke a diagonal slant. Beige crepe with a touch of brown in bows and inset would make a charming combination. Figured silks with plain contrasting would also combine well. The pattern cuts in sizes 16, 18 years, 36, 38, 40 and 42 inches bust measure. Size 36 requires 2 3/4 yards of 39-inch material with 3/8 yard of 27-inch contrasting. PRICE 13c.

DESIGN NO. 2826 with its cascading jabot frill and flattering fullness of skirt is stunning when made up in the new purple aster shade with egg-shell trim. It is especially good for full figures because all its lines are designed to slenderize. Flowered chiffon, sprigged dimity, or rayon voile would make up beautifully in this pattern which cuts in sizes 16, 18 years, 36, 38, 40, 42 and 44 inches bust measure. Size 36 requires 3 1/2 yards of 39-inch material with 3/4 yard of 39-inch contrasting. PATTERN PRICE 13c.

TO ORDER: Write name, address, pattern sizes and numbers correctly and clearly and enclose with correct remittance in stamps or coin (although coin is sent at own risk). Add 12c for one of the new summer fashion catalogues and send to Pattern Department, American Agriculturist, 461 Fourth Avenue, New York City.

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ONCE each month American Agriculturist has a full page of Little Recipes for Little Cooks. The best way for the little girl or boy to keep these pages together is in Betty's Scrapbook of Little Recipes for Little Cooks. Lessons 1 and 2 are already printed in the scrapbook and there are 22 blank pages waiting to receive the recipe pages as they are printed.

When you have filled the Scrapbook with the pages of recipes, you will have a cookbook that even mother would be proud to own.

To make ordering easy use the coupon:

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c/o American Agriculturist,
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Please find 10 cents (coin or stamps) inclosed for one of your scrap books.

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The Plains of Abraham—By James Oliver Curwood

He disappeared into the woods and walked swiftly through the deep aisles of the forest with Odd at his side. A new emotion burned in him, one of change, of spiritual transformation, of physical growth. The world about him was not the world through which he had travelled this trail in the early morning, nor was he the same Jeems. Had Jeems's mother known what had happened, she would have understood the story unfolding slowly in the boy's face, and it would have frightened her, for a mother dreads the day when childhood draws itself away, like a beautiful shadow, to be replaced by the sterner form of maturity in her offspring. Catherine had held this day back from Jeems as long as she could, even in a time and place where the ruggedness of life and its social conditions schooled plastic youth to early duties and responsibilities. Now it had come in spite of her. Jeems was unaware of the fact, though he felt the new sensations pressing upon him. The events of an hour had made him older. It was an hour in which he had lost, and yet in losing trivial things he had unconsciously achieved greater ones. Paul Tache had whipped him. Toinette's cool friendship had turned to hatred. His dreams were wrecked, his rose-hued hopes sunk into oblivion.

Yet a different poise was in his chin as he walked through the solitude, a different swing in his step. Morning had sent him on an errand of hysterical desire, now he was returning home vaguely appraising the folly of an act which seemed to have been born a long time ago, in a period of uncertainty, of half faith, of ill-defined and divided yearnings. Through Paul and Toinette and his defeat at their hands, he was beginning to see the wider horizons of the world that was shaping itself in his brain and in which the vital factor was *himself*. When he fought Paul Tache again, he would not be the Jeems of Lussan's barnyard, and when that time came, as it surely would, he would not throw mud into the face of Toinette Tonteur!

Hepsibah would have rejoiced greatly in this breaking down and building up of fabrics in Jeems's visionings, and would have sworn it was the blood of the Adames rising in him, a fighting strain, an unconquerable spirit, the beginning of a sure and steady resolution born of the lad's first contact with strife and adversity. Even Catherine had not guessed the depth of affection which the adventurous Indian trader held for her boy, nor the fear that lived with it, the jealous and yet unspoken apprehension that a caprice of fate, like her marriage to Henri Bulain, would at last turn an Adams into a Frenchman. But within the few hours he had been at Catherine's home, this misgiving had subsided in his breast, for Jeems was more than ever like his mother, with something in his face and a quietness of manner which her brother failed to discover in Henri Bulain, with his foolish confidence and dreams of enduring peace.

It was not long after Jeems's departure from Lussan's place that Hepsibah discovered he was gone, and with a quick adieu to Tonteur and a word to Henri he set out after him. Sharp walking and the cool earthy smells of the forest cleared his mind of the mellowing effects of Lussan's brews, and he began to feel certain qualms rising in him as he progressed. He did not like the thought of Jeems going off alone in this way, which had the appearance of retreat, and under his breath he swore at the baron for luring him from the pool and at himself for yielding to temptation. Few

men could keep pace with the trader on a trail, despite the rotundity of his bulk, and at the end of an hour he came to a halt, with Jeems stepping from behind a bush half a dozen paces away, an arrow fixed to his bow.

It Hepsibah had a doubt of his nephew's courage, it was dispelled by this watchfulness and the lad's readiness for action.

"I'm dead, looking at the theory o' the thing," he commented. "Jeemsey, I'm ashamed o' my carelessness and proud o' your discretion. At that dis-

as the Lord o' Hosts intended it should. By which I mean, Jeems, that the biggest and best friendships are made through fighting, with nations as well as men, and that when you shake hands with a man you've fought, granting the grip is a good and honest one, you've made a friend forever."

"I wouldn't shake hands with Paul Tache," said Jeems. "Not ever. Some days I am going to kill him."

The quietness of his voice stirred Hepsibah with a feeling of uneasiness. He was thinking of Catherine again

Bringing the Story Up to Date

JEEMS BULAIN with his French father and his English mother lived in colonial times near the border between Canada and the English colonies. Their neighbor, Tonteur, is their friend but Madam Tonteur hates Catherine Bulain because of her beauty and her English blood and tries in every possible way to teach her daughter Toinette to hate Jeems Bulain.

Jeems admires Toinette and is deeply hurt by her disdain. He hates Paul Tache, Toinette's cousin from Quebec, because Paul assumes a superior air and because he is in the good graces of Toinette.

Catherine Bulain sees and understands the situation to which her husband is blind. Jeems is brooding over the situation as he, his mother and father and Odd, his dog, walk home from a visit to Tonteur Manor.

On their arrival they find Hepsibah, Catherine Bulain's trader brother who visits them at long intervals. After supper he opens his pack and among the presents he has brought is a beautiful piece of red velvet cloth for Jeems to give Toinette. Jeems attends Lussan's auction the next day and resolves to give Toinette his present and to whip Paul Tache.

Paul is the victor in the fight, and Hepsibah and Tonteur also have a scrap in which Hepsibah comes in second best. Jeems starts out for home alone.

tance you could stick an arrow half through me!"

"Clear through you," corrected Jeems. "I've done it with a buck."

Hepsibah's eyes glowed with pleasure at the note of calm boastfulness in the boy's voice.

"Why did you run away?" he demanded.

"I didn't," replied Jeems, meeting his uncle's look with a flash of resentment.

"You ran away from me—with Tonteur. I wouldn't go like that with Paul Tache!"

They continued along the trail, and in the boy's steady silence Hepsibah's face wore a pondering seriousness. Then he said, laying a hand tenderly on Jeems's arm:

"Son, what do you think of me for doing that?"

"I wouldn't do it—with someone I hated," answered Jeems, looking straight ahead.

"But I don't hate Tonteur. I like him."

"Then why did you fight him? And why did he almost kill you with his wooden leg?"

Hepsibah was not quick in answering such a fine point of logic, and the hardness in the voice at his side, so unlike that of the boy whom he had comforted and encouraged at the pool, drew his gaze casually, and yet more shrewdly, to the other's face. Twice he started to speak, and each time his lips were closed by the memory of his sister and of the talk which had passed between them when Jeems was in bed. Then the thoughts in his mind burst forth in spite of his worship for Catherine and his desire not to overstep the importunities she had placed upon him in respect to the use of his tongue when in the presence of Jeems.

"Fighting," he began in a subdued voice, treading softly upon the forbidden subject as if Catherine might be near and listening, "is the breath o' life, the spice of existence, and the most reasonable thing ever invented. Without fighting the earth might as well turn up its toes and die. It's a sort o' medicine, you'll see in time, lad. It clears the complexions o' nations, makes religion what it is, and irons out the troubles o' people just

as he continued his measurement of the boy.

"Killing, except in the case o' war, is not a good thing to have on your mind," he remonstrated. "And there will be plenty of that before you're much older, Jeems. Until then, learn the tricks I'm going to show you, whip this young Tache, and then offer him your hand to shake. That's the glory o' the game."

The tenseness in Jeems's face gave way a little before his uncle's words and the good-natured laugh which followed them.

"I'll never shake hands with Paul Tache," he repeated. "I'm going to whip him. Some day I may kill him."

"That's better," approved Hepsibah. "You may kill him, which doesn't set the mark o' surety on your intention. But if you ever find it necessary to put an end to his days, don't do it in a spirit o' hatred, lad. Fighting, if jolly and well intended, lifts the soul to glorious heights; it makes you laugh as well as cry, and cleans out all the thistles and weeds in the back yards o' your life, making you broader-minded and stronger o' blood. But when that fighting is poisoned by hatred and you reach a point where you can't laugh at the cracking o' your own pate as well as the other fellow's, then it's a *deestructive* thing and the worst that can empty its vials o' desolation upon the earth. Jeemsey, that's what is spreading like a plague over the land right now, the same poison o' hatred with which you fought young Tache, and the time is coming—it's almost here—when it's going to burn up this world of yours in flames so red and terrible that God A'mighty Himself won't be able to stop them!"

Hepsibah let his voice rise with the emotion which was never entirely quiet within him, and at the astounding words he was saying, Jeems's thoughts lost their hold of Tache and he stared wide-eyed and wondering. Hepsibah went on, seeing the visions of impending events which he had described to Catherine and Henri the night before, and Jeems's blood ran fast at the pictures his uncle painted of their wilderness world in the grip of massacre and war.

"All this you should know," said

Hepsibah defiantly, thinking of the futility of his arguments with his sister and her husband. "You're coming to manhood, Jeems, and if your mother and father won't look after themselves, you must do it for them. There's fighting in your future, you might as well make yourself ready for it, though I can't see any reason why you should tell your mother about it or what I've said. She'd punish me, I swear, and your mother's sweetness is no sweeter than the bitterness of her reproach when she doesn't say a word, but just looks at me as if I've struck her with my fist. You won't tell her, will you?"

Jeems shook his head and promised.

"Then I'll go to the end of what I had in my mind," continued Hepsibah. "It begins with this thing we call hate. When you say you hate Paul Tache, you're simply giving evidence o' the fact that you've been bitten by a snake you can't see or feel or hear, a snake beside which the copperhead o' the swamps is a gentle and kindly creature and one we should look in the eye with friendship and love. This snake lives in our own blood, Jeemsey, and it's a cuss for brewing trouble. It has been hard at work for years in this country of ours until hate is becoming the biggest part o' the air we breathe. White men like you and me set this snake at work. First, down there, we began hating the French and the French began hating us; and then we set the Indians to hating our enemies and our enemies did the same; and after that, not being content with the deviltry we'd done, we started the Indians to hating among themselves. We did that, lad, we white descendants o' the Son o' God, with our greater wisdom, our whisky, our guns and lies, until in a hundred tribes o' redskins between the Upper Canadas and the Ohio there isn't a tribe that doesn't hate some other tribe, and all because we hate the French and the French hate us. Jeemsey, bear this in mind—it wasn't the Indians who brought hair to us—we sent them out to get it. We wanted proof of their killings, so we asked for the scalps and paid cash money for them, and the French did likewise; until, with prices for the hair of men and women and children rising steadily, white men took to the dirty trade they had taught the savages. And this has brought about such a competition in the taking of human blood that the cover won't keep the pot down much longer, and when the cover blows off, the sky itself won't be big enough to hold what comes from under it. That is what hate will do, the hate o' two breeds o' white men for each other; and when it's over—mark me, Jeems!—they'll blame the Indian for it. There's no hate like a white man's hate, not even an Indian's, for it's deadlier because o' the power and knowledge behind it, which have taken advantage of simpler folk from the beginning of time. So I say it is a point in your disfavour to go on hating Paul Tache."

For a little while Jeems had forgotten Paul. It seemed to him the world of peace which he had always known was suddenly gone. In vague and scarcely believed whisperings and rumours he had heard of dark happenings along the farther frontiers. But his father and mother, living their lives of persistent hopefulness, had smoothed away the thoughts to which his uncle's unleashed tongue now gave freedom. As Hepsibah Adams went on with what his conscience urged him to say, even pausing to trace with a stick in a spot of open sand a map of the countries which would soon be

(Continued on Page 16)

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50 MILLION out door grown vegetable plants—Cabbage: Copenhagen, Ballhead, Wakefield, etc., 300, \$1.00; 500, \$1.25; 1000, \$2.00 prepaid. 10,000, \$10.00 expressed. Tomato Plants: Marglobe, Bonnybest, Baltimore, Stone and Matchless, 300, \$1.50; 500, \$2.00; 1000, \$3.00 prepaid. 10,000, \$15.00 expressed. Sweet Potato and Pepper Plants: 300, \$1.25; 500, \$2.00; 1000, \$3.25 prepaid. 10,000, \$20.00 expressed. Shipping capacity ½ million daily. Day and Night service. Our plants must please you or money cheerfully refunded. J. P. COUNCELL COMPANY, Franklin, Va.

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On Page 15

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To Teach Baby to Eat

By Ray Inman

a healthy 2 yr. old is ready for 3 meals a day at table with the family.



Don't EXPRESS YOUR LIKES AND DISLIKES FOR A FOOD IN HIS PRESENCE NOR DISCUSS HIS LIKES AND DISLIKES



don't force him to eat a food he doesn't like; drop it for awhile and start it gradually later.



feed him; vegetables, (CUT & FINELY, OR MASHED) light meats, (CRISP BACON, STEWED LAMB) Fruits & pudding (JUNKET, TAPIOCA, CUSTARD) A LITTLE SUGAR CANDY AFTER MEALS IS O.K.



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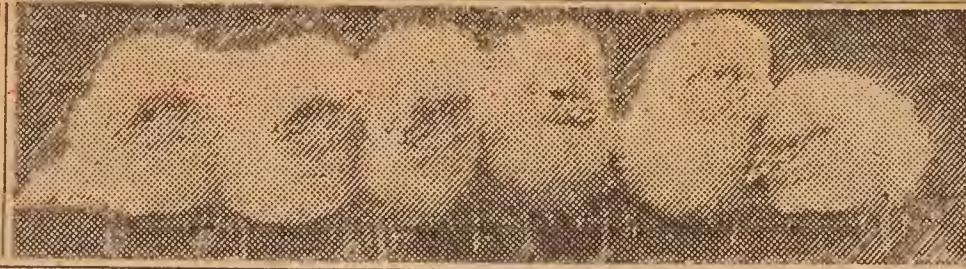
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(Continued on Opposite Page)

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Heavy Mixed.....	2.75	5.00	9.00
Light Mixed.....	2.25	4.00	7.00

These chicks are from free range and heavy egg producing flock. 100% live delivery guaranteed to your door. Write for Special Mating prices.

FRANK NACE, Cocolamus, Pa., Box No. 120

Quality Chicks at Low Prices

Variety	100	500	1000
United Strain Leghorns.....	\$7.50	\$36.00	\$70.00
Barron or Wyckoff Leghorns.....	8.00	37.50	75.00
Special Leghorn Wyckoff only.....	9.00	42.50	80.00
Barred Rocks.....	9.00	42.50	85.00
Mixed Chicks.....	7.00	34.00	65.00

L. E. STRAWSER, McAlisterville, Pa.



Klines Barred Rocks

Healthy stock, Penna. State College males, Strong chicks guaranteed. Prompt del. C.O.D. \$10.00-100. \$90.00-1,000. Write or wire.
S. W. Kline, Box 40, Middlecreek, Pa.

WYCKOFF and BARRON STRAIN, White Leghorn Chicks for June 9c each; \$80 per 1000. Prepaid and safe delivery guaranteed. Our 19th year. Circular free. \$1.00 books order. THE PENNSYLVANIA HATCHERY, Box W, Liverpool, Pa.

WOLF SELECTED CHICKS

CHICKS C. O. D.

Special pen mated and extra high bred chicks at slightly higher prices. Shipments made any time you wish.
S. C. Wh. Br. & Buff Leghorns, S. C. M. Anconas.....\$2.25 \$4.25 \$8.00 \$38 \$75
Bd. & Wh. Rocks, S.C. & R.C.R.I. Reds, Bl. Min.....2.50 5.00 10.00 48 95
White Wyandottes, Buff Orpingtons.....3.00 5.00 11.00 52 100
Jersey Black Giants.....4.50 8.50 15.00 72 140
Heavy Mixed.....2.75 4.50 8.50 40 80
Light Mixed.....2.00 4.00 7.00 34 68

LAST HATCH JULY 8th.

WOLF HATCHING & BREEDING COMPANY, Box 1 Gibsonburg, Ohio



IMMEDIATE DELIVERY

STOP! LOOK! LISTEN!

Cash or C.O.D.	25	50	100	500	1000
Wh. Wyandottes.....	\$3.50	\$6.50	\$12.00	\$57.50	\$110
Rocks or Reds.....	3.00	5.50	10.00	47.50	90
Wh. Leghorns.....	3.00	4.50	8.00	37.50	70
Heavy Mixed.....	3.00	4.50	8.00	37.50	70
Light Mixed.....	2.50	4.00	7.00	32.50	65

From carefully selected free-range flocks, 100% arrival. Postpaid. Valuable illustrated 96-page booklet FREE. Telling all about poultry.

The Commercial Hatchery,
Box 75-A (The dependable plant) Richfield, Penna.

BABY CHICKS

From Heavy Laying Free Range Flocks

S.C.W. & Br. Leghorns.....	25	50	100	500	1000
Wh. Wyandottes.....	\$2.50	\$4.50	\$8	\$37.50	\$70
S.C.W. & Wh. Rocks.....	3.00	5.50	10	47.50	90
Buff Orpingtons & Reds.....	3.00	5.50	10	47.50	90
White Wyandottes.....	3.00	5.50	10	47.50	90
Assorted Chicks.....	2.25	4.00	7	32.50	60

100% prepaid safe delivery guaranteed.

Order from this ad. or write for circular
Box 161
J. N. Nace Poultry Farm RICHFIELD, Pa.

TAKE NOTICE 150,000 CHICKS FOR

S. C. White Leghorns.....	25	50	100	500	1000
Barred Rox.....	\$2.50	\$4.50	\$8.00	\$37.50	\$70
Rhode Island Reds.....	3.00	5.50	10.00	47.50	90
Silver Laced Wyandottes.....	3.00	5.50	10.00	47.50	90
Light Mixed.....	3.50	6.50	12.00		
Heavy Mixed.....	4.00	7.00	12.50	60	
Light Mixed.....	4.50	8.00	15.00	70	

From carefully selected free range flocks. 100% arrival Postpaid. Write for illustrated catalogue.

The Richfield Hatchery, Box 80, Richfield, Pa.

BARRED ROCK CHICKS

A large modern Breeding Farm and Hatchery devoted exclusively to the production of BARRED PLYMOUTH ROCKS.

MARVEL POULTRY FARM, GEORGETOWN, DEL.

BABY CHICKS ORDER DIRECT from

Free Range Bred	25	50	100	500	1000
W., Br., Blk. Leg. & Ancona.....	\$2.25	\$4.25	\$8.00	\$39.00	\$75
Wh. & Br. Rocks, Reds & Wyand.	2.75	5.25	10.00	49.00	95
Heavy Mixed Broilers.....	2.50	4.75	9.00	44.00	85
Light Mixed Broilers.....	2.00	3.50	6.50	31.50	60

ULSH POULTRY FARM & HATCHERY, Port Trevorton, Pa.



FERRIS STRAIN WHITE LEGHORN CHICKS

Our breeders are large birds; long, deep, rectangular bodies. Selected for size, type and egg production.
\$8 Per 100; \$37.50, 500; \$70.00, 1000
Juniata Poultry Farm, Box T, Richfield, Pa.

WANTED

OLD ADDRESS

When sending in change of address on your subscription please give the old address as well as the new.

This insures prompt change.

CHERRY HILL CHICKS

S. C. W. Leghorns—Wyckoff Strain.....	100
S. C. Everlay Brown Leghorns.....	8.00
Barred Rocks and R. I. Reds.....	10.00
Heavy Mixed.....	8.00
Light Mixed.....	7.00

1½c less per chick in 500 lots. 1c less in 1000 lots. For less than 100 chicks add 2c per chick. 100% live arrival guaranteed. Parcel post prepaid. Bank reference. Order direct from this adv. or write for free circular.

CHERRY HILL POULTRY FARM,
WM. NACE, Prop., Box A, McALISTERVILLE, PA.

BABY CHICKS

hatched by the best system of incubators from high class bred-to-lay stock. White, Brown, Buff Leghorns, Anconas \$11.50 per 100; Barred, White Rocks, Minorcas, Reds \$13.50 per 100; White Wyandottes, Buff Orpingtons \$14.50 per 100; Giants \$17.00 per 100; Heavy Mixed \$10.00 per 100; Light Mixed \$8.00 per 100; Pekin Ducklings \$30.00 per 100. Add 25c on orders for less than 100. Safe delivery guaranteed by parcel post.

Nunda Poultry Farm, Desk H, Nunda, N. Y.
Member of the International Baby Chick Ass'n, and the N. Y. State Co-Operative Chick Producers Ass'n.

BABY CHICKS

100% Arrival.	25	50	100	500
White Leghorns.....	\$2.75	\$5.25	\$8.00	\$37.50
Barred Rocks and Reds.....	\$3.25	6.25	10.00	47.50
Heavy Mixed.....	2.75	5.25	8.00	37.50
Light Mixed.....	2.50	4.75	7.00	32.50
Pekin Ducklings.....	7.50	14.50	28.00	
Mixed Ducklings.....	6.50	13.00	25.00	

John Shadel Hatchery
McAlisterville, Pa. R. 2, Box 13.

Reduced Chick Prices

In effect June to October	25	50	100	500	1000
Large Type Wh. Leghorns.....	\$2.00	\$4.00	\$8	\$38.50	\$75
Rocks, Reds, Minorcas.....	2.50	5.00	10	48.00	95
Wyandottes, Orpingtons.....	2.75	5.50	11	55.00	100
Hamburgs Ilc. Assorted 8c.					

Live Delivery Guaranteed. Catalog Free.
LANTZ HATCHERY, Tiffin, Ohio

BABY CHICKS

100% live delivery guaranteed. Order from this ad. or write for free circular.
C. P. Leister, McAlisterville, Pa.

JUNE PRICES

Barron & Wyckoff Leghorns.....	100	500	1000
Barred Rocks & R. I. Reds.....	\$ 8.00	\$37.50	\$70.00
Light Mixed.....	9.00	42.50	80.00
Heavy Mixed.....	7.00	32.50	65.00

Heavy Mixed \$8. Our chicks are properly hatched, strong and vigorous. 100% live delivery. Postpaid. Circular free giving full details of all breeds. CLEAR SPRING HATCHERY, McAlisterville, Pa. R. D. No. 2. B. Leister, Prop.

SINGLE COMB Rhode Island Reds
Vt. Certified: Tested free from B.W.D. Males from 200-300 egg hens. Pullets: Started Chicks: 3000 Baby Chicks weekly: Circular.
ASCUTNEY FARMS, A10, HARTLAND, VT.

BARRED ROCK COCKERELS

Three months old—Blood tested Certified stock—Hosterman Strain, fine specimens, \$2.00 each. Satisfaction Guaranteed.
THE KEYSTONE HATCHERY, Richfield, Pa.

CHICKS 8½c

CLASS A..CHICKS at low prices, also pullets. Special discounts. Several varieties. No money down. 100% live arrival; postpaid. Catalog free.
BOS HATCHERY, R2A, ZEELAND, MICH.

The Plains of Abraham

(Continued on Page 12)

at grips in war, pointing out their places of weakness and strength, Jeems's soul had entered another life and world. And when, after making tiny trails to mark the paths of invasion and greatest danger, Hepsibah put a finger on what he called Forbidden Valley and stated his conviction that the Mohawks would come that way with fire and tomahawk, Jeems caught his breath with a throb of suspense.

"Again I'm telling you that you have reached a time in your years when you should know these things," con-

tinued Hepsibah, rising from the plot of sand. "And now that I've unburdened my mind and set you straight in spite o' your father and mother, I'm ready for that first lesson in the art o' defence and offence which will show you why you didn't whip young Tache. There is much to learn, the fine points o' sparring and squaring away, the justle-holds and grapple, knee-gouging and choking, and the proper way to kick when down as well as up—so we might as well begin."

To this suggestion Jeems willingly acquiesced, and for half an hour Hepsibah trained his pupil in a little open near their path.

(To be Continued Next Week)



